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## EXECUTIVE SUMMARY – TRAFFIC IMPACT ANALYSIS

FAT City, Fort Lauderdale, FL

June 6, 2017

FAT City is a proposed mixed-use development to be located at the southwest quadrant of NW 4<sup>th</sup> Street & NW 1<sup>st</sup> Avenue in Ft. Lauderdale, Florida. Kimley-Horn and Associates, Inc. prepared a traffic impact analysis assess the impact of project traffic on the surrounding roadway network.

The development program analyzed in the traffic study includes the construction of 612 apartment units, 184,431 square feet of office space and 87,437 square feet of retail. The project site will generate a total of 6,887 net new daily trips, 562 net new AM peak hour trips, 769 net new PM peak hour trips.

The site has two proposed full-access driveway connections, one on the north side of the project site on NE 4<sup>th</sup> Street for self-parking patrons and residents and one on the south side of the project site on NE 3<sup>rd</sup> Street that will be limited to valet operations.

The buildout horizon that was evaluated in the study is year 2022. The following intersections and roadway links where analyzed during the AM and PM peak hours for existing conditions, future background conditions (future 2022 conditions without project traffic) and future total conditions (future 2022 conditions including project traffic).

Intersections:

- NE/NW 6th Street & N Andrews Avenue
- NE/NW 4th Street & N Andrews Avenue
- NE/NW 2nd Street & N Andrews Avenue
- Broward Boulevard & N Andrews Avenue
- NE 6th Street & NE 3rd Avenue
- NE 4th Street & NE 3rd Avenue
- NE 2nd Street & NE 3rd Avenue
- Broward Boulevard & Federal Highway
- NE/NW 3rd Street & N Andrews Avenue
- NE 1st Avenue & NE 4th Street
- NE 2nd Avenue & NE 4th Street
- NE/NW 5th Street & N Andrews Avenue

#### Roadway Links:

- Broward Boulevard west of 1<sup>st</sup> Avenue to east of Federal Highway
- Federal Highway north of SE 7<sup>th</sup> Street to north of NE 4<sup>th</sup> Street
- NE 3<sup>rd</sup> Avenue from north of Broward Boulevard to north of NE 6<sup>th</sup> Street
- NE/NW 4<sup>th</sup> Street from west of Andrews Boulevard to Federal Highway
- N Andrews Avenue from south of Broward Boulevard to NE/NW 6<sup>th</sup> Street

The link analyses indicated that the roadway links analyzed are all anticipated to operate at a Level of Service (LOS) D or better, including with project traffic. The intersection analyses indicate that all of the study intersections will operate at LOS D or better with the exceptions of Broward Boulevard & N. Andrews Avenue (AM peak hour) and Broward Boulevard & N. Federal Highway (AM & PM peak hours), which area anticipated to operate at LOS E with and without project traffic. The project traffic does not create any new LOS E or LOS F conditions.

A queueing analysis was performed to determine if adequate storage is available at signalized intersections during the AM and PM peak hours. Insufficient queue storage was identified at the following intersections:

- AM peak hour NBL, EBL, and SBL at Broward Boulevard & Andrews Avenue
- AM peak hour SBL, NBL, and WBL at Broward Boulevard & NE 3<sup>rd</sup> Avenue.
- AM peak hour WBL at NE 4<sup>th</sup> Street & Federal Highway
- AM peak hour SBR, WBL, NBL, and EBR at Broward Boulevard & Federal Highway
- PM peak hour NBL at 6<sup>th</sup> Street & Andrews Avenue
- PM peak hour WBL and SBL at 4<sup>th</sup> Street & Andrews Avenue
- PM peak hour NBL at 6<sup>th</sup> Street & Andrews Avenue
- PM peak hour EBL & NBL at Broward Boulevard & Andrews Avenue
- PM peak hour EBL, NBL & SBL at Broward Boulevard & NE 3<sup>rd</sup> Avenue
- PM peak hour EBL, WBL & NBL at Broward Boulevard and Federal Highway

These queuing deficiencies all exist under future background conditions without the project with the exception of NE/NW 4<sup>th</sup> Street & N Andrews Avenue. The analysis identifies opportunities, where feasible, to mitigate the identified deficiencies.

Overall, the project is not anticipated to generate new adverse impacts on the surrounding transportation system. Furthermore, several multi-modal transportation opportunities will be available upon project buildout for patrons to reduce reliance on single-occupancy vehicles including enhanced sidewalk widths, the Wave Streetcar project, Uber/Lyft dedicated pick-up/drop-off areas, Broward County Transit (BCT) and the Brightline station. Ultimately, these alternative modes will help mitigate traffic impacts generated by the project as some of the trips will be accommodated via alternative modes of travel.

## EXECUTIVE SUMMARY

Transit-Oriented Development ("TOD") parking requirements are designed to promote the use of alternative transportation in support of office, retail and residential land uses within a defined neighborhood. Often, the effect of these parking requirements may limit the success of a TOD neighborhood if the transit options are not frequent, convenient and cost-effective. The policy of reducing residential unit parking requirements below one parking space per unit may also have a direct effect on whether the residential units will reach full occupancy.

Walker's shared parking model recommends base parking ratios equal to 1.5 spaces per each 1-bedroom unit, 1.75 spaces for each 2-bedroom unit and two spaces for each 3-bedroom unit. Additionally, we recommend 2.9 consumer spaces/ksf and .70 employee spaces/ksf of planned community retail, and 3.15 employee spaces/ksf of commercial office space during typical weekday business hours. When factoring these base parking ratios against the revised FAT CITY Project data, Walker's shared parking analysis projects the overall parking inventory ( $\pm 1,327$ ) is expected to experience a deficit of ( $\pm 180$ ) spaces during typical peak weekday hours and a surplus of  $\pm 68$  spaces during typical peak weekend hours.

## BACKGROUND

On Thursday, May 4, 2017, Adache Group Architects provided the following changes to the FAT City Project data originally received by Walker on 1/17/2017:

Retail Area:	87,437 SF
Office Area:	184,431 SF
Residential Units:	612 units
Parking Inventory:	1,327 spaces

In addition to the total number of residential units provided above from Adache Group Architects, Walker understands the residential unit breakdown as follows:

1-bedroom unit:	69% of 612 = 422 units
2-bedroom unit:	28% of 612 = 173 units
3-bedroom unit:	3% of 612 = 17 units

## WALKER'S SHARED-USE PARKING MODEL (WITH REVISED FAT CITY PROJECT DATA)

Walker has provided the following typical peak weekday and weekend projections for parking utilization when factoring the changes to the FAT City Project land use. The following base parking ratios were used to project utilization for the revised FAT CITY Project.

Land Use	Weekday		Weekend		Unit	Total	
	Visitor	Emp/Res	Visitor	Emp/Res		Weekday	Weekend
Community Retail (<400 ksf)	2.90	0.70	3.20	0.80	/ksf GLA	3.60	4.00
Residential : Studio Efficiency	0.10	1.00	0.15	1.00	/unit	1.10	1.15
1 bedroom	0.10	1.50	0.15	1.50	/unit	1.60	1.65
2 bedroom	0.10	1.75	0.15	1.75	/unit	1.85	1.90
>3 bedroom	0.10	2.00	0.15	2.00	/unit	2.10	2.15
Office 100k to 500k sq ft	0.25	3.15	0.03	0.32	/ksf GFA	3.40	0.35

Source: Walker Parking Consultants Shared Parking Model 2017

Based on the model for the revised FAT CITY Project, separate weekday and weekend typical peak hour demands are projected to occur in December. Typical weekday peak demand is projected to occur around the 2:00 PM hour and typical weekend peak demand is projected to occur around the 7:00 PM hour. The tables and figures on the following pages provide a summary of this data.

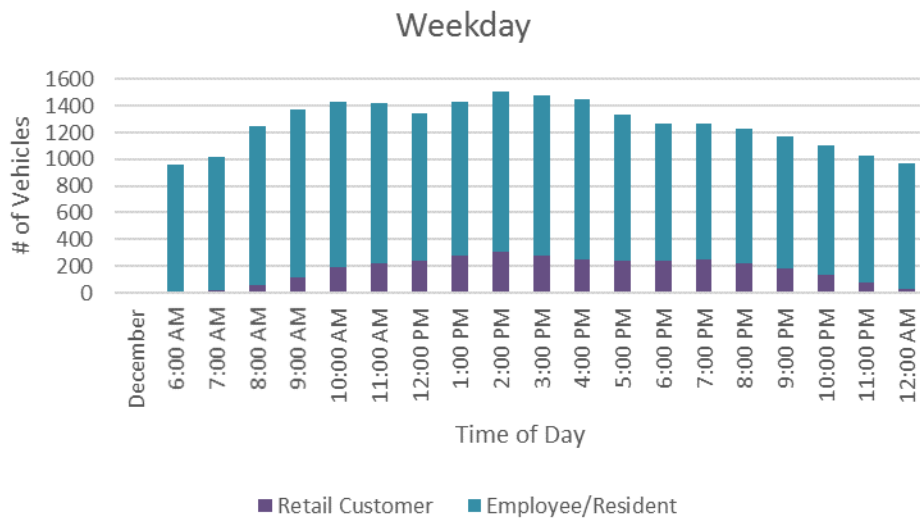
### FAT CITY Shared Parking Model Projections – Weekday

Land Use	Weekday						Demand	Demand
	Unadj	Month Adj	Pk Hr Adj	Non Captive	Drive Ratio	December	December	
	Demand	December	2:00 PM	Daytime	Daytime	2:00 PM	6:00 PM	
Community Retail (<400 ksf)	254	100%	100%	98%	100%	248	199	
Employee	61	100%	100%	94%	85%	49	49	
Residential Guest	61	100%	20%	100%	100%	12	37	
Residential Unreserved - Rental	970	100%	70%	100%	97%	659	847	
Office 100k to 500k sq ft	44	100%	100%	100%	100%	44	2	
Employee	560	100%	100%	98%	90%	495	133	
Subtotal Customer	359					304	238	
Subtotal Employee/Resident	1,591					1,203	1,029	
<b>Total Parking Spaces Required</b>	<b>1,950</b>					<b>1,507</b>	<b>1,267</b>	
					% reduction	23%		

Source: Walker Parking Consultants Shared Parking Model 2017

The weekday parking utilization by hour and user is illustrated in the following figure. The typical weekday peak ( $\pm 1,507$  spaces) is projected at 2:00 PM with a weekday evening typical peak ( $\pm 1,267$  spaces) occurring during the 6:00 PM hour.

### FAT CITY Weekday Parking by User and Hour



Source: Walker Parking Consultants Shared Parking Model 2017

The typical weekend projections are illustrated as follows:

### FAT CITY Shared Parking Model Projections – Weekend

Land Use	Weekend						Demand	Demand
	Unadj Demand	Month Adj Demand	Adj Pk Hr	Adj Non Captive	Drive Ratio	December 7:00 PM	December 5:00 PM	
Community Retail (<400 ksf)	280	100%	75%	97%	100%	204	248	
Employee	70	100%	80%	94%	95%	50	58	
Residential Guest	92	100%	100%	100%	100%	92	37	
Residential Unreserved - Rental	970	100%	97%	100%	97%	913	800	
Office 100k to 500k sq ft	4	100%	0%	100%	100%	0	0	
Employee	56	100%	0%	100%	100%	0	5	
Subtotal Customer	376					296	285	
Subtotal Employee/Resident	1,096					963	863	
<b>Total Parking Spaces Required</b>	<b>1,472</b>					<b>1,259</b>	<b>1,148</b>	
					% reduction	14%		

Source: Walker Parking Consultants Shared Parking Model 2017

The weekend parking utilization by hour and user is illustrated in the following figure. The typical peak demand ( $\pm 1,259$  spaces) is projected at the 7:00 PM hour with a typical daytime peak ( $\pm 1,148$  spaces) occurring at the 5:00 PM hour.

**FAT CITY Weekend Parking by Hour and User**



Source: Walker Parking Consultants Shared Parking Model 2017