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October 21, 2020

Ms. Miryam Jimenez
c/o Kyle B. Teal, Esq.
Buchanan Ingersoll & Rooney PC
One Biscayne Tower
Two South Biscayne Boulevard, Ste. 1500
Miami, FL 33131-1822

RE: Margate Cares for Heroes Traffic Statement (Revised)
Project No. 202027.01

Dear Ms. Jimenez:

As requested, Thomas A. Hall, Inc., on August 25, 2020, completed a traffic statement for a proposed new business plan for this site in the City of Margate, Florida. Subsequent to completion of that traffic statement, our firm's contract Engineer of Record for this project, Mr. Freddie Vargas, P.E., died suddenly. Shortly thereafter, we received comments from City staff at a Development Review Committee (DRC) meeting on October 13, 2020. This traffic statement was completed to address staff comments and has currently been prepared under the engineering supervision of Peter Partington, P.E., former City Traffic Engineer for the City of Fort Lauderdale.

According to the project site plan, the proposed new plan is for an 8,885-square-foot residential rehabilitation facility located at 603 Melaleuca Drive. The prior development was a 10-unit, multi-family apartment building, which was reconstructed to serve as a group care facility in accordance with City-approved permits. The enclosed **Figure 1 – Site Location** shows the location of the proposed project. A copy of the project's site plan is also enclosed.

1. Trip Generation Analysis

In order to determine the traffic impacts associated with the proposed residential rehabilitation facility, an analysis of trips expected to be generated by both the prior and proposed developments was conducted. Trip generation characteristics provided in the Institute of Transportation Engineers' (ITE) *Trip Generation* manual, 10th Edition, were consulted and the trips generated by the prior multi-family residential land use (ITE Code 220 – Multi-Family Housing, Low-Rise) were estimated, as was the (ITE Code 620 – Nursing Home) land use. Note that Nursing Home was selected as the proposed development's land use. ITE's manual does not contain trip generation characteristics for a residential rehabilitation facility. However, nursing homes have similar operational and trip generation characteristics, based upon the description provided in the ITE manual, and, thus, offer the best match to the proposed land use.

While not discussed in depth at the October 13th DRC meeting, notes contained in a staff memorandum dated October 16, 2020, recommending the City Commission affirm the City Manager's denial of a reasonable accommodation request, take issue with the selection of independent variables for both the existing, multi-family residential land use and the proposed, nursing home land use presented in the trip generation tables provided by this firm. While we stand by the methods used in our original report, we have amended the report to include discussion of the use of alternative independent variables for the proposed use. However, it is worth noting some of the reasons for our original assumptions.

Regarding the multi-family residential land use, ITE's database supporting the trip generation characteristics for "dwelling units" as an independent variable is twice as large (or larger) than the database supporting the other independent variables. It also has a very good R^2 value for the three time periods considered in the analysis, that is, the coefficient of determination closely matches the fitted regression line. Simply put, the closer the R^2 value is to "1," the better, and more accurate, the statistical model. For a general urban/suburban location such as is found in the City of Margate, ITE provides trip generation characteristics for three (not five) independent variables. Those independent variables are: dwelling units; occupied dwelling units; and residents. Of the three, "dwelling units" remains the independent variable with the most statistical validity based upon the size of the supporting database and the common practice of traffic engineers around the nation. For this reason, we have continued to use "dwelling units" as the independent variable in our analysis.

Regarding the proposed "nursing home" trip generation, staff seems to believe that this firm chose the independent variable of "square footage" because it was perceived to be advantageous to the client. Although it was explained in the DRC meeting that, just as with the multi-family residential trip generation analysis, we simply used the independent variable with the largest and best supporting database. Regardless of the independent variable selected, the proposed project does not generate a significant increase in traffic volumes, so we continue to assert that this is not a problem. Therefore, we have provided trip generation analyses for all of the independent variables available to us in the ITE manual for general urban/suburban areas such as the City of Margate. Note that this trip generation analysis is the same whether used to consider a re-zoning application or a request for reasonable accommodation for the subject property.

Table 1 – Trip Generation Summary – Net New Trips shows the net new trips expected to be generated by the proposed project when calculated using the four different independent variables provided in the ITE manual for Nursing Homes. The manual provides trip generation characteristics for: building square footage, beds, occupied beds and employees. **Tables 2 through 13** (enclosed) show the calculations for each individual independent variable. As Table 1 indicates, the proposed residential rehabilitation facility is expected to generate an average of 31 additional daily trips, three (3) additional a.m. peak-hour trips, and two (2) additional p.m. peak-hour trips.

If the highest trip generation, which is based on employees, is assumed to be correct, the project site is expected to generate 69 additional daily trips, nine (9) additional a.m. peak-hour trips, and eight (8) additional p.m. peak-hour trips. Using this as a worst case, an analysis was completed comparing the net new project trips to the maximum Level of Service D service volume for a

two-lane, undivided roadway such as Melaleuca Drive. The City of Margate's Comprehensive Plan Transportation Element states, on page II-12, "The City will continue to use the LOS "D" standard as the roadway concurrency standard. To be consistent with Broward County, the City is using the two-way peak hour volumes instead of the directional peak hour volumes because the FDOT also uses two-way peak hour volumes."

The Florida Department of Transportation's 2020 Quality/Level of Service Handbook contains tables for estimating roadway capacity. Table 4 – Generalized Peak Hour Two-Way Volumes for Florida's Urbanized Areas, copy enclosed, provides estimates of local roadway capacity. The maximum Level of Service D peak-hour service volume for a local, two-lane, undivided roadway given in Table 4 is 958 trips. Comparing these trips to the project's eight (8) net new peak-hour trips (one trip every 7.5 minutes) reveals that the project represents less than one percent of the local roadway's capacity ($8 \text{ peak-hour trips} / 958 \text{ LOS D capacity} = \underline{0.84 \text{ percent}}$).

Please note that, for the building square footage independent variable shown in Tables 2 through 4, the average rate was used in the calculations for both the prior and proposed land uses due to the extremely small size of the building areas proposed for these land uses (The fitted curve equation tended to overstate the trips associated with these relatively small areas or yield irrational numbers).

2. Parking

It is our understanding that the application for a reasonable accommodation for Margate Cares for Heroes now calls for 35 beds. The city's parking code, Article XXXIII, Section 33.3, for convalescent homes, nursing homes, retirement homes and other such facilities with operational characteristics similar to the proposed development is based on beds. Therefore, a review of the project's parking requirements using the ITE's *Parking Generation* manual, 5th Edition, was completed assuming the proposed number of beds as the independent variable. A copy of the parking generation characteristics information from the ITE manual is enclosed.

The average rate for parking spaces per bed is 0.36, which would mean that 13 parking spaces ($35 \text{ beds} \times 0.36 \text{ parking spaces} = 12.60 \text{ parking spaces}$, or 13 parking spaces) are required to serve the site. However, good design practice would suggest that, rather than rely upon the average rate for parking, the 85th percentile rate should be used. The ITE manual indicates that the 85th percentile parking rate per bed is 0.51, which means that 18 parking spaces ($35 \text{ beds} \times 0.51 \text{ parking spaces} = 17.85 \text{ parking spaces}$, or 18 parking spaces) are required to serve the site. Note that this is the total demand, including clients, staff, visitors and service vehicles.

Comparing the parking demand calculation to the site plan and staff report, reveals that the 22 parking spaces (including one handicap space) provided at the Margate Cares for Heroes site is more than sufficient.

In spite of this conclusion, staff attending the DRC meeting on October 13th asked, "What happens when a shift change occurs"? They suggested that the arriving employees would arrive while the previous shift's employees were still parked on site, thus requiring twice the number of employee parking spaces for a few minutes at every shift change. To address this concern, it is

first necessary to define the employees who will be on site (there are other employees, such as bookkeepers, who will be employed off site). Here is the breakdown of employees that was provided to this firm for use in our analysis:

On-Site Employees:

- 1 Chief Operating Officer (day shift only)
- 1 Driver per shift
- 2 Chef/Cleaning Staff per shift
- 3 Therapists (when the number of patients go over 30)
- 1 Clinical Director (day shift only)
- 1 Director of Nursing (day shift only)
- 1 Medical Director (day shift only)
- 1 Licensed Nurse per shift (this is the Director of Nursing during the day shift)
- 2 Behavioral Health Technicians (one male, one female) per shift

Shifts are eight hours long, running from 7:00 a.m. to 3:00 p.m., 3:00 p.m. to 11:00 p.m., and 11:00 p.m. to 7:00 a.m.

As can be seen from the list of employees, a total of 12 employees are expected to be on site during the day shift, but that number drops to nine (9) for the other two shifts. What is not indicated, however, is that the Chief Operating Officer, Clinical Director and Medical Director may not keep strict hours and may arrive and depart at times different than the shift changes.

Using these employee numbers, it would appear that the worst case parking operation is likely to be at 3:00 p.m. when 12 day shift employees might be parked on site as nine (9) other employees arrive for the evening shift. However, the ITE *Parking Generation* manual provides guidance, copy enclosed, on the intensity of parking demand during the day at Nursing Homes. This variation in parking demand is expected to be similar to the parking demand for this development. Based on this, at 3:00 p.m., the parking demand is only 71 percent of peak parking demand. Given that 18 parking spaces are expected to be needed at the time of peak demand per the calculations provided above, a reduction of 29 percent would result in a 13 parking space demand at the time of shift change ($18 \text{ parking spaces} \times 0.71 = 12.78$, or 13 parking spaces). This means that the nine (9) arriving employees could park in the remaining eight parking spaces plus one handicap space. If neither the arriving nor departing employees used the one handicap parking space, this would mean that the last arriving employee might be taking the first departing employee's parking space. In any case, it is not expected that arriving staff will need to wait for a parking space to be vacated.

3. Conclusion

Based upon the findings shown in Tables 1 through 13, and described above, it appears that the Margate Cares for Heroes development proposed to be located at 603 Melaleuca Drive will result in, at most, a small increase in trips generated by the property. Under the most intense documented trip generation rate, the proposed land use will generate an increase of 69 daily trips, nine (9) a.m. peak-hour trips, and eight (8) p.m. peak-hour trips when compared to the prior land

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use. This represents less than one percent of the Level of Service D maximum service volume for Melaleuca Drive and is only one vehicle every 7.5 minutes.

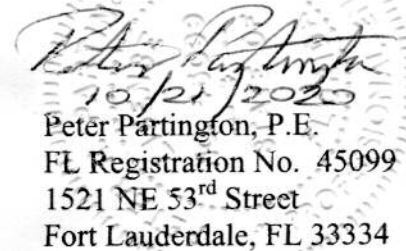
Further, with 22 parking spaces on site (including one handicap parking space), the proposed development has sufficient parking to accommodate the peak parking demand including shift changes.

Should you have any questions or comments regarding this statement, please do not hesitate to contact this office.

Very truly yours,



Thomas A. Hall
President



Peter Partington, P.E.
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TAH/kh

Enclosures

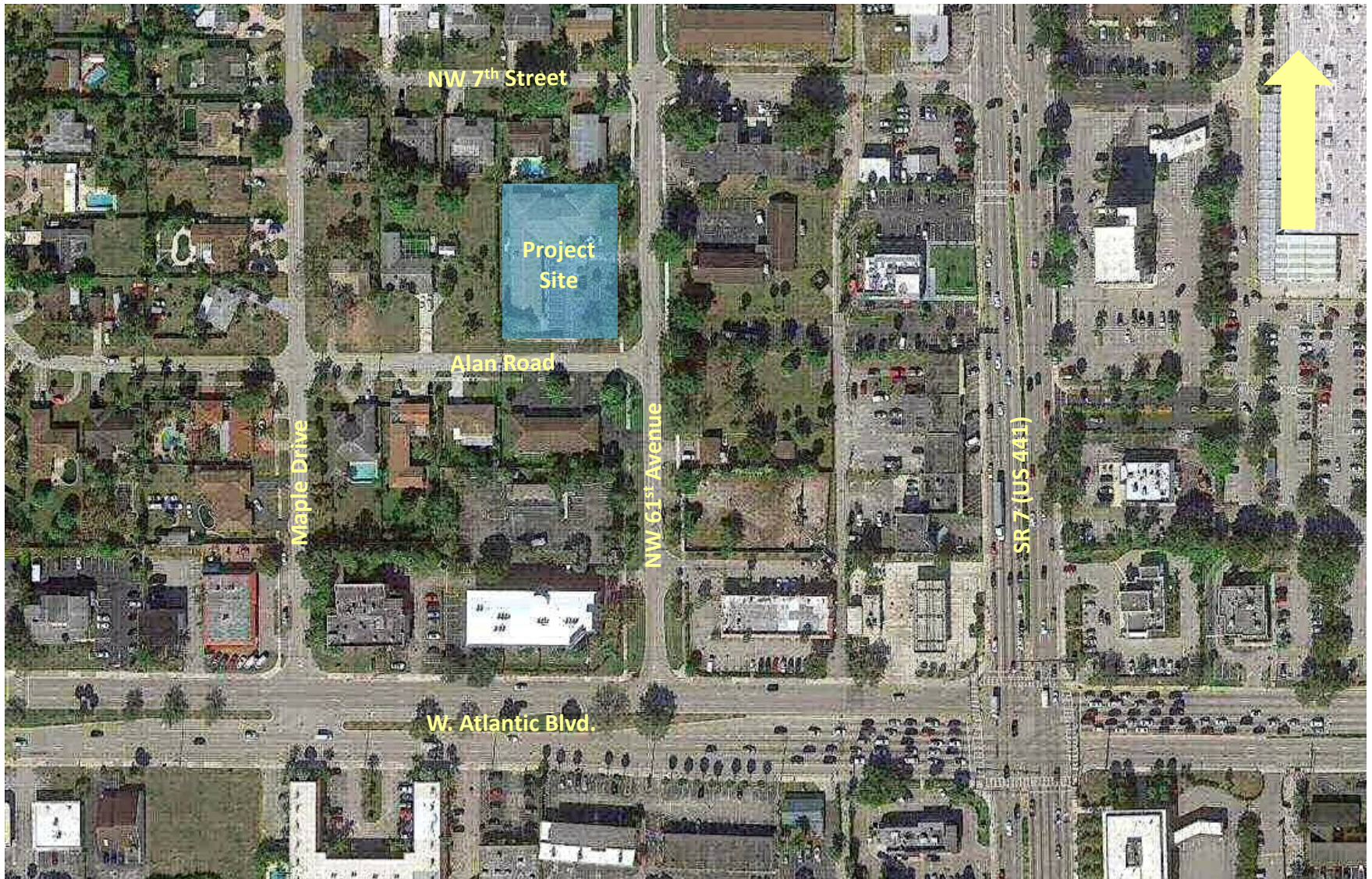


Figure 1 – Site Location
Margate Cares for Heroes
City of Margate, Florida

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Table 1
Trip Generation Summary - Net New Trips
Margate Cares for Heroes

Independent Variable					
Time	Bldg. Sq. Ft.	Beds	Occ. Beds	Employees	Avg. Value
Weekday	-14	34	34	69	31
A.M. Peak	0	1	3	9	3
P.M. Peak	-1	2	-3	8	2

Table 2
Daily Trip Generation - Square Footage
Margate Cares for Heroes

Land Use	ITE Code	Intensity	Trip Generation Rate ⁽¹⁾	Total Trips			Internal Trips				External Trips			Pass-by Trips		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Prior Use																		
Multi-Family Housing (Low-Rise)	220	10 d.u.	T=7.32(X) (50/50)	37	37	74	0	0	0	0.0%	37	37	74	0	0.0%	37	37	74
Subtotal				37	37	74	0	0	0		37	37	74	0		37	37	74
Proposed Use																		
Nursing Home	620	8,885 s.f. ⁽²⁾	T=6.64(X) (50/50)	30	30	60	0	0	0	0.0%	30	30	60	0	0.0%	30	30	60
Subtotal				30	30	60	0	0	0	0	30	30	60	0	0	30	30	60
NetDifference				-7	-7	-14	0	0	0		-7	-7	-14	0		-7	-7	-14

⁽¹⁾Trip generation rate obtained from ITE *Trip Generation* manual, 10th Edition.

⁽²⁾Square footage obtained from the Broward County Property Appraiser's website.

Table 3
AM Peak Hour Trip Generation - Square Footage
Margate Cares for Heroes

Land Use	ITE Code	Intensity	Trip Generation Rate ⁽¹⁾	Total Trips			Internal Trips				External Trips			Pass-by Trips		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Prior Use																		
Multi-Family Housing (Low-Rise)	220	10 d.u.	T=0.46(X) (23/77)	1	4	5	0	0	0	0.0%	1	4	5	0	0.0%	1	4	5
Subtotal				1	4	5	0	0	0		1	4	5	0		1	4	5
Proposed Use																		
Nursing Home	620	8,885 s.f. ⁽²⁾	T=0.55(X) (78/22)	4	1	5	0	0	0	0.0%	4	1	5	0	0.0%	4	1	5
Subtotal				4	1	5	0	0	0	0	4	1	5	0	0	4	1	5
NetDifference				3	-3	0	0	0	0		3	-3	0	0		3	-3	0

⁽¹⁾Trip generation rate obtained from ITE *Trip Generation* manual, 10th Edition.

⁽²⁾Square footage obtained from the Broward County Property Appraiser's website.

Table 4
PM Peak Hour Trip Generation - Square Footage
Margate Cares for Heroes

Land Use	ITE Code	Intensity	Trip Generation Rate ⁽¹⁾	Total Trips			Internal Trips				External Trips			Pass-by Trips		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Prior Use																		
Multi-Family Housing (Low-Rise)	220	10 d.u.	T=0.56(X) (63/37)	4	2	6	0	0	0	0.0%	4	2	6	0	0.0%	4	2	6
Subtotal				4	2	6	0	0	0		4	2	6	0		4	2	6
Proposed Use																		
Nursing Home	620	8,885 s.f. ⁽²⁾	T=0.59(X) (41/59)	2	3	5	0	0	0	0.0%	2	3	5	0	0.0%	2	3	5
Subtotal				2	3	5	0	0	0	0	2	3	5	0	0	2	3	5
NetDifference				-2	1	-1	0	0	0		-2	1	-1	0		-2	1	-1

⁽¹⁾Trip generation rate obtained from ITE *Trip Generation* manual, 10th Edition.

⁽²⁾Square footage obtained from the Broward County Property Appraiser's website.

Table 5
Daily Trip Generation - Beds
Margate Cares for Heroes

Land Use	ITE Code	Intensity	Trip Generation Rate ⁽¹⁾	Total Trips			Internal Trips				External Trips			Pass-by Trips		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Prior Use																		
Multi-Family Housing (Low-Rise)	220	10 d.u.	T=7.32(X) (50/50)	37	37	74	0	0	0	0.0%	37	37	74	0	0.0%	37	37	74
Subtotal				37	37	74	0	0	0		37	37	74	0		37	37	74
Proposed Use																		
Nursing Home	620	35 beds	T=3.06(X) (50/50)	54	54	108	0	0	0	0.0%	54	54	108	0	0.0%	54	54	108
Subtotal				54	54	108	0	0	0	0	54	54	108	0	0	54	54	108
NetDifference				17	17	34	0	0	0		17	17	34	0		17	17	34

⁽¹⁾Trip generation rate obtained from ITE *Trip Generation* manual, 10th Edition.

Table 6
AM Peak Hour Trip Generation - Beds
Margate Cares for Heroes

Land Use	ITE Code	Intensity	Trip Generation Rate ⁽¹⁾	Total Trips			Internal Trips				External Trips			Pass-by Trips		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Prior Use																		
Multi-Family Housing (Low-Rise)	220	10 d.u.	T=0.46(X) (23/77)	1	4	5	0	0	0	0.0%	1	4	5	0	0.0%	1	4	5
Subtotal				1	4	5	0	0	0		1	4	5	0		1	4	5
Proposed Use																		
Nursing Home	620	35 beds	T=0.17(X) (72/28)	4	2	6	0	0	0	0.0%	4	2	6	0	0.0%	4	2	6
Subtotal				4	2	6	0	0	0	0	4	2	6	0	0	4	2	6
NetDifference				3	-2	1	0	0	0		3	-2	1	0		3	-2	1

⁽¹⁾Trip generation rate obtained from ITE *Trip Generation* manual, 10th Edition.

Table 7
PM Peak Hour Trip Generation - Beds
Margate Cares for Heroes

Land Use	ITE Code	Intensity	Trip Generation Rate ⁽¹⁾	Total Trips			Internal Trips				External Trips			Pass-by Trips		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Prior Use																		
Multi-Family Housing (Low-Rise)	220	10 d.u.	T=0.56(X) (63/37)	4	2	6	0	0	0	0.0%	4	2	6	0	0.0%	4	2	6
Subtotal				4	2	6	0	0	0		4	2	6	0		4	2	6
Proposed Use																		
Nursing Home	620	35 beds	T=0.22(X) (33/67)	3	5	8	0	0	0	0.0%	3	5	8	0	0.0%	3	5	8
Subtotal				3	5	8	0	0	0	0	3	5	8	0	0	3	5	8
NetDifference				-1	3	2	0	0	0		-1	3	2	0		-1	3	2

⁽¹⁾Trip generation rate obtained from ITE *Trip Generation* manual, 10th Edition.

Table 8
Daily Trip Generation - Occupied Beds
Margate Cares for Heroes

Land Use	ITE Code	Intensity	Trip Generation Rate ⁽¹⁾	Total Trips			Internal Trips				External Trips			Pass-by Trips		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Prior Use																		
Multi-Family Housing (Low-Rise)	220	10 d.u.	T=7.32(X) (50/50)	37	37	74	0	0	0	0.0%	37	37	74	0	0.0%	37	37	74
Subtotal				37	37	74	0	0	0		37	37	74	0		37	37	74
Proposed Use																		
Nursing Home	620	35 beds ⁽²⁾	T=3.06(X) (50/50)	54	54	108	0	0	0	0.0%	54	54	108	0	0.0%	54	54	108
Subtotal				54	54	108	0	0	0	0	54	54	108	0	0	54	54	108
NetDifference				17	17	34	0	0	0		17	17	34	0		17	17	34

⁽¹⁾Trip generation rate obtained from ITE *Trip Generation* manual, 10th Edition.

⁽²⁾ITE doesn't provide a daily trip generation rate for "occupied beds."

Table 9
AM Peak Hour Trip Generation - Occupied Beds
Margate Cares for Heroes

Land Use	ITE Code	Intensity	Trip Generation Rate ⁽¹⁾	Total Trips			Internal Trips				External Trips			Pass-by Trips		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Prior Use																		
Multi-Family Housing (Low-Rise)	220	10 d.u.	T=0.46(X) (23/77)	1	4	5	0	0	0	0.0%	1	4	5	0	0.0%	1	4	5
Subtotal				1	4	5	0	0	0		1	4	5	0		1	4	5
Proposed Use																		
Nursing Home	620	35 occupied beds	T=0.10(X)+4.87 (72/28)	6	2	8	0	0	0	0.0%	6	2	8	0	0.0%	6	2	8
Subtotal				6	2	8	0	0	0	0	6	2	8	0	0	6	2	8
NetDifference				5	-2	3	0	0	0		5	-2	3	0		5	-2	3

⁽¹⁾Trip generation rate obtained from ITE *Trip Generation* manual, 10th Edition.

Table 10
PM Peak Hour Trip Generation - Occupied Beds
Margate Cares for Heroes

Land Use	ITE Code	Intensity	Trip Generation Rate ⁽¹⁾	Total Trips			Internal Trips				External Trips			Pass-by Trips		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Prior Use																		
Multi-Family Housing (Low-Rise)	220	10 d.u.	T=0.56(X) (63/37)	4	2	6	0	0	0	0.0%	4	2	6	0	0.0%	4	2	6
Subtotal				4	2	6	0	0	0		4	2	6	0		4	2	6
Proposed Use																		
Nursing Home	620	35 occupied beds	T=0.12(X)-1.51 (33/67) ⁽²⁾	1	2	3	0	0	0	0.0%	1	2	3	0	0.0%	1	2	3
Subtotal				1	2	3	0	0	0	0	1	2	3	0	0	1	2	3
NetDifference				-3	0	-3	0	0	0		-3	0	-3	0		-3	0	-3

⁽¹⁾Trip generation rate obtained from ITE *Trip Generation* manual, 10th Edition.

⁽²⁾No directional distribution provided by ITE. The same distribution provided for "beds" was assumed.

Table 11
Daily Trip Generation - Employees
Margate Cares for Heroes

Land Use	ITE Code	Intensity	Trip Generation Rate ⁽¹⁾	Total Trips			Internal Trips				External Trips			Pass-by Trips		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Prior Use																		
Multi-Family Housing (Low-Rise)	220	10 d.u.	$T=7.32(X) (50/50)$	37	37	74	0	0	0	0.0%	37	37	74	0	0.0%	37	37	74
Subtotal				37	37	74	0	0	0		37	37	74	0		37	37	74
Proposed Use																		
Nursing Home	620	31 employees	$T=2.43(X)+68.33 (50/50)$	72	72	144	0	0	0	0.0%	72	72	144	0	0.0%	72	72	144
Subtotal				72	72	144	0	0	0	0	72	72	144	0	0	72	72	144
NetDifference				35	35	69	0	0	0		35	35	69	0		35	35	69

⁽¹⁾Trip generation rate obtained from ITE *Trip Generation* manual, 10th Edition.

Table 12
AM Peak Hour Trip Generation - Employees
Margate Cares for Heroes

Land Use	ITE Code	Intensity	Trip Generation Rate ⁽¹⁾	Total Trips			Internal Trips				External Trips			Pass-by Trips		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Prior Use																		
Multi-Family Housing (Low-Rise)	220	10 d.u.	$T=0.46(X) (23/77)$	1	4	5	0	0	0	0.0%	1	4	5	0	0.0%	1	4	5
Subtotal				1	4	5	0	0	0		1	4	5	0		1	4	5
Proposed Use																		
Nursing Home	620	31 employees	$T=0.29(X)+4.76 (79/21)$	11	3	14	0	0	0	0.0%	11	3	14	0	0.0%	11	3	14
Subtotal				11	3	14	0	0	0	0	11	3	14	0	0	11	3	14
NetDifference				10	-1	9	0	0	0		10	-1	9	0		10	-1	9

⁽¹⁾Trip generation rate obtained from ITE *Trip Generation* manual, 10th Edition.

Table 13
PM Peak Hour Trip Generation - Employees
Margate Cares for Heroes

Land Use	ITE Code	Intensity	Trip Generation Rate ⁽¹⁾	Total Trips			Internal Trips				External Trips			Pass-by Trips		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Prior Use																		
Multi-Family Housing (Low-Rise)	220	10 d.u.	$T=0.56(X) (63/37)$	4	2	6	0	0	0	0.0%	4	2	6	0	0.0%	4	2	6
Subtotal				4	2	6	0	0	0		4	2	6	0		4	2	6
Proposed Use																		
Nursing Home	620	31 employees	$\ln(T)=0.65\ln(X)+0.40 (32/68)$	4	9	14	0	0	0	0.0%	4	9	14	0	0.0%	4	9	14
Subtotal				4	9	14	0	0	0	0	4	9	14	0	0	4	9	14
NetDifference				1	7	8	0	0	0		1	7	8	0		1	7	8

⁽¹⁾Trip generation rate obtained from ITE *Trip Generation* manual, 10th Edition.

TABLE 4

Generalized **Peak Hour Two-Way** Volumes for Florida's
Urbanized Areas¹

January 2020

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (40 mph or higher posted speed limit)						Core Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	1,510	1,600	**	4	4,050	5,640	6,800	7,420	
4	Divided	*	3,420	3,580	**	6	5,960	8,310	10,220	11,150	
6	Divided	*	5,250	5,390	**	8	7,840	10,960	13,620	14,850	
8	Divided	*	7,090	7,210	**	10	9,800	13,510	17,040	18,580	
						12	11,600	16,350	20,930	23,200	
Class II (35 mph or slower posted speed limit)						Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	660	1,330	1,410	4	4,130	5,640	7,070	7,690	
4	Divided	*	1,310	2,920	3,040	6	6,200	8,450	10,510	11,530	
6	Divided	*	2,090	4,500	4,590	8	8,270	11,270	13,960	15,380	
8	Divided	*	2,880	6,060	6,130	10	10,350	14,110	17,310	19,220	
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						Freeway Adjustments					
Non-State Signalized Roadways - 10%						Auxiliary Lanes Present in Both Directions + 1,800					
Median & Turn Lane Adjustments						Ramp Metering + 5%					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		UNINTERRUPTED FLOW HIGHWAYS					
2	Divided	Yes	No	+5%		Lanes	Median	B	C	D	E
2	Undivided	No	No	-20%		2	Undivided	1,050	1,620	2,180	2,930
Multi	Undivided	Yes	No	-5%		4	Divided	3,270	4,730	5,960	6,780
Multi	Undivided	No	No	-25%		6	Divided	4,910	7,090	8,950	10,180
-	-	-	Yes	+5%		Uninterrupted Flow Highway Adjustments					
One-Way Facility Adjustment Multiply the corresponding two-directional volumes in this table by 0.6						Lanes	Median	Exclusive left lanes	Adjustment factors		
						2	Divided	Yes	+5%		
						Multi	Undivided	Yes	-5%		
						Multi	Undivided	No	-25%		
BICYCLE MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						¹ Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.					
Paved						² Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.					
Shoulder/Bicycle						³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.					
Lane Coverage	B	C	D	E		* Cannot be achieved using table input value defaults.					
0-49%	*	260	680	1,770		** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.					
50-84%	190	600	1,770	>1,770		Source: Florida Department of Transportation Systems Implementation Office https://www.fdot.gov/planning/systems/					
85-100%	830	1,700	>1,770	**							
PEDESTRIAN MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)											
Sidewalk Coverage	B	C	D	E							
0-49%	*	*	250	850							
50-84%	*	150	780	1,420							
85-100%	340	960	1,560	>1,770							
BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)											
Sidewalk Coverage	B	C	D	E							
0-84%	> 5	≥ 4	≥ 3	≥ 2							
85-100%	> 4	≥ 3	≥ 2	≥ 1							

Nursing Home (620)

Peak Period Parking Demand vs: Beds

On a: Weekday (Monday - Friday)

Setting/Location: General Urban/Suburban

Peak Period of Parking Demand: 9:00 a.m. - 3:00 p.m.

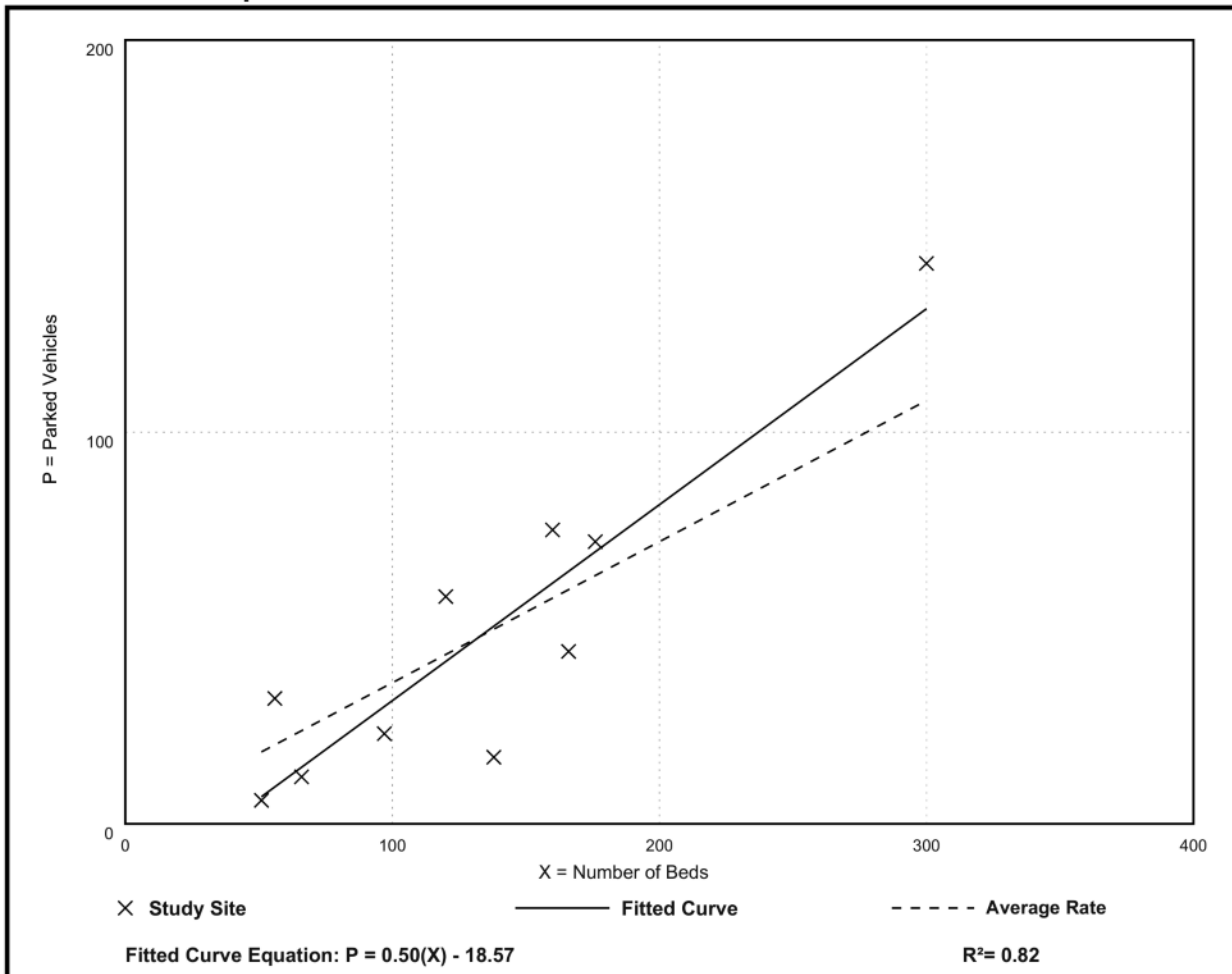
Number of Studies: 10

Avg. Num. of Beds: 133

Peak Period Parking Demand per Bed

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.36	0.12 - 0.57	0.22 / 0.51	***	0.15 (42%)

Data Plot and Equation



Land Use: 620 Nursing Home

Description

A nursing home is any facility whose primary function is to provide care for persons who are unable to care for themselves. Examples of such facilities include rest homes, chronic care, and convalescent homes. Skilled nurses and nursing aides are present 24 hours a day at these sites. Residents often require treatment from a registered healthcare professional for on-going medical issues. A nursing home resident is not capable of operating a vehicle. Parking demand is entirely generated by employees, visitors, and deliveries. Assisted living (Land Use 254) and continuing care retirement community (Land Use 255) are related uses.

Time of Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday at five study sites in a general urban/suburban setting.

Hour Beginning	Percent of Weekday Peak Parking Demand
12:00–4:00 a.m.	—
5:00 a.m.	—
6:00 a.m.	34
7:00 a.m.	41
8:00 a.m.	70
9:00 a.m.	86
10:00 a.m.	90
11:00 a.m.	97
12:00 p.m.	92
1:00 p.m.	93
2:00 p.m.	100
3:00 p.m.	71
4:00 p.m.	51
5:00 p.m.	52
6:00 p.m.	32
7:00 p.m.	—
8:00 p.m.	—
9:00 p.m.	—
10:00 p.m.	—
11:00 p.m.	—