



April 19, 2021

Firat Akcay, M.S.C.E., MBA  
City of Miami Beach Transportation Department  
1688 Meridian Avenue, Suite 801  
Miami Beach, Florida 33139

**Re: Sorrento Villas Redevelopment – Traffic Assessment  
Miami Beach, Florida**

Dear Mr. Akcay:

Kimley-Horn and Associates, Inc. has prepared a traffic assessment for the Sorrento Villas Redevelopment located at 7510 Harding Avenue in Miami Beach, Florida. Currently, the site proposed for redevelopment is occupied by a 21-room hotel. The proposed redevelopment consists of a 50-room hotel. A location map and conceptual site plan are provided in Attachment A. The following sections summarize our analysis.

**TRIP GENERATION**

Trip generation calculations for the proposed redevelopment were performed using Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10<sup>th</sup> Edition. The trip generation for the existing and proposed development were determined using ITE Land Use Code (LUC) 310 (Hotel).

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tracts in the vicinity of the redevelopment. The US Census data indicated that there is a 28.1 percent (28.1%) multimodal factor within the vicinity of the redevelopment. However, to provide a conservative analysis, a multimodal factor of 20.0 percent (20.0%) was applied to the trip generation calculations to account for the urban environment in which the project site is located. It is expected that a portion of employees and guests will choose to walk, bike, or use public transit to and from the proposed redevelopment.

The proposed redevelopment is expected to generate 11 net new vehicle trips during the weekday A.M. peak hour and 14 net new vehicle trips during the weekday P.M. peak hour. Trip generation calculations and US Census data are included as Attachment B.

**PROJECT ACCESS**

Guest/pedestrian access to the project is provided at the project's front door/main entrance along Harding Avenue. Note that a designated rideshare/taxi drop-off/pick-up area is provided along the north side of 75<sup>th</sup> Street just west of Harding Avenue.

A signage detail for the proposed rideshare/taxi drop-off/pick-up area was prepared to graphically illustrate the proposed signage that will be utilized to facilitate passenger drop-off/pick-up operations. An aerial depicting the rideshare/taxi drop-off/pick-up area and a conceptual sign detail graphic are contained in Attachment C.

## TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

The applicant is considering providing the following Transportation Demand Management (TDM) strategies to encourage people to use public transportation, use bicycles, walk, and use car/vanpools to reduce the impacts of the project traffic on the surrounding roadway network:

- Create an employee transportation coordinator position to manage the TDM program.
- Provide secure bicycle parking (bicycle racks and/or lockers).
- Provide transit information within the site including route schedules and maps.
- Provide carpool incentive program for employees.
- Provide subsidized transit passes for employees.
- Provide bike workroom or shop.
- Provide bike washing stations.
- Provide improved, enhanced (wide) sidewalks around the site.

## CONCLUSION

Kimley-Horn and Associates, Inc. has performed a traffic assessment for the proposed redevelopment located at 7510 Harding Avenue in Miami Beach, Florida. The property proposed for redevelopment is currently occupied by a 21-room hotel. The proposed redevelopment consists of a 50-room hotel. Guest/pedestrian access to the project is provided at the project's main entrance along Harding Avenue. A designated rideshare/taxi drop-off/pick-up area is provided along the north side of 75<sup>th</sup> Street just west of Harding Avenue. The proposed development is expected to generate 11 net new weekday A.M. peak hour vehicular trips and 14 net new weekday P.M. peak hour vehicular trips.

If you have any questions regarding this analysis, please feel free to contact me.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.



Omar Kanaan, P.E.



Omar Kanaan, P.E.

Florida Registration Number 81433  
Kimley-Horn and Associates, Inc.  
8201 Peters Road, Suite 2200  
Fort Lauderdale, FL 33324  
Registry # 00000696

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# **Attachment A**

Location Map and Conceptual Site Plan



Figure 1  
Location Map  
Sorrento Villas Redevelopment  
Miami Beach, Florida



**Attachment B**  
Trip Generation Calculations

## AM PEAK HOUR TRIP GENERATION COMPARISON

### EXISTING WEEKDAY AM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS					
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total			
						In	Out																					
GROUP 1	1	Hotel	10	310	21	room	59%	41%	6	4	10	20.0%	2	5	3	8	0.0%	0	5	3	8	0.0%	0	5	3	8		
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		ITE Land Use Code	Rate or Equation		Total:		6	4	10	20.0%	2	5	3	8	0.0%	0	5	3	8	0.0%	0	5	3	8				
		310	Y=0.47(X)																									

### PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS						
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total				
						In	Out																						
GROUP 2	1	Hotel	10	310	50	room	59%	41%	14	10	24	20.0%	5	11	8	19	0.0%	0	11	8	19	0.0%	0	11	8	19			
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		ITE Land Use Code	Rate or Equation		Total:		14	10	24	20.0%	5	11	8	19	0.0%	0	11	8	19	0.0%	0	11	8	19					
		310	Y=0.47(X)																										

NET NEW TRIPS	IN	OUT	TOTAL
6	5	11	11

# PM PEAK HOUR TRIP GENERATION COMPARISON

## EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS					
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total			
						In	Out																					
GROUP 1	1	Hotel	10	310	21	room	51%	49%	7	6	13	20.0%	3	5	5	10	0.0%	0	5	5	10	0.0%	0	5	5	10		
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		ITE Land Use Code	Rate or Equation		Total:		7	6	13	20.0%	3	5	5	10	0.0%	0	5	5	10	0.0%	0	5	5	10				
		310	Y=0.6(X)																									

## PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS						
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total				
						In	Out																						
GROUP 2	1	Hotel	10	310	50	room	51%	49%	15	15	30	20.0%	6	12	12	24	0.0%	0	12	12	24	0.0%	0	12	12	24			
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		ITE Land Use Code	Rate or Equation		Total:		15	15	30	20.0%	6	12	12	24	0.0%	0	12	12	24	0.0%	0	12	12	24					
		310	Y=0.6(X)																										

	IN	OUT	TOTAL
<b>NET NEW TRIPS</b>	7	7	14

# MEANS OF TRANSPORTATION TO WORK

$$(611+108+111)/2,951 = 28.1\%$$



Note: This is a modified view of the original table produced by the U.S. Census Bureau. This download or printed version may have missing information from the original table.

Census Tract 39.13, Miami-Dade County, Florida		
Label	Estimate	Margin of Error
▼ Total:	2,951	±395
▼ Car, truck, or van:	1,710	±364
Drove alone	1,605	±363
▼ Carpooled:	105	±134
In 2-person carpool	105	±134
In 3-person carpool	0	±14
In 4-person carpool	0	±14
In 5- or 6-person carpool	0	±14
In 7-or-more-person carpool	0	±14
▼ Public transportation (excluding taxicab):	611	±241
Bus	550	±233
Subway or elevated rail	61	±92
Long-distance train or commuter rail	0	±14
Light rail, streetcar or trolley (carro público in Puerto Rico)	0	±14
Ferryboat	0	±14
Taxicab	41	±69
Motorcycle	107	±104
Bicycle	108	±97
Walked	111	±96
Other means	52	±50
Worked from home	211	±152

## Table Notes

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### MEANS OF TRANSPORTATION TO WORK

**Survey/Program:**

American Community Survey

**Universe:**

Workers 16 years and over

**Year:**

2019

**Estimates:**

5-Year

**Table ID:**

B08301

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates

2019 ACS data products include updates to several categories of the existing means of transportation question. For more information, see: [Change to Means of Transportation](#).

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

The 2015-2019 American Community Survey (ACS) data generally reflect the September 2018 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

**Explanation of Symbols:**

An "\*\*\*" entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.

An "-" entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution, or the margin of error associated with a median was larger than the median itself.

An "-" following a median estimate means the median falls in the lowest interval of an open-ended distribution.

An "+" following a median estimate means the median falls in the upper interval of an open-ended distribution.

An "\*\*\*" entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.

An "\*\*\*\*\*" entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.

An "N" entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.

An "(X)" means that the estimate is not applicable or not available.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

## **Attachment C**

Rideshare/Taxi Drop-Off/Pick-Up Area and  
Conceptual Sign Detail

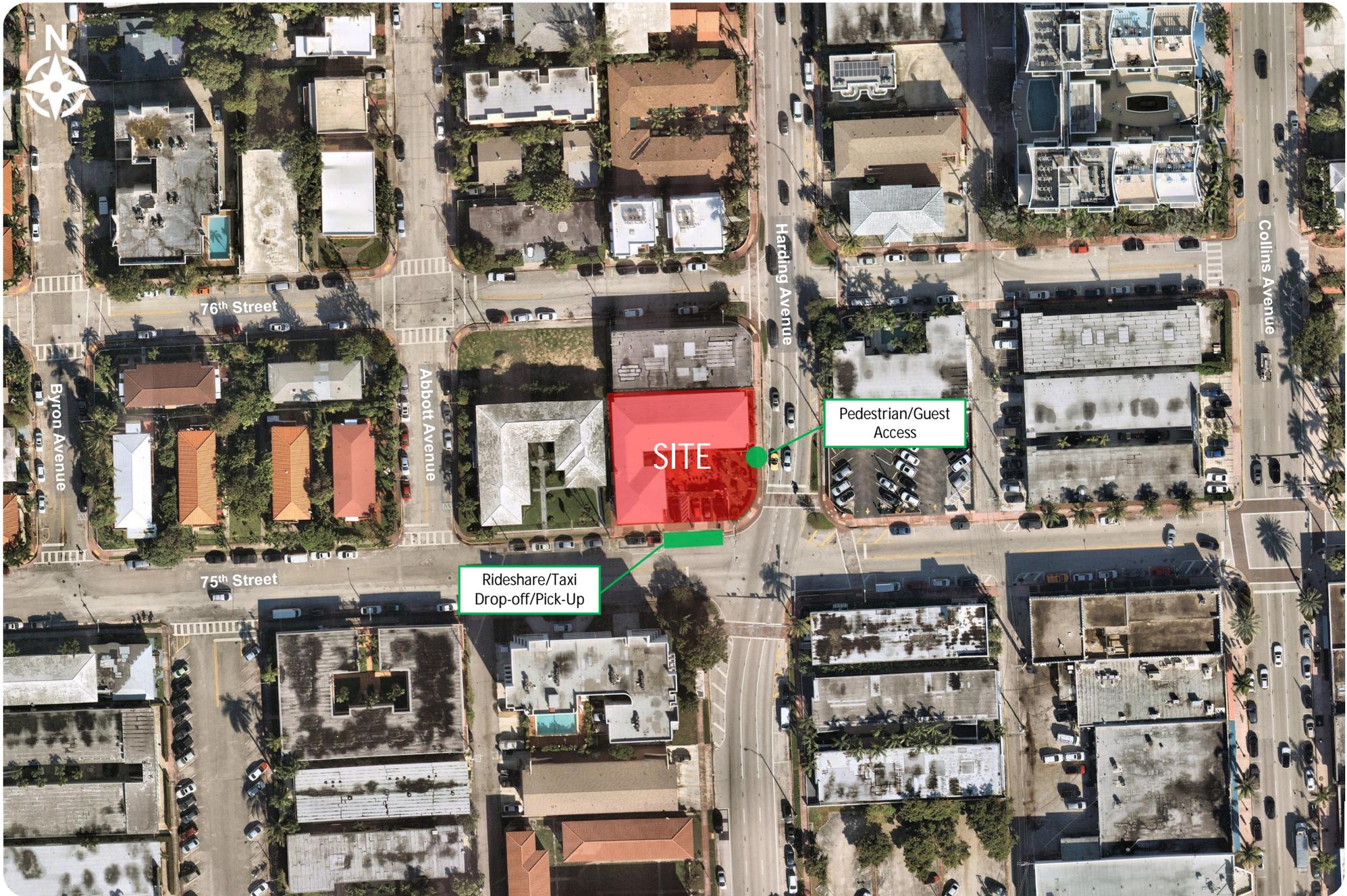


Figure 2  
Rideshare/Taxi Drop-Off/Pick-Up Location  
Sorrento Villas Redevelopment  
Miami Beach, Florida

Southbound Harding Avenue  
Signage



Westbound 75th Street  
Signage

