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Redevelopment Traffic Study

1709 Jefferson Avenue

Prepared by:
Alfka, LLC

Prepared for:
Regency Development Group

Project Number:
RDG2301

LUIS ALFREDO CELY
LICENSE
No 70653
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:
Luis A Cely
2024.01.30 21:29:56 -05'00'
ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

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Luis Alfredo Cely, P.E. No. 70653

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Appendices

Executive Summary

The commercial property at 1709 Jefferson Avenue is proposed to be redeveloped from a surface parking lot into a 10 unit single-family attached townhome development. A trip generation study was completed based on the proposed Single-Family Attached Use for 1709 Jefferson Avenue. The study shows that the proposed redevelopment is expected to result in an increase of 5 weekday AM peak hour trips and 6 weekday PM peak hour trips. As a conservative measure, the existing surface parking lot use has been estimated to generate no additional traffic. Thus, the maximum net increase in vehicular trips generated by the proposed development are 6 trips during the weekday PM peak hour.

Recent Census Data shows an increase in multimodal use nationwide, and as such 2023 data shows approximately a 25% multimodal use in Miami Beach, however as a conservative approach this Study assumes a 20% Multimodal factor. There are several Miami-Dade Transit lines that serve the vicinity of the project site, these include Route S, M, and L. In addition, the City of Miami Beach operates the South Beach Trolley, which serves the subject project.

An intersection capacity analysis was performed for the two-way stop controlled intersection of 17th Street and Jefferson Avenue. The analysis shows the intersection is projected to operate within acceptable LOS standards. A 95th percentile queue analysis was performed to determine if the roadway network have sufficient storage to accommodate project vehicle queue lengths for existing and future conditions.

To further improve traffic circulation within its project, the 1709 Jefferson Avenue development is currently formulating its Transportation Demand Management (TDM) Plan. The TDM will incentivize the use of transit, cycling, carpooling, and alternative transportation modes.

Garbage pickup is to be completed by a private hauler. Each of the 10 units will have rolling bins that will be stored within each unit's garage, and rolled out on the assigned private collection days. Loading and unloading operations are to be completed within the internal drive-aisle between the rows of townhomes. Garbage pick-up, loading and unloading operations are all to occur within the internal drive-aisle, within private property, and outside the City's Right of Way.

The townhome development is proposed to have one security roller gate, which is to open sliding within the private property. A queue analysis was completed, and during the PM peak hour only one vehicle is anticipated to queue while the gate is opened. The gate has been positioned inside the private property, so that the one vehicle queue, an estimated 20-foot length, occurs within private property and outside the City's Right of Way.

This study demonstrates that the minimal increase in vehicular traffic (6 PM peak hour trips) does not create a negative impact to the intersection of Jefferson Avenue and 17th Street or the surrounding roadway network.

The study was developed in accordance to the Traffic Study Methodology shown in Appendix M.

Trip Generation

The 1709 Jefferson Avenue redevelopment proposes to use the existing surface parking lot to serve as a 10-unit Single-Family Attached townhome development. Trip generation calculations were performed using Institute of Transportation Engineers' (ITE's) Trip Generation Manual, 11th Edition. ITE Land Use Code (LUC) 215 (Single-Family Attached) was used to estimate traffic from the proposed redevelopment.

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census Means of Transportation to Work data was reviewed for the census tract containing the redevelopment (see Appendix A). A multimodal factor of 25.9 percent (25.9%) was determined for the area based on the census data for this tract, for the calculations a conservative 20% multimodal reduction factor was applied to the trip generation. It is expected that employees, patrons, and guests will choose to walk, bicycle or use public transit to and from the proposed redevelopment. There are several transit lines that serve the vicinity of the project site (see Appendix B), these include Route S, M, and L. In addition the City of Miami Beach operates the South Beach Trolley, which also serves the subject project (see Appendix C).

The proposed redevelopment is expected to result in a increase of 5 weekday AM peak hour trips and 6 weekday PM peak hour trips. Detailed trip generation calculations are shown below on Table 1.

Table 1 - Trip Generation Summary

PROPOSED WEEKDAY ADT

ITE Code / Description	Quantity	Units	Peak Hour Trips			Multimodal Reduction	Net Peak Hour Trips		
			In	Out	Total		In	Out	Total
215 / Single-Family Attached Housing	10	DU	36	36	72	20%	29	29	58
						Totals	**29**	**29**	**58**

PROPOSED WEEKDAY AM PEAK HOUR

ITE Code / Description	Quantity	Units	Peak Hour Trips			Multimodal Reduction	Net Peak Hour Trips		
			In	Out	Total		In	Out	Total
215 / Single-Family Attached Housing	10	DU	2	4	6	20%	2	3	5
						Totals	**2**	**3**	**5**

PROPOSED WEEKDAY PM PEAK HOUR

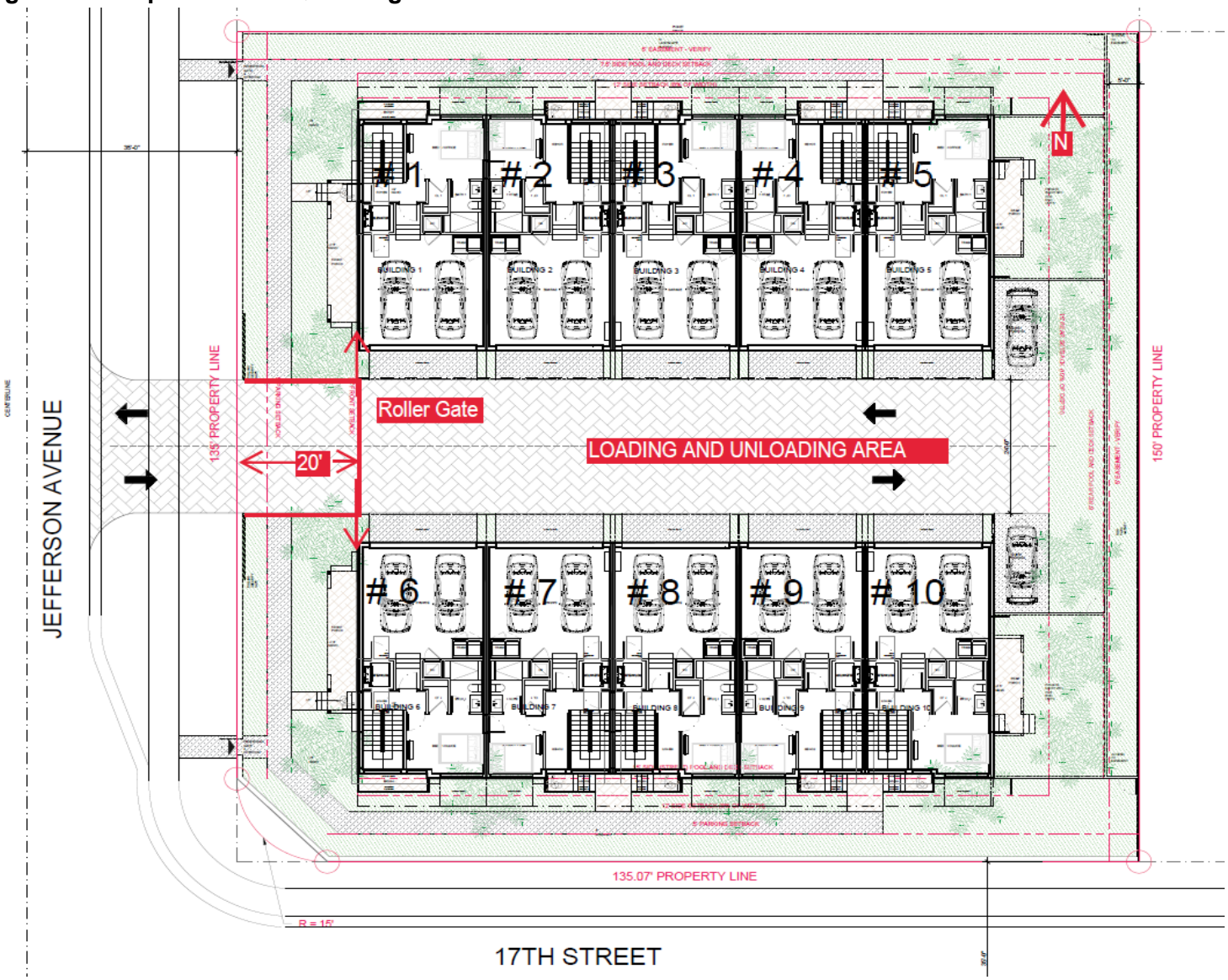
ITE Code / Description	Quantity	Units	Peak Hour Trips			Multimodal Reduction	Net Peak Hour Trips		
			In	Out	Total		In	Out	Total
215 / Single-Family Attached Housing	10	DU	5	3	8	20%	4	2	6
						Totals	**4**	**2**	**6**

ITE Trip Generation - 11th Edition

Queue Analysis

The proposed development is planned to have one roller gate, operated via remote control by each of the individual property owners. During the weekday PM peak hour, it is anticipated a maximum of one vehicle will queue waiting for the door to open at a time. The gate has been positioned so the estimated 20-foot long passenger vehicle can queue within private property, without encroaching into the City's Right of Way. Figure 1 provides details of the site plan and the estimated queue area. Appendix D, provides a Context Location Plan. Appendix F has a detailed site plan, which also provides details on the loading and unloading area.

Figure 1 – Proposed Gate Queueing Location



As noted in Figure 1, there is a proposed 20-foot clearance between the roller gate and the property line. This clearance is intended to serve as a one (1) passenger vehicle queueing storage, for when the private vehicles are waiting for the automatic garage roller door to open. Based on a conservative operation estimate, a total of 90 seconds of waiting is estimated for the user to operate the door, and for the transponder to roll and open the garage door. The queuing operations analysis was performed based on the methodology outlined in ITE's Transportation and Land Development manual published in 1988. The analysis determined that one (1) vehicle space is adequate to ensure with a 95% confidence interval that no vehicles are queueing for the garage door to open within the City's Right of Way. The analysis was completed using the traffic volumes estimated to access the proposed development during its highest-use, which is the weekday PM peak hour. Please refer to Table 2 for the details of the gate queueing analysis.

Table 2 - Waiting Line Model – Automatic Gate Queueing

95% Percentile Queueing Analysis

Service Time (min)	Description
1.5	Opening gate for stopped vehicle using remote

Queueing Analysis Calculations

5%	Queue Exceeding Probability
4.0	Arrival Rate in veh/hr (q)
40.00	Average Service Rate per service position in veh/hr (Q)
1	Number of service positions (N)
0.10	Coefficient of Utilization q/NQ (r)
90.00%	Probability of no users in the system (P(0))
0.011	Mean number in the queue (Em)
0.111	Mean number in the system (En)
0.167	Mean wait time in the queue in minutes (Ew)
1.667	Mean wait time in the system in minutes (Et)
10.00%	Percentage of users who wait
0.000	Queue storage required

Parking, Site Maneuverability and Loading

The proposed project is planned to provide two passenger vehicle parking spaces per each townhome, with additional two parking spaces for the common space. This represents a total of 22 parking spaces. Loading and unloading is to be completed within the common drive-aisle in between the townhomes. The property is proposing to use a private solid waste hauler to pick-up garbage from each of the townhomes. Each townhome is provided with a 5-foot deep clear area along the back/garage area for each townhome. During the private garbage collection days, townhome residents are to roll out garbage bins and place them within the 5-foot clear area for garbage pick-up. A maneuverability analysis has been completed as part of the project using turning movement templates for passenger vehicles. Please refer to Appendix N.

Intersection Capacity Analysis

To identify the existing peak hour for the vehicular traffic within the two-way stop-controlled intersection between 17th Street and Jefferson Avenue, turning movement counts were completed between 7:00 and 9:00AM and between 4:00 and 6:00PM on 12/19/2023 (Tuesday). The observed peak hour occurred from 4:15 to 5:15PM with 1,056 vehicles accessing the intersection (Please refer to Appendix I for Traffic Volume Counts). Intersection turning movement counts were collected within this peak hour during at the intersection. The existing surface parking lot driveway is currently not in use, as discussed with the property owner. This was evident during the day of the counts, as no vehicles entered or exited the existing surface parking lot driveway. The existing roadway network volumes are summarized in Figure 2. The townhome development is anticipated to open in 2024, thus the year 2024 was selected as the build-out year. Available FDOT and Miami-Dade County traffic counts were consulted to determine a growth factor consistent with historical annual growth in the area. The growth factor was applied to the existing traffic volumes to establish background traffic. Growth factor estimate is shown on Table 3.

Figure 2 – Existing Traffic Volumes

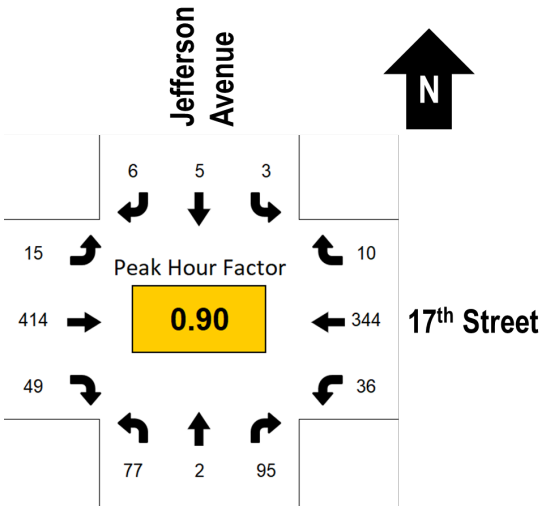
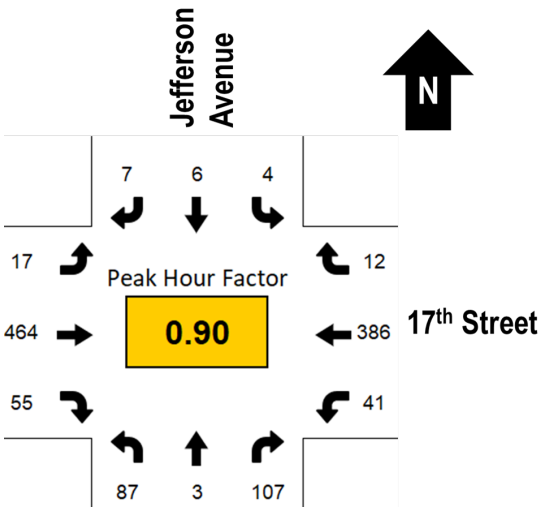


Table 3 – Traffic Count Site 8531 Data Summary

17th Street (8531)	2018	2019	2020	2021	2022
AADT	16,800	19,400	17,300	16,500	16,900
Growth Rate		15%	-11%	-5%	3%
Average Growth Rate					0.5%

The FDOT Peak Season Factor (Appendix K) was used to estimate the traffic volumes in 2024. The peak season conversion was selected for I-395 and the coinciding factor for the analysis date was determined to be 1.09. Future without project turning movement volumes were obtained by applying one year of background growth to the existing network. Future Background without project trips is summarized in Figure 3. Trip generation calculations were performed using Institute of Transportation Engineers' (ITE's) Trip Generation Manual, 11th Edition. ITE Land Use Code (LUC) 215 (Single-Family Attached) was used to estimate traffic from the proposed redevelopment. The proposed redevelopment is anticipated to generate 4 inbound and 2 outbound trips during the Weekday PM peak period.

Figure 3 – Background 2024 Volumes



Project traffic was distributed and assigned to the study area using the Cardinal Distribution for TAZ 655 shown in Table 4. The Cardinal Distribution gives a generalized distribution of trips from a TAZ to other parts of Miami-Dade County (see Appendix L). For estimating trip distribution for the project traffic, consideration was given to conditions such as the roadway network accessed by the project traffic, roadways available to travel in the desired direction, and attractiveness of traveling on a specific roadway. The future with project volumes is show on figure 4.

Figure 4 – Development 2024 Volumes

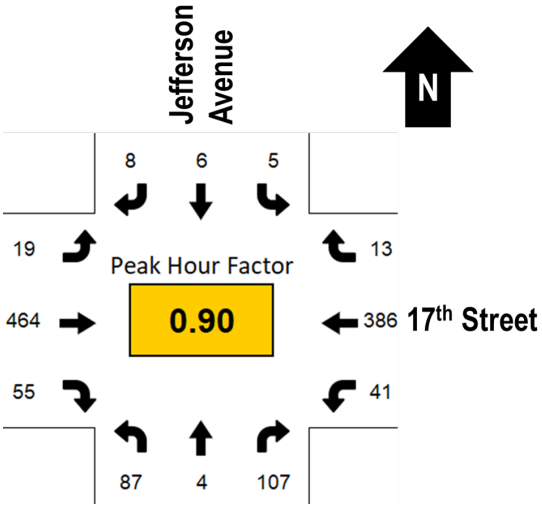


Table 4 – Cardinal Distribution

Direction	2015	2045	2024
NNE	20.80%	17.60%	19.70%
ENE	0.00%	0.00%	0.00%
ESE	0.00%	0.00%	0.00%
SSE	0.00%	0.00%	0.00%
SSW	8.30%	6.90%	7.80%
WSW	20.40%	21.90%	20.90%
WNW	27.10%	31.80%	28.70%
NNW	23.40%	21.90%	22.90%

An intersection capacity analysis was performed used the Highway Capacity Manual (HCM 6th Edition) methodology for Two-Way Stop Controlled Intersections for the unsignalized Jefferson Avenue and 17th Street intersection. The analysis show that the intersection's priority movements (EB-WB) are projected to operate within acceptable LOS standards. The NB and SB sidestreet movements operate with an F and D level for both the future background scenario and for the proposed development scenario. A 95th percentile queue analysis was performed to determine if the roadway network has sufficient storage to accommodate project vehicle queue lengths for existing and future conditions. There is no impact on the queue length for the either of the approaches by the proposed development scenario. SYNCHRO version 12 was used to develop the HCM calculations for the Two-Way Stop-Controlled Intersection according to the HCM 6th Edition. Appendix L provides the worksheets used for the calculations developed by the HCS program.

Table 5 – Intersection Capacity Analysis Results

			Existing		Background		Future	
Intersection	Type	Direction	PM LOS	PM Delay	PM LOS	PM Delay	PM LOS	PM Delay
Jefferson Ave & 17th Street	Two-Way Stop Controlled	NB	C	21.7	D	31.2	D	32.3
		SB	C	16.1	C	18.5	C	18.5
		EB	A	8.1	A	8.2	A	8.3
		WB	A	8.6	A	8.8	A	8.8

Transportation Demand Management Plan

One of the reasons the proposed Miami Beach location of the 1709 Jefferson Avenue Project was selected is because it is within an urban, dense, and mixed-use land area. This type of land use promotes the use of sustainable transportation modes and provides opportunities to employees and patrons to use transportation modes that do not rely on single-occupant motor vehicle rides. A land-use plan is included under Appendix E to provide information on surrounding land uses.

The 1709 Jefferson Avenue Transportation Demand Management Plan (TDMP) includes elements to incentivize the preferred use of transit, cycling, carpooling, and other alternative transportation modes. These strategies have the goal of reducing the impacts of the project traffic on the surrounding roadway network and focus on promoting bicycling and walking, car/vanpooling, and alternatives to the typical single-occupant use of a motor vehicle to access the site, either as a patron or employee. TDMP Strategies include:

Employee Transportation Coordinator. To promote the use of alternative transportation modes, the 1709 Jefferson Avenue Project has designated Mr. Igor Michin, as the project's Transportation Coordinator. Ms. Ichin's contact information is as follows:

Mr. Igor Michin
Phone: (312) 914-0224
Email: igor@regencydevgroup.com

Promoting Transit. The 1709 Jefferson Avenue Project shall promote the use of transit with its users. Transit information will be provided to each resident with information on transit route maps and route schedules. Carpooling and vanpooling program information shall be provided to residents, including information of any available economic incentive programs (such as subsidized transit passes) to encourage residents' participation in the reduction of single-occupant vehicular trips or the use of transit facilities.

Promoting Pedestrian and Cycling. Jefferson Avenue and 17th Street have wide sidewalks (>5ft) which will be maintained as part of the operation of the new development with locations for landscaping shading, well established businesses and local art which promotes and invites walking. These wide sidewalks and streetscape amenities such as lighting, landscaping, benches, bike racks, and trash cans, create an environment which encourages walking and cycling, and are proposed to remain. Furthermore, Jefferson Avenue and 17th Street are used via micromobility users, further promoting the use of alternative transportation modes. The project site is located right within this livable corridor, promoting and inviting the use of alternative transportation modes for residents. The project is evaluating the option of providing direct pedestrian access for residential units to 17th Street, further promoting the use of walking and cycling within the corridor.

APPENDIX A

US Census Means of Transportation to Work

MEANS OF TRANSPORTATION TO WORK BY VEHICLES AVAILABLE

United States Census Bureau

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.

	United States	
Label	Estimate	Margin of Error
Total:	152,891,752	±149,819
No vehicle available	6,298,680	±49,012
1 vehicle available	31,422,618	±117,551
2 vehicles available	61,801,315	±185,070
3 or more vehicles available	53,369,139	±166,780
Car, truck, or van - drove alone:	104,249,513	±136,937
No vehicle available	1,580,531	±29,738
1 vehicle available	19,701,567	±73,979
2 vehicles available	43,283,148	±133,720
3 or more vehicles available	39,684,267	±142,947
Car, truck, or van - carpooled:	11,921,065	±69,985
No vehicle available	599,486	±17,049
1 vehicle available	2,452,307	±34,518
2 vehicles available	4,366,569	±44,474
3 or more vehicles available	4,502,703	±44,867
Public transportation (excluding taxicab):	3,728,343	±36,906
No vehicle available	1,554,809	±25,465
1 vehicle available	1,137,414	±22,511
2 vehicles available	640,079	±14,107
3 or more vehicles available	396,041	±13,136
Walked:	2,858,418	±31,619
No vehicle available	709,516	±18,908
1 vehicle available	857,169	±20,321
2 vehicles available	753,612	±15,296
3 or more vehicles available	538,121	±15,860
Taxicab, motorcycle, bicycle, or other means:	2,850,491	±34,969
No vehicle available	561,967	±12,777
1 vehicle available	778,691	±17,553
2 vehicles available	846,256	±21,567
3 or more vehicles available	663,577	±19,392
Worked from home:	27,283,922	±105,055
No vehicle available	1,292,371	±19,631
1 vehicle available	6,495,470	±61,103
2 vehicles available	11,911,651	±89,390
3 or more vehicles available	7,584,430	±56,519

Table Notes

MEANS OF TRANSPORTATION TO WORK BY VEHICLES AVAILABLE

Survey/Program: American Community Survey

Universe: Workers 16 years and over in households

Year: 2021

Estimates: 1-Year

Table ID: B08141

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.

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.

Source: U.S. Census Bureau, 2021 American Community Survey 1-Year Estimates

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 2021 American Community Survey (ACS) data generally reflect the March 2020 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 delineations 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:

-

The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself.

N

The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area.

(X)

The estimate or margin of error is not applicable or not available.

median-

The median falls in the lowest interval of an open-ended distribution (for example "2,500-")

median+

The median falls in the highest interval of an open-ended distribution (for example "250,000+").

**

The margin of error could not be computed because there were an insufficient number of sample observations.

***

The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.

*****

A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.

APPENDIX B
Miami-Dade Transit Bus Service Routes

METROBUS SYSTEM

MAY 2019

METROBUS ROUTES

- Limited-Stop Service
- Express Service
- Non-stop Service
- East-West Local-Stop Service
- North-South Local-Stop Service
- Local Shuttle or Circulator Service

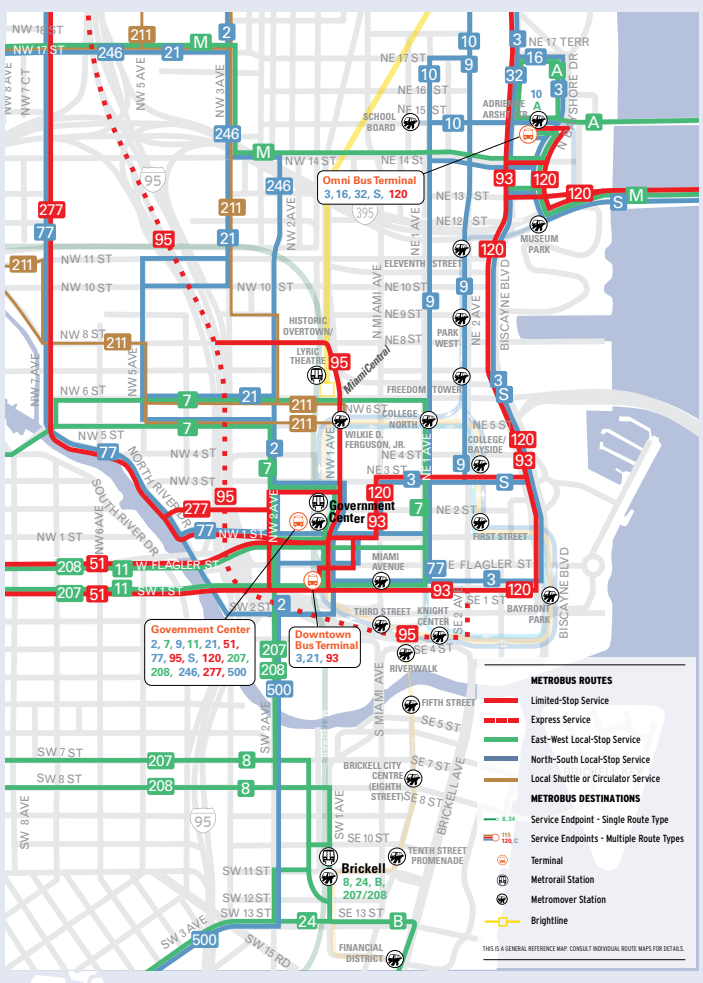
METROBUS DESTINATIONS

- 8, 24 — Service Endpoint - Single Route Type
- 115 120, C — Service Endpoints - Multiple Route Types
- Terminal
- Park and Ride Lot
- South Dade TransitWay Station
- 22, 27 — Metrorail & Station - Routes Serving Station
- Tri-Rail
- Brightline

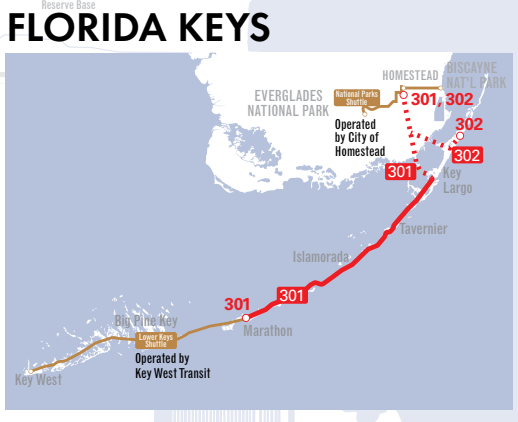
THIS IS A GENERAL REFERENCE MAP. CONSULT INDIVIDUAL ROUTE MAPS FOR DETAILS.

BROWARD COUNTY

DOWNTOWN MIAMI



FLORIDA KEYS



Connects with Metrorail · Serves Park & Ride · Overnight Service · Serves Miami International Airport · Connects with Tri-Rail · Connects with Brightline

- 1 — Perrine ⇆ Quail Roost Dr/SW 117 Ave
- 2 — 163 St Mall, 84 St ⇆ Downtown Miami
- 3 — Aventura Mall ⇆ Downtown Miami
- 7 — Dolphin Mall, Miami Intl Airport ⇆ Downtown Miami
- 8 — FIU Maidique Campus ⇆ Brickell Metrorail
- 9 — Aventura, 163 St Mall ⇆ Downtown Miami
- 10 — Skylake Mall ⇆ Omni Metrobus Terminal
- 11 — FIU Maidique Campus, Mall of the Americas ⇆ Downtown Miami
- 12 — Northside Metrorail ⇆ Mercy Hospital
- 16 — 163 St Mall ⇆ Omni Metrobus Terminal
- 17 — Norwood ⇆ Vizcaya Metrorail
- 19 — (WEEKDAYS ONLY) MDC North Campus ⇆ 163 St Mall
- 21 — Northside Metrorail ⇆ Downtown Miami
- 22 — 163 St Mall ⇆ Coconut Grove Metrorail
- 24 — **CORAL WAY LIMITED** - West Dade ⇆ Brickell Metrorail
- 27 — Miami Gardens ⇆ Coconut Grove Metrorail
- 29 — (WEEKDAYS ONLY) Miami Lakes Education Center ⇆ Hialeah
- 31 — **BUSWAY LOCAL** - South Dade Government Center ⇆ Dadeland South Metrorail
- 32 — Carol City ⇆ Omni Metrobus Terminal
- 33 — Hialeah ⇆ NE 79 St/Biscayne Blvd
- 34 — **34 EXPRESS** (WEEKDAY RUSH-HOUR ONLY) Florida City ⇆ Dadeland South Metrorail
- 35 — MDC Kendall Campus ⇆ Florida City
- 36 — Dolphin Mall, Doral, Miami Springs ⇆ Midtown Miami
- 37 — Hialeah ⇆ South Miami Metrorail
- 38 — **BUSWAY MAX** Dadeland South Metrorail ⇆ Florida City
- 39 — **39 EXPRESS** (WEEKDAY RUSH-HOUR ONLY) S Dade Govt Ctr ⇆ Dadeland South Metrorail
- 40 — Lakes of the Meadow, Tamiami Trail/SW 132 Ave ⇆ Douglas Road Metrorail
- 42 — Opa-locka Tri-Rail ⇆ Douglas Road Metrorail
- 46 — **LIBERTY CITY CONNECTION** (WEEKDAY RUSH-HOUR ONLY) Brownsville Metrorail ⇆ Seventh Avenue Transit Village
- 51 — **FLAGLER MAX** (WEEKDAYS ONLY) West Dade ⇆ Downtown Miami
- 52 — Dadeland South Metrorail ⇆ South Dade Health Center
- 54 — Miami Gardens Dr/NW 87 Ave, Hialeah Gardens ⇆ Biscayne Blvd/NE 54 St
- 56 — (WEEKDAYS ONLY) West Dade ⇆ Miami Children's Hospital
- 57 — (WEEKDAYS ONLY) Miami Intl Airport ⇆ Jackson South Hospital
- 62 — Hialeah ⇆ Biscayne Blvd / 62 St
- 71 — Dolphin Mall ⇆ MDC Kendall Campus
- 72 — West Kendall Terminal, Miller Square ⇆ South Miami Metrorail
- 73 — Miami Gardens Dr & NW 73 Ave Park & Ride ⇆ Dadeland South Metrorail
- 75 — Miami Lakes Educational Center ⇆ FIU Biscayne Bay Campus
- 77 — Norwood ⇆ Downtown Miami
- 79 — **79 STREET MAX** (WEEKDAY RUSH-HOUR ONLY) Northside Metrorail ⇆ 72 St / Miami Beach
- 82 — **WESTCHESTER CIRCULATOR** (NO SUNDAYS) FIU Maidique Campus ⇆ Flagami
- 87 — Palmetto Metrorail, Doral ⇆ Dadeland North Metrorail
- 88 — Dadeland North Metrorail ⇆ West Kendall Terminal
- 93 — **BISCAYNE MAX** (WEEKDAYS ONLY) Downtown Miami ⇆ Aventura Mall
- 95 — **95 EXPRESS GOLDEN GLADES** (WEEKDAY RUSH-HOUR ONLY) Carol City, Aventura Mall, Golden Glades ⇆ Downtown Miami, Civic Center
  95 EXPRESS DADE BROWARD (WEEKDAY RUSH-HOUR ONLY)
  ROUTE 195: Broward Blvd ⇆ Downtown Miami
  ROUTE 196: Sheridan St ⇆ Downtown Miami
  ROUTE 295: Broward Blvd ⇆ Civic Center
  ROUTE 296: Sheridan St ⇆ Civic Center
- 99 — Miami Gardens Dr & NW 73 Ave Park & Ride ⇆ Aventura Mall
- A — ROUTE 101: Omni ⇆ 20th Street & West Avenue / Miami Beach
- B — ROUTE 102: Brickell Metrorail ⇆ Key Biscayne
- C — ROUTE 103: South Beach ⇆ Mt. Sinai Medical Center
- 104 — West Kendall Terminal ⇆ Dadeland North Metrorail
- E — ROUTE 105: Golden Glades ⇆ Hallandale Beach
- G — ROUTE 107: 94 St / Miami Beach ⇆ MDC North Campus
- H — ROUTE 108: 163 Street Mall ⇆ Haulover Park
- J — ROUTE 110: Miami Intl Airport ⇆ 41 St / Miami Beach
- L — ROUTE 112: Lincoln Rd ⇆ Hialeah Metrorail
- M — ROUTE 113: Civic Center ⇆ Mt. Sinai Hospital
- 115 — **MID-NORTH BEACH CONNECTION** - Collins Ave / 88 St ⇆ Lincoln Rd
- S — ROUTE 119: Downtown Miami ⇆ Aventura Mall
- 120 — **BEACH MAX** Downtown Miami ⇆ Haulover Park, Aventura Mall
- 132 — **TRI-RAIL DORAL SHUTTLE** (WEEKDAY RUSH-HOUR ONLY): Doral ⇆ Hialeah Market Tri-Rail
- 135 — Hialeah Metrorail, Miami Lakes ⇆ FIU Biscayne Bay Campus
- 136 — (WEEKDAY RUSH-HOUR ONLY) SW 136 St / US1 ⇆ Douglas Road Metrorail
- 137 — **WEST DADE CONNECTION** Dolphin Mall ⇆ South Dade Gov Center
- 150 — **MIAMI BEACH AIRPORT EXPRESS** Miami Intl Airport ⇆ South Beach
- 155 — **BISCAYNE GARDENS CIRCULATOR** (WEEKDAYS ONLY)
- 183 — Miami Gardens Dr & NW 73 Ave Park & Ride ⇆ Aventura Mall
- 200 — **CUTLER BAY LOCAL**
- 202 — **LITTLE HAITI CONNECTION** Biscayne Shopping Plaza, NW 5 AVE / 83 St ⇆ Miami Design District
- 204 — **KILLIAN KAT** (WEEKDAY RUSH-HOUR ONLY) West Kendall Terminal ⇆ Dadeland North Metrorail
- 207 — **LITTLE HAVANA CONNECTION** (CLOCKWISE) Downtown Miami, Brickell ⇆ SW 25 Ave via SW 1 St & SW 7 St
- 208 — **LITTLE HAVANA CONNECTION** (COUNTERCLOCKWISE) Downtown Miami, Brickell ⇆ SW 27 Ave via W Flagler St & SW
- 210 — **SKYLAKE CIRCULATOR** Skylake Mall ⇆ 163 Street Mall
- 211 — **OVERTOWN CIRCULATOR** (WEEKDAYS ONLY)
- 212 — **SWEETWATER CIRCULATOR** (WEEKDAYS ONLY)
- 217 — **BUNCHE PARK CIRCULATOR** (WEEKDAYS ONLY) NW 127 St / 22 Ave ⇆ N Dade Health Center
- 238 — **EAST-WEST CONNECTION** (WEEKDAYS ONLY) Dolphin Mall ⇆ Miami Int. Airport
- 246 — **NIGHT OWL** Downtown Miami ⇆ 163 St Mall
- 248 — **PRINCETON CIRCULATOR** Southland Mall ⇆ SW 264 St, Naranja (Weekdays Only)
- 252 — **CORAL REEF MAX** Country Walk ⇆ Dadeland South Metrorail, Zoo Miami (Weekends Only)
- 254 — **BROWNSVILLE CIRCULATOR** (WEEKDAYS ONLY) Caleb Center ⇆ Jefferson Reeves Park, Hialeah (Thursday only)
- 267 — **LUDLAM LIMITED** (WEEKDAY RUSH-HOUR ONLY) NW 186 St/87 Ave ⇆ Okeechobee Metrorail
- 272 — **SUNSET KAT** (WEEKDAY RUSH-HOUR ONLY) West Kendall Terminal ⇆ Dadeland North Metrorail
- 277 — **NW 7 AVENUE MAX** (WEEKDAY RUSH-HOUR ONLY) Downtown Miami ⇆ Golden Glades Park & Ride
- 286 — **NORTH POINTE CIRCULATOR** (NO SUNDAYS) Miami Gardens Dr & NW 73 Ave Park & Ride ⇆ NW 57 Ave/NW 176 St
- 287 — **SAGA BAY MAX** (WEEKDAY RUSH-HOUR ONLY) S Dade Health Center ⇆ Dadeland South Metrorail
- 288 — **KENDALL CRUISER** (WEEKDAY RUSH-HOUR ONLY) West Kendall Terminal, SW 127 Ave Park & Ride ⇆ Dadeland North Metrorail
- 297 — **27th AVE ORANGE MAX** (WEEKDAYS ONLY) Miami Intl Airport ⇆ Miami Gardens
- 301 — **DADE-MONROE EXPRESS** Florida City ⇆ Marathon Key
- 302 — **CARD SOUND EXPRESS** Florida City ⇆ Ocean Reef Club
- 338 — **WEEKEND EXPRESS** (WEEKENDS ONLY) Miami Intl Airport ⇆ Dolphin Mall
- 344 — (WEEKDAYS ONLY) Florida City ⇆ MDC Homestead Campus
- 500 — **MIDNIGHT OWL** Dadeland South Metrorail ⇆ Downtown Miami

DRIVE LESS.LIVE MORE.™

www.miamidade.gov/transit **311** (305.468.5900) TTY/FLORIDA RELAY: 711

@GoMiamiDade MDT TRACKER / EASY PAY MIAMI / MDT TRANSIT WATCH

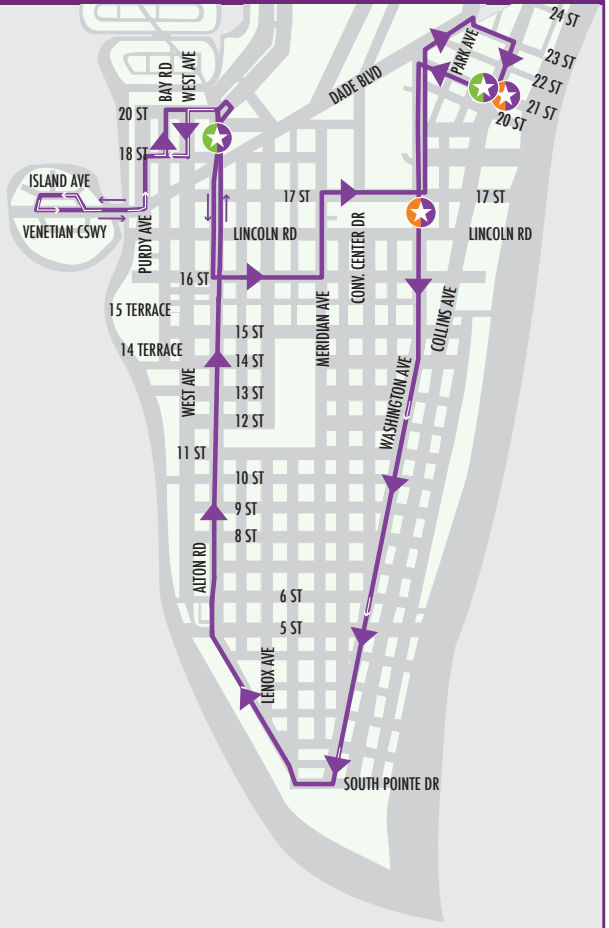
MIAMI-DADE COUNTY

APPENDIX C

City of Miami Beach South Beach Trolley Map

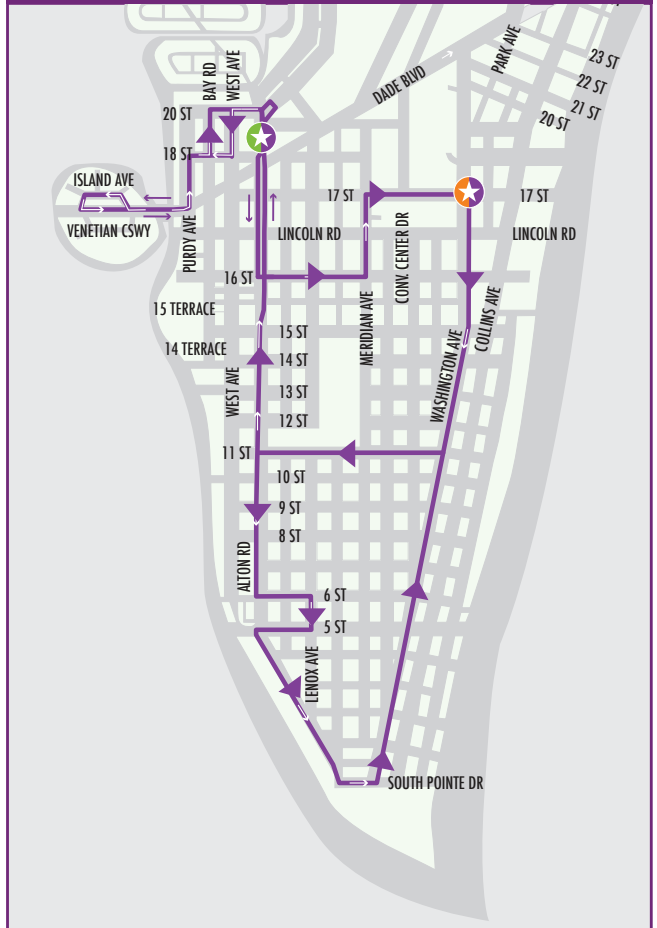
SOUTH BEACH LOOP - A

(Clockwise - Approximately 20 minutes)



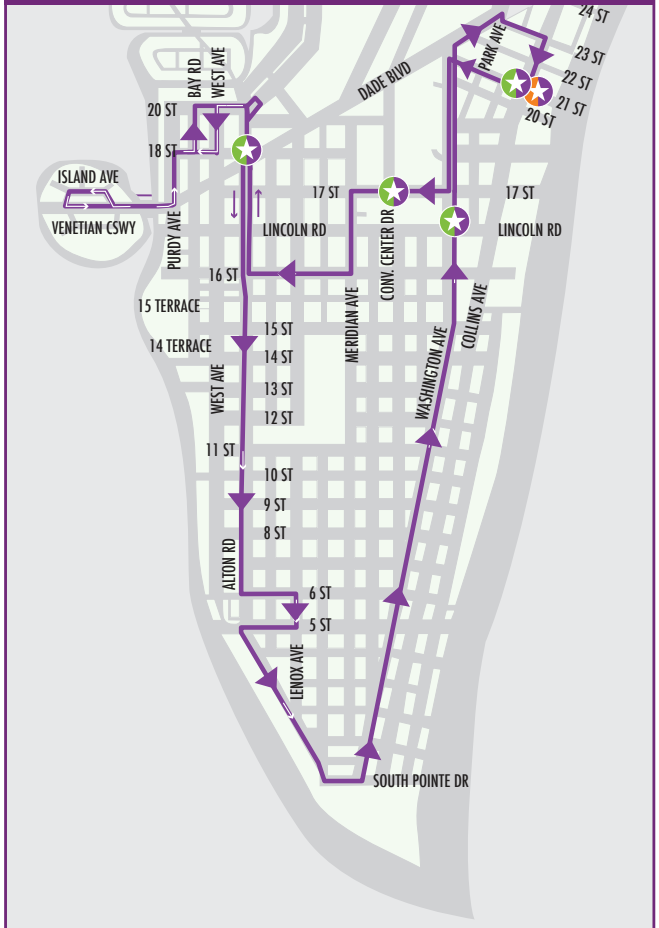
SOUTH BEACH LOOP - VIA 11 ST

(Approximately 40 minutes)



SOUTH BEACH LOOP - B

(Counter Clockwise - Approximately 20 minutes)



APPENDIX D
Context Location Plan

Context Location Plan

APPENDIX E

Land Use Plan

Atlantic Ocean

MIAMIBEACH
PLANNING DEPARTMENT
1700 CONVENTION CENTER DRIVE
MIAMI BEACH, FLORIDA 33139
P 305.673.7550 F 305.673.7559

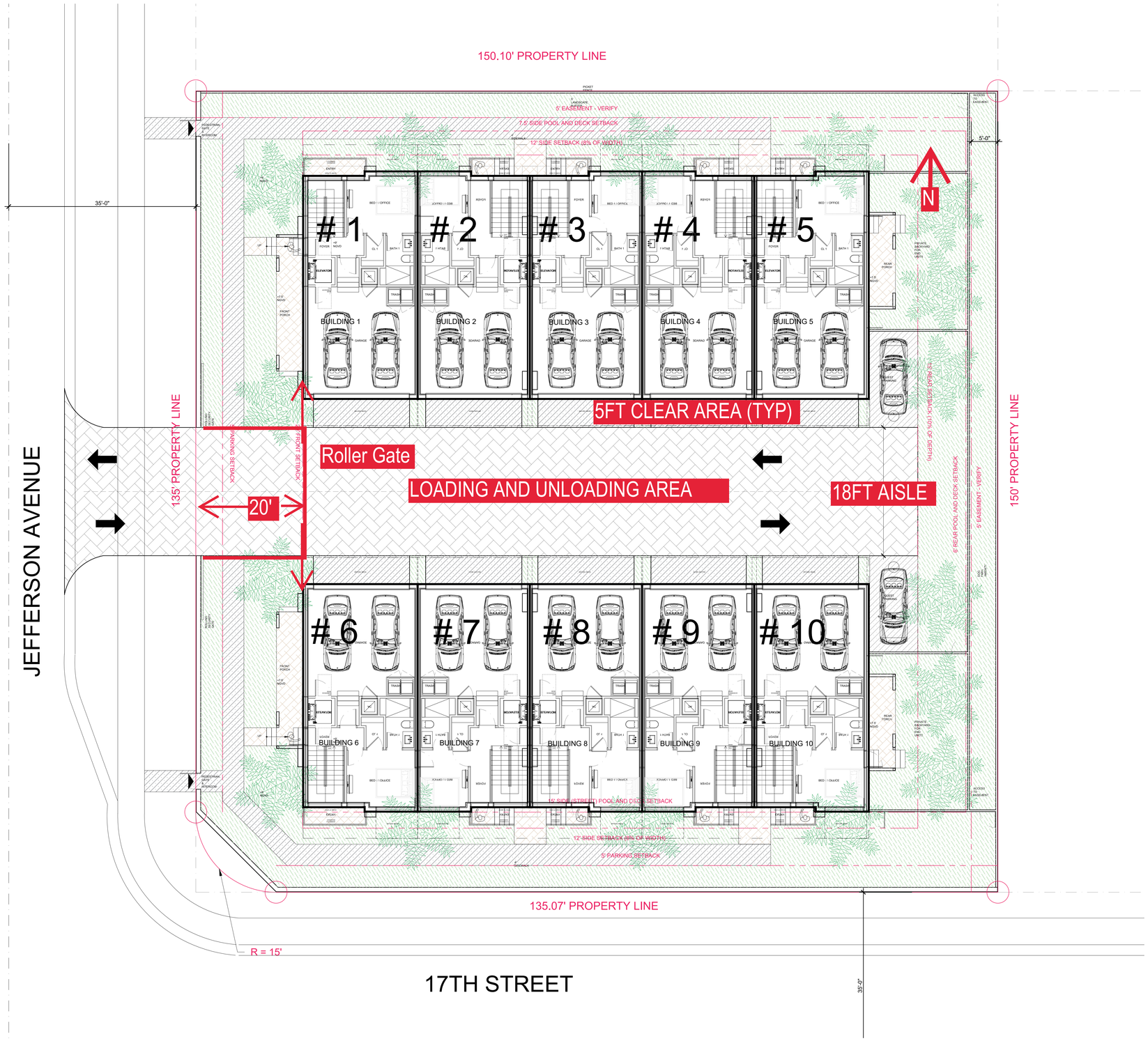
0 0.125 0.25 0.5 0.75 1 Miles

LAND USE MAP MIAMI-DADE COUNTY

0 0.125 0.25 0.5 0.75 1 Miles

APPENDIX F

Site Plan, Floor Plan and Site Access



1 SITE PLAN

SCALE: 1/8" = 1'-0"

Rev.	Date	Rev.	Date
1		11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	
11		21	
12		22	
13		23	
14		24	
15			

ZONING PHASE

1709 JEFFERSON AVE

MIAMI BEACH, FL 33139

Owner:
Name --
Address --
Address -
Tel: --
Email -

Consultant:
Name
Address
Address --
Tel:
Email

Consultant:
Name
Address
Address --
Tel:
Email

Consultant:
Name
Address
Address --
Tel:
Email

Consultant:
Name
Address
Address --
Tel:
Email

Consultant:
Name
Address
Address --
Tel:
Email

Consultant:
Name
Address
Address --
Tel:
Email

Architect:
Kobi Karp Architecture and Interior Design, Inc.
571 NW 28th STREET
Miami, Florida 33137 USA
Tel: +1(305) 573 1818
Fax: +1(305) 573 3766

KOBI KARP
Lic. # AR0012578

SITE PLAN

Date:	Sheet No.
Scale:	A2.00
Project:	

APPENDIX G

ITETripGen Web Application Worksheets and Graphs

1709 JEFFERSON AVE

PROPOSED WEEKDAY ADT

ITE Code / Description	Quantity	Units	Peak Hour Trips			Multimodal Reduction	Net Peak Hour Trips		
			In	Out	Total		In	Out	Total
215 / Single-Family Attached Housing	10	DU	36	36	72	20%	29	29	58
						Totals	**29**	**29**	**58**

PROPOSED WEEKDAY AM PEAK HOUR

ITE Code / Description	Quantity	Units	Peak Hour Trips			Multimodal Reduction	Net Peak Hour Trips		
			In	Out	Total		In	Out	Total
215 / Single-Family Attached Housing	10	DU	2	4	6	20%	2	3	5
						Totals	**2**	**3**	**5**

PROPOSED WEEKDAY PM PEAK HOUR

ITE Code / Description	Quantity	Units	Peak Hour Trips			Multimodal Reduction	Net Peak Hour Trips		
			In	Out	Total		In	Out	Total
215 / Single-Family Attached Housing	10	DU	5	3	8	20%	4	2	6
						Totals	**4**	**2**	**6**

ITE Trip Generation - 11th Edition

Land Use: 215
Single-Family Attached Housing

Description

Single-family attached housing includes any single-family housing unit that shares a wall with an adjoining dwelling unit, whether the walls are for living space, a vehicle garage, or storage space.

Additional Data

The database for this land use includes duplexes (defined as a single structure with two distinct dwelling units, typically joined side-by-side and each with at least one outside entrance) and townhouses/rowhouses (defined as a single structure with three or more distinct dwelling units, joined side-by-side in a row and each with an outside entrance).

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in British Columbia (CAN), California, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Dakota, Utah, Virginia, and Wisconsin.

Source Numbers

168, 204, 211, 237, 305, 306, 319, 321, 357, 390, 418, 525, 571, 583, 638, 735, 868, 869, 870, 896, 912, 959, 1009, 1046, 1056, 1058, 1077

Single-Family Attached Housing
(215)

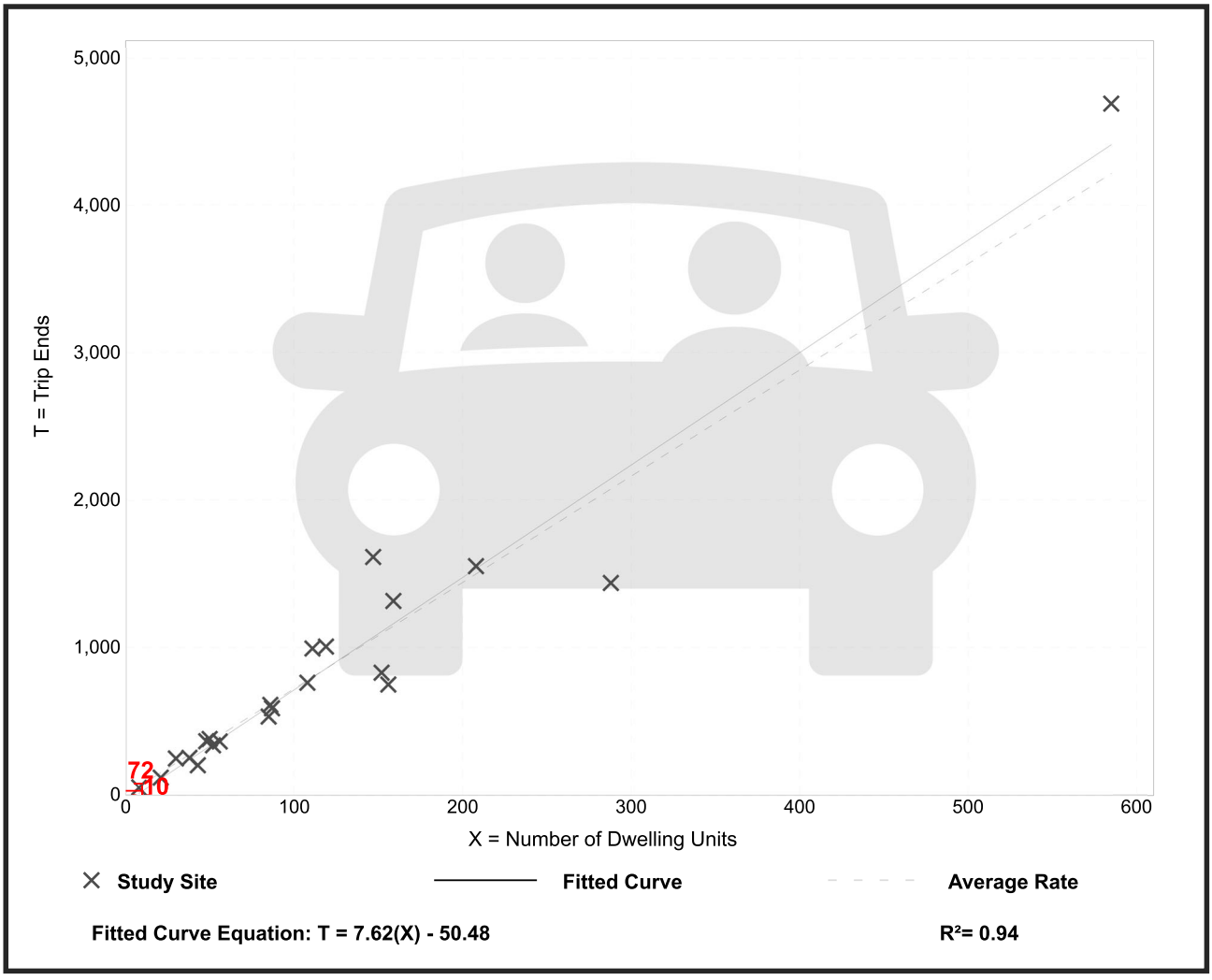
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 22
Avg. Num. of Dwelling Units: 120
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.20	4.70 - 10.97	1.61

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Single-Family Attached Housing
(215)

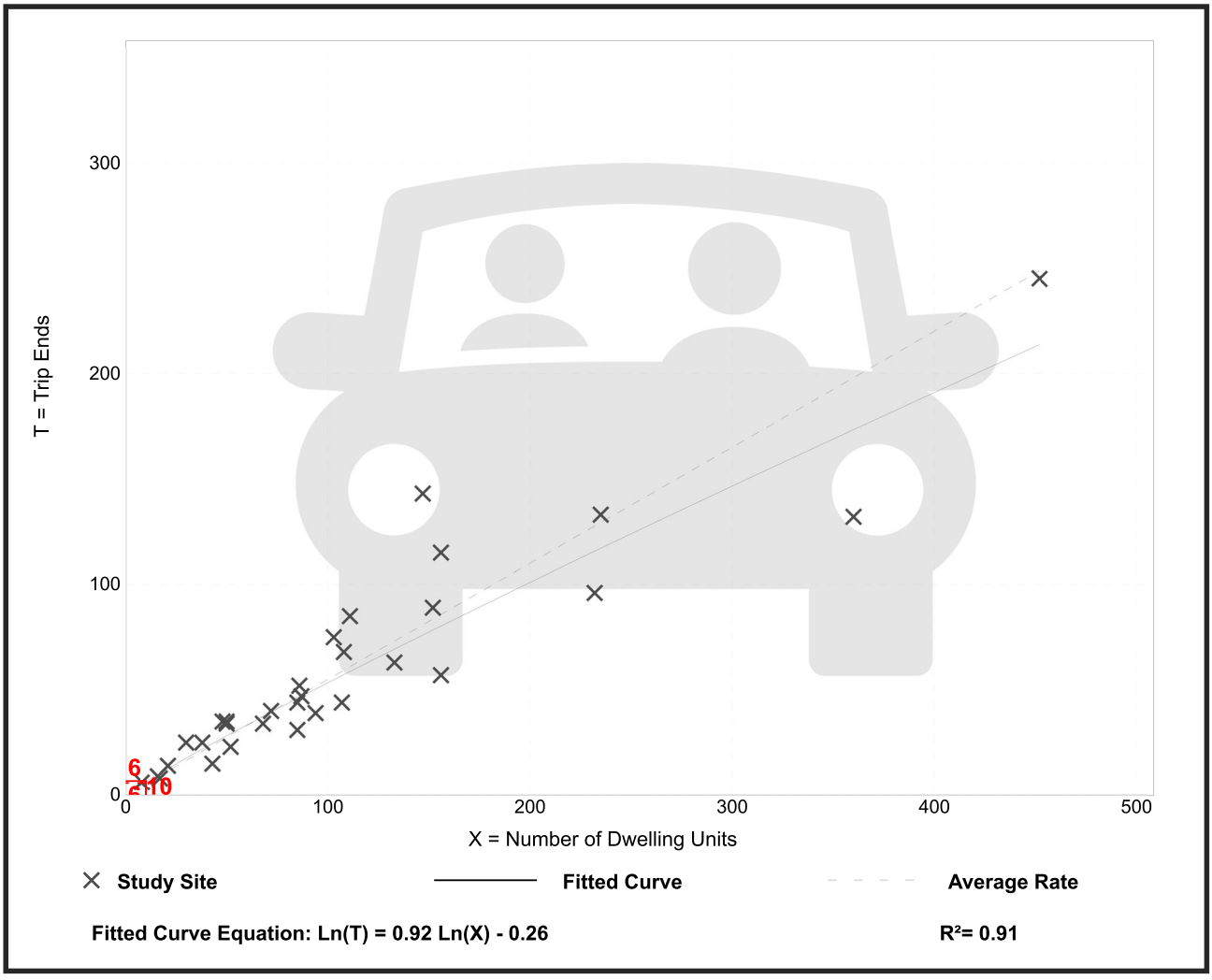
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
AM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 31
Avg. Num. of Dwelling Units: 110
Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.55	0.35 - 0.97	0.16

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Single-Family Attached Housing
(215)

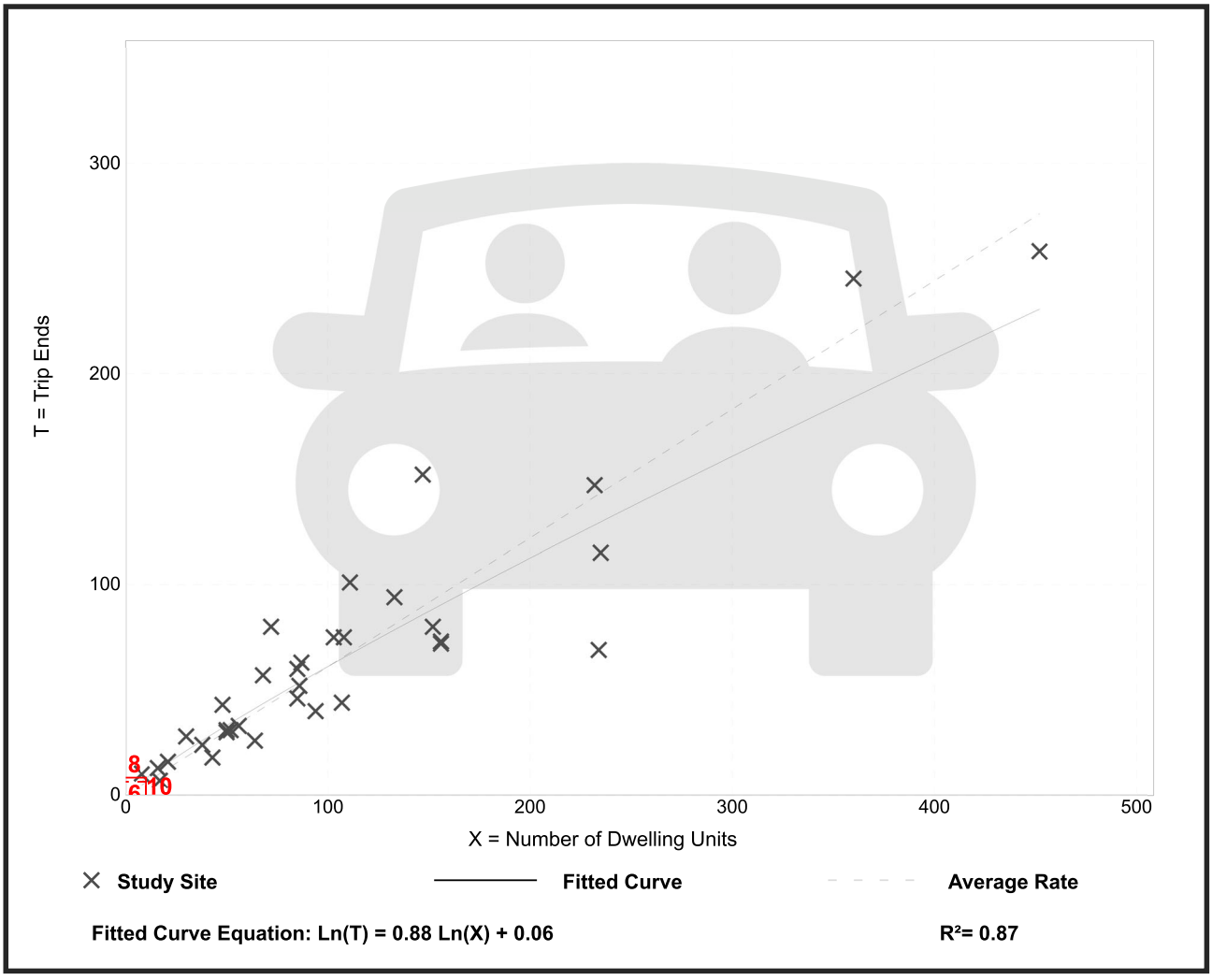
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 34
Avg. Num. of Dwelling Units: 110
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.61	0.29 - 1.25	0.18

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

APPENDIX H

Coordination with City of Miami Beach Traffic Department

Alfka
Innovative | Lean | Engineering

Alfredo Cely <alfredo@alfka.com>

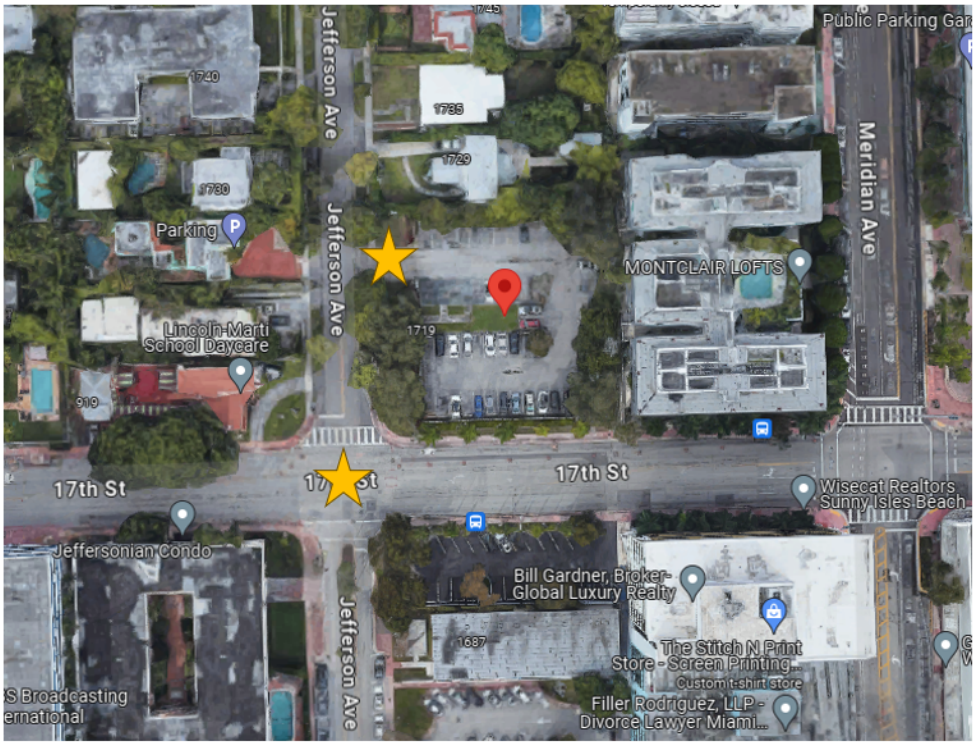
Traffic Meeting - HPB23-0604 - 1709 Jefferson Avenue

Alfredo Cely <alfredo@alfka.com> Thu, Dec 14, 2023 at 11:46 AM
To: "Webster, Harrison" <HarrisonWebster@miamibeachfl.gov>
Cc: Kobi Karp <kobikarp@kobikarp.com>, Taylor Shumate <tshumate@kobikarp.com>, "Gray J. Crow" <gcrow@brzoninglaw.com>, Michael Troyanovsky <michael@regencydevgroup.com>, Igor Michin <igor@regencydevgroup.com>, "Tackett, Deborah" <DeborahTackett@miamibeachfl.gov>, "Seiberling, James" <JamesSeiberling@miamibeachfl.gov>, "Rodriguez, Otniel" <OtnielRodriguez@miamibeachfl.gov>, "Choueiry, Ghassan" <GhassanChoueiry@miamibeachfl.gov>, Michael Larkin <MLarkin@brzoninglaw.com>, Diana Ramos <DRamos@brzoninglaw.com>

Good morning Grant,

Thanks for your time this morning as well as the rest of City staff.

As discussed, in order to evaluate the existing traffic coming in/out of the existing parking lot, turning movement counts are to be completed next Tuesday (12/19/23) between 7AM to 9AM and 4PM to 6PM. The counts are to be completed at the parking lot driveway and at the intersection between Jefferson Avenue and 17th Street. Following is a quick diagram:



The Land Use code for the proposed use, will be revised to be Single-Family **Attached** Housing (ITE LUC 215).

Based on the traffic impact of the proposed development, we will developed a Methodology for the TIA for the City to Review.

Thanks,

Alfredo Cely, P.E., PMP | Senior Engineer
Alfka - Lean - Innovative - Engineering

400 N. Tampa Street. Ste 1440. Tampa, FL 33602
e: Alfredo@alfka.com | **w:** www.alfka.com
m: +1 813 638 6650 | **p:** +1 813 544 2866

[Quoted text hidden]

APPENDIX I

Traffic Volume and Turning Movement Counts

National Data & Surveying Services

Intersection Turning Movement Count

Location: Jefferson Ave & 17thSt
City: Miami Beach
Control: 2-Way Stop(NB/SB)

Project ID: 23-140493-002
Date: 12/19/2023

Data - Total

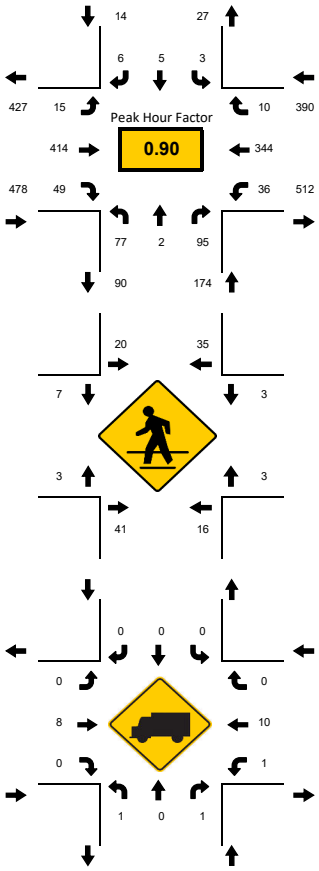
NS/EW Streets:	Jefferson Ave				Jefferson Ave				17thSt				17thSt				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	1	0	0	1	0	0	0	87	0	0	2	30	0	0	123
7:15 AM	3	0	1	0	0	0	2	0	1	60	6	0	3	27	0	0	103
7:30 AM	3	0	1	0	1	0	1	0	1	74	14	0	2	30	0	0	127
7:45 AM	7	1	1	0	0	1	1	0	2	75	5	0	0	31	0	0	124
8:00 AM	4	1	2	0	2	1	1	0	4	77	8	0	1	30	1	0	132
8:15 AM	6	2	2	0	2	0	2	0	3	85	13	0	4	25	2	0	146
8:30 AM	6	2	3	1	0	0	2	0	1	88	5	0	3	45	4	0	160
8:45 AM	4	1	2	0	0	2	0	0	2	99	8	0	9	38	3	0	168
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	35	7	13	1	5	5	9	0	14	645	59	0	24	256	10	0	1083
APPROACH %'s :	62.50%	12.50%	23.21%	1.79%	26.32%	26.32%	47.37%	0.00%	1.95%	89.83%	8.22%	0.00%	8.28%	88.28%	3.45%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	20	6	9	1	4	3	5	0	10	349	34	0	17	138	10	0	606
PEAK HR FACTOR :	0.833	0.750	0.750	0.250	0.500	0.375	0.625	0.000	0.625	0.881	0.654	0.000	0.472	0.767	0.625	0.000	0.902
	0.750				0.750				0.901				0.793				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	23	1	16	0	0	0	2	0	3	115	6	0	6	82	5	1	260
4:15 PM	16	2	13	0	0	2	2	0	5	104	10	0	7	111	3	0	275
4:30 PM	19	0	19	0	1	2	0	0	5	95	17	0	7	70	3	0	238
4:45 PM	6	0	33	0	1	1	2	0	3	111	8	0	17	68	1	0	251
5:00 PM	36	0	30	0	1	0	2	0	2	104	14	0	5	95	3	0	292
5:15 PM	22	1	20	0	0	0	0	0	2	79	4	0	8	84	1	0	221
5:30 PM	26	2	16	0	0	1	2	0	5	102	12	0	6	75	2	0	249
5:45 PM	21	1	10	0	0	1	2	0	3	102	6	0	6	86	3	0	241
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	169	7	157	0	3	7	12	0	28	812	77	0	62	671	21	1	2027
APPROACH %'s :	50.75%	2.10%	47.15%	0.00%	13.64%	31.82%	54.55%	0.00%	3.05%	88.55%	8.40%	0.00%	8.21%	88.87%	2.78%	0.13%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	77	2	95	0	3	5	6	0	15	414	49	0	36	344	10	0	1056
PEAK HR FACTOR :	0.535	0.250	0.720	0.000	0.750	0.625	0.750	0.000	0.750	0.932	0.721	0.000	0.529	0.775	0.833	0.000	0.904
	0.659				0.875				0.980				0.806				

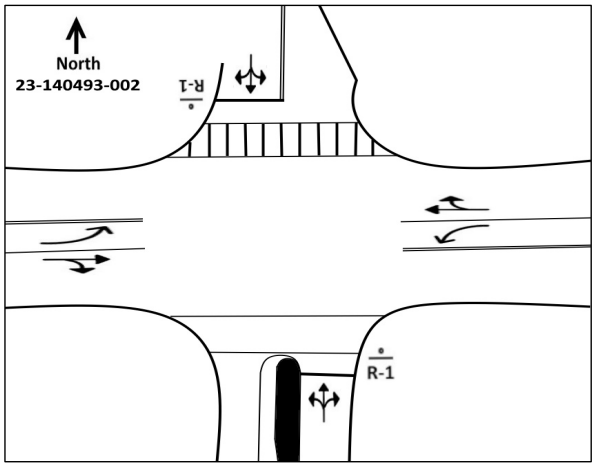
LOCATION: Jefferson Ave & 17thSt
CITY/STATE: Miami Beach, FL

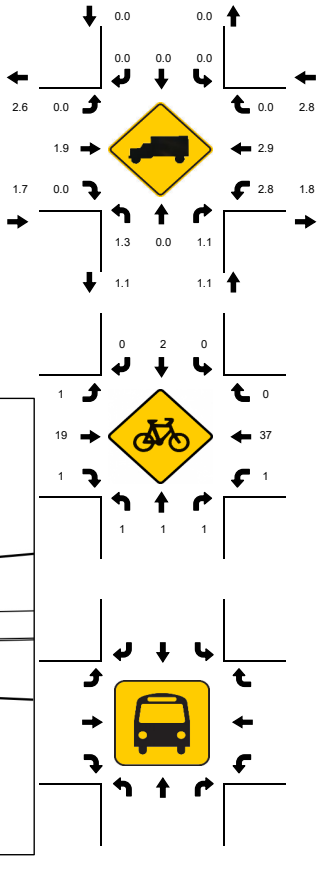
PROJECT ID: 23-140493-002
DATE: Tue, Dec 19, 2023

Peak-Hour: 04:15 PM - 05:15 PM
Peak 15-Minute: 05:00 PM - 05:15 PM



National Data & Surveying Services





15-Min Count Period Beginning At	Jefferson Ave Northbound					Jefferson Ave Southbound					17thSt Eastbound					17thSt Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	23	1	16	0		0	0	2	0		3	115	6	0		6	82	5	1		260	1024
4:15 PM	16	2	13	0		0	2	2	0		5	104	10	0		7	111	3	0		275	1056
4:30 PM	19	0	19	0		1	2	0	0		5	95	17	0		7	70	3	0		238	1002
4:45 PM	6	0	33	0		1	1	2	0		3	111	8	0		17	68	1	0		251	1013
5:00 PM	36	0	30	0		1	0	2	0		2	104	14	0		5	95	3	0		292	1003
5:15 PM	22	1	20	0		0	0	0	0		2	79	4	0		8	84	1	0		221	711
5:30 PM	26	2	16	0		0	1	2	0		5	102	12	0		6	75	2	0		249	490
5:45 PM	21	1	10	0		0	1	2	0		3	102	6	0		6	86	3	0		241	241
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	144	8	132	0		4	8	8	0		20	444	68	0		68	444	12	0		**1360**	
Heavy Trucks	4	0	4	0		0	0	0	0		0	16	0	0		4	20	0	0		**48**	
Pedestrians		80					72					32					12				**196**	
Bicycles	4	4	4	0		0	8	0	0		4	44	4	0		4	40	0	0		**116**	
Buses																						
Stopped Buses																						

APPENDIX J

Peak Season Conversion Factor

2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 8739 MIAMI-DADE I 395

WEEK	DATES	SF	MOCF: 0.94 PSCF
1	01/01/2022 - 01/01/2022	1.02	1.09
2	01/02/2022 - 01/08/2022	1.02	1.09
3	01/09/2022 - 01/15/2022	1.02	1.09
4	01/16/2022 - 01/22/2022	1.01	1.07
5	01/23/2022 - 01/29/2022	0.99	1.05
6	01/30/2022 - 02/05/2022	0.98	1.04
7	02/06/2022 - 02/12/2022	0.96	1.02
* 8	02/13/2022 - 02/19/2022	0.95	1.01
* 9	02/20/2022 - 02/26/2022	0.94	1.00
*10	02/27/2022 - 03/05/2022	0.94	1.00
*11	03/06/2022 - 03/12/2022	0.93	0.99
*12	03/13/2022 - 03/19/2022	0.93	0.99
*13	03/20/2022 - 03/26/2022	0.93	0.99
*14	03/27/2022 - 04/02/2022	0.94	1.00
*15	04/03/2022 - 04/09/2022	0.94	1.00
*16	04/10/2022 - 04/16/2022	0.95	1.01
*17	04/17/2022 - 04/23/2022	0.95	1.01
*18	04/24/2022 - 04/30/2022	0.95	1.01
*19	05/01/2022 - 05/07/2022	0.95	1.01
*20	05/08/2022 - 05/14/2022	0.96	1.02
21	05/15/2022 - 05/21/2022	0.96	1.02
22	05/22/2022 - 05/28/2022	0.98	1.04
23	05/29/2022 - 06/04/2022	1.00	1.06
24	06/05/2022 - 06/11/2022	1.01	1.07
25	06/12/2022 - 06/18/2022	1.03	1.10
26	06/19/2022 - 06/25/2022	1.02	1.09
27	06/26/2022 - 07/02/2022	1.02	1.09
28	07/03/2022 - 07/09/2022	1.01	1.07
29	07/10/2022 - 07/16/2022	1.00	1.06
30	07/17/2022 - 07/23/2022	1.01	1.07
31	07/24/2022 - 07/30/2022	1.01	1.07
32	07/31/2022 - 08/06/2022	1.02	1.09
33	08/07/2022 - 08/13/2022	1.02	1.09
34	08/14/2022 - 08/20/2022	1.03	1.10
35	08/21/2022 - 08/27/2022	1.04	1.11
36	08/28/2022 - 09/03/2022	1.06	1.13
37	09/04/2022 - 09/10/2022	1.08	1.15
38	09/11/2022 - 09/17/2022	1.10	1.17
39	09/18/2022 - 09/24/2022	1.08	1.15
40	09/25/2022 - 10/01/2022	1.07	1.14
41	10/02/2022 - 10/08/2022	1.05	1.12
42	10/09/2022 - 10/15/2022	1.04	1.11
43	10/16/2022 - 10/22/2022	1.04	1.11
44	10/23/2022 - 10/29/2022	1.04	1.11
45	10/30/2022 - 11/05/2022	1.04	1.11
46	11/06/2022 - 11/12/2022	1.04	1.11
47	11/13/2022 - 11/19/2022	1.05	1.12
48	11/20/2022 - 11/26/2022	1.04	1.11
49	11/27/2022 - 12/03/2022	1.03	1.10
50	12/04/2022 - 12/10/2022	1.03	1.10
51	12/11/2022 - 12/17/2022	1.02	1.09
52	12/18/2022 - 12/24/2022	1.02	1.09
53	12/25/2022 - 12/31/2022	1.02	1.09

* PEAK SEASON

23-FEB-2023 09:11:23 830UPD 6_8739_PKSEASON.TXT

APPENDIX K

Miami-Dade TPO 2045 Directional Trip Distribution

Miami-Dade 2015 Base Year Direction Trip Distribution Summary											
TAZ of Origin		Trips / Percent	Cardinal Directions								Total Trips
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
651	3551	Trips	601	40	126	-	25	267	541	390	2,069
651	3551	Percent	30.2	2.0	6.3	-	1.2	13.4	27.2	19.6	
652	3552	Trips	740	133	112	92	80	539	627	907	3,332
652	3552	Percent	22.9	4.1	3.5	2.8	2.5	16.7	19.4	28.1	
653	3553	Trips	597	120	187	238	48	604	488	661	2,984
653	3553	Percent	20.3	4.1	6.4	8.1	1.6	20.5	16.6	22.5	
654	3554	Trips	648	-	246	192	190	739	849	890	3,940
654	3554	Percent	17.3	-	6.6	5.1	5.1	19.7	22.6	23.7	
655	3555	Trips	2,579	-	-	-	1,029	2,523	3,354	2,903	13,375
655	3555	Percent	20.8	-	-	-	8.3	20.4	27.1	23.4	
656	3556	Trips	683	-	-	-	187	546	1,103	960	3,541
656	3556	Percent	19.6	-	-	-	5.4	15.7	31.7	27.6	

Miami-Dade 2045 Cost Feasible Plan Direction Trip Distribution Summary											
TAZ of Origin		Trips / Percent	Cardinal Directions								Total Trips
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
651	3551	Trips	500	33	118	-	44	610	964	424	2,777
651	3551	Percent	18.6	1.2	4.4	-	1.6	22.7	35.8	15.8	
652	3552	Trips	834	141	140	71	102	864	1,319	966	4,613
652	3552	Percent	18.8	3.2	3.2	1.6	2.3	19.5	29.7	21.8	
653	3553	Trips	563	73	181	185	40	875	1,115	522	3,691
653	3553	Percent	15.8	2.1	5.1	5.2	1.1	24.6	31.4	14.7	
654	3554	Trips	527	-	154	189	209	1,276	1,357	971	4,960
654	3554	Percent	11.3	-	3.3	4.0	4.5	27.2	29.0	20.7	
655	3555	Trips	2,507	-	-	-	984	3,119	4,529	3,116	15,245
655	3555	Percent	17.6	-	-	-	6.9	21.9	31.8	21.9	
656	3556	Trips	752	-	-	-	201	872	1,503	1,028	4,509
656	3556	Percent	17.3	-	-	-	4.6	20.0	34.5	23.6	
657	3557	Trips	255	42	13	51	17	325	482	206	1,441
657	3557	Percent	18.4	3.0	1.0	3.7	1.2	23.4	34.6	14.8	

APPENDIX L

HCS Intersection Capacity Results and Vol. Tables

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	414	49	36	344	10	77	2	95	3	5	6
Future Vol, veh/h	15	414	49	36	344	10	77	2	95	3	5	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	3	0	0	1	0	1	0	0	0
Mvmt Flow	17	460	54	40	382	11	86	2	106	3	6	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	393	0	0	514	0	0	795	994	257	733	1016	197
Stage 1	-	-	-	-	-	-	521	521	-	468	468	-
Stage 2	-	-	-	-	-	-	274	473	-	265	548	-
Critical Hdwy	4.1	-	-	4.16	-	-	7.52	6.5	6.92	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.23	-	-	3.51	4	3.31	3.5	4	3.3
Pot Cap-1 Maneuver	1177	-	-	1041	-	-	280	247	745	312	240	817
Stage 1	-	-	-	-	-	-	509	535	-	550	565	-
Stage 2	-	-	-	-	-	-	712	562	-	723	520	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1177	-	-	1041	-	-	262	234	745	255	228	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	262	234	-	255	228	-
Stage 1	-	-	-	-	-	-	502	528	-	542	544	-
Stage 2	-	-	-	-	-	-	672	541	-	609	513	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.3	0.8	21.7	16.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	405	1177	-	-	1041	-	-	341
HCM Lane V/C Ratio	0.477	0.014	-	-	0.038	-	-	0.046
HCM Control Delay (s/veh)	21.7	8.1	-	-	8.6	-	-	16.1
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q (veh)	2.5	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	464	55	41	386	12	87	3	107	4	6	7
Future Vol, veh/h	17	464	55	41	386	12	87	3	107	4	6	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	3	0	0	1	0	1	0	0	0
Mvmt Flow	19	516	61	46	429	13	97	3	119	4	7	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	442	0	0	577	0	0	895	1119	289	826	1143	221
Stage 1	-	-	-	-	-	-	585	585	-	528	528	-
Stage 2	-	-	-	-	-	-	310	534	-	298	615	-
Critical Hdwy	4.1	-	-	4.16	-	-	7.52	6.5	6.92	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.23	-	-	3.51	4	3.31	3.5	4	3.3
Pot Cap-1 Maneuver	1129	-	-	986	-	-	237	209	711	268	202	789
Stage 1	-	-	-	-	-	-	466	501	-	507	531	-
Stage 2	-	-	-	-	-	-	678	528	-	692	485	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1129	-	-	986	-	-	218	196	711	210	189	789
Mov Cap-2 Maneuver	-	-	-	-	-	-	218	196	-	210	189	-
Stage 1	-	-	-	-	-	-	458	492	-	498	506	-
Stage 2	-	-	-	-	-	-	632	503	-	563	477	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.3	0.8	31.2	18.5
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	349	1129	-	-	986	-	-	285
HCM Lane V/C Ratio	0.627	0.017	-	-	0.046	-	-	0.066
HCM Control Delay (s/veh)	31.2	8.2	-	-	8.8	-	-	18.5
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q (veh)	4	0.1	-	-	0.1	-	-	0.2

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	464	55	41	386	13	87	4	107	5	6	8
Future Vol, veh/h	19	464	55	41	386	13	87	4	107	5	6	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	3	0	0	1	0	1	0	0	0
Mvmt Flow	21	516	61	46	429	14	97	4	119	6	7	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	443	0	0	577	0	0	899	1124	289	830	1147	222
Stage 1	-	-	-	-	-	-	589	589	-	528	528	-
Stage 2	-	-	-	-	-	-	310	535	-	302	619	-
Critical Hdwy	4.1	-	-	4.16	-	-	7.52	6.5	6.92	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.23	-	-	3.51	4	3.31	3.5	4	3.3
Pot Cap-1 Maneuver	1128	-	-	986	-	-	235	207	711	266	201	788
Stage 1	-	-	-	-	-	-	464	499	-	507	531	-
Stage 2	-	-	-	-	-	-	678	527	-	688	483	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1128	-	-	986	-	-	215	194	711	207	188	788
Mov Cap-2 Maneuver	-	-	-	-	-	-	215	194	-	207	188	-
Stage 1	-	-	-	-	-	-	455	490	-	497	506	-
Stage 2	-	-	-	-	-	-	631	502	-	557	474	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.3	0.8	32.3	18.5
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	344	1128	-	-	986	-	-	287
HCM Lane V/C Ratio	0.64	0.019	-	-	0.046	-	-	0.074
HCM Control Delay (s/veh)	32.3	8.3	-	-	8.8	-	-	18.5
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q (veh)	4.2	0.1	-	-	0.1	-	-	0.2

APPENDIX M
Traffic Study Methodology

January 30, 2024

Memorandum to City of Miami Beach – Traffic Department
Subject: Traffic Study Methodology for 1709 Jefferson Avenue. Miami Beach, FL 33139

Following is a summary of the traffic study methodology for the subject redevelopment project, which consists of 10 Single-Family Attached Townhome units. The current use of the property is as a surface parking lot. The following sections summarize our proposed methodology.

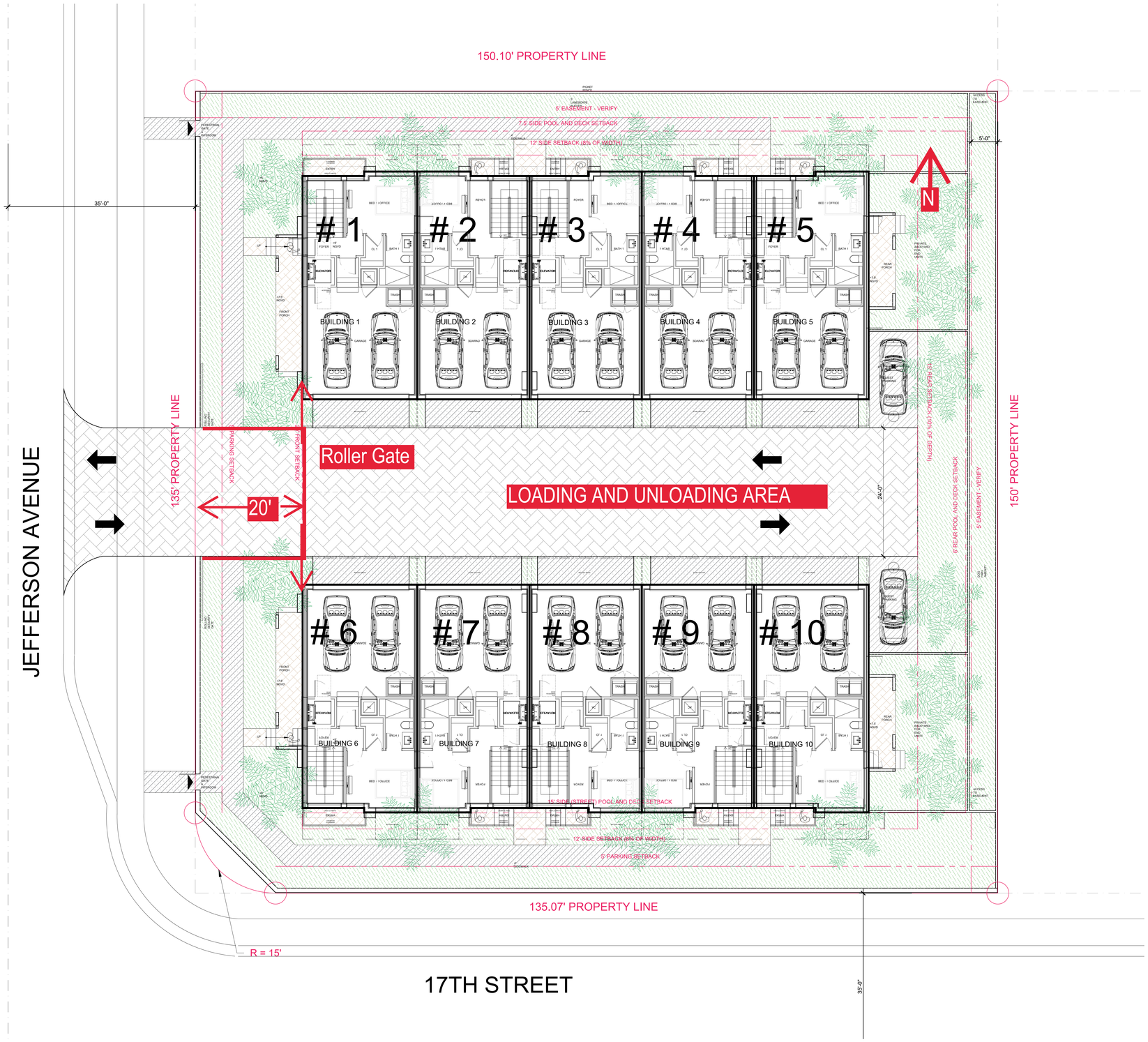
1. The project location map is shown below, and the concept site plan is attached.

LOCATION MAP

2. Detailed trip generation calculations for weekday AM and PM peak hours for a Single Family Attached use Land Use Code 215 from the Institute of Transportation Engineers (ITE), Trip Generation Manual 11th Edition. The calculations are to be completed using ITE's Trip Gen web application, which uses the data from the Trip Generation Manual 11th Edition. **Please refer to attachment 2.**
3. Data collection periods based on proposed land use(s) that will be used for the analysis to include volumes of pedestrians, bicycles, and heavy vehicles. The traffic counts were completed on Tuesday 12/19/2023 between 7AM to 9AM and 4PM to 6PM. The turning movement counts were completed for the intersection between 17th Street and Jefferson Avenue. The existing surface parking lot is closed, thus there were not vehicles entering or exiting the parking lot during the traffic counts. **Please refer to attachment 2.**
4. The study area is limited to the intersection between 17th Street and Jefferson Avenue.
5. Trip distribution and assignment based on an interpolated cardinal distribution from the Miami-Dade Transportation Planning Organization's (TPO) 2045 LRTP Directional Trip Distribution Report travel demand model based on 2015 base year and projected 2045 data. **Please refer to attachment 2.**
6. Background growth rate to be calculated based on the higher rate of either 5 and 10-year historic FDOT count stations or Miami-Dade TPO 2015 base year and projected 2045 model network volumes.
7. Intersection capacity analysis to include trip distribution and trip assignment and evaluation of existing conditions; future background traffic conditions (with growth rate and committed development traffic); and future total conditions (with project). The analysis is to follow Highway Capacity Manual, 6th Edition and modeled using SYNCHRO 12.
8. Adopted and programmed projects and roadway improvements by the City. *Please note, none improvements were identified at the intersection of 17th Street and Jefferson Avenue.*
9. Conflicting pedestrian movements, conflicting bicycle movements, parking lanes, transit stops, pedestrian calls at signalized intersections. *Not Applicable, as the study area does not have signalized intersections.*
10. The unsignalized intersection was evaluated using the Highway Capacity Manual 6th Edition Two-Way Stop Controlled Criteria and SYNCHRO 12.
11. Queuing analysis for all study intersections.
12. Internal circulation for the site is shown with loading/unloading areas, as well as a narrative regarding the use of private garbage haulers.
13. The project proposes to use private haulers to pick-up garbage for each one of the townhomes. Each townhome user/owner is to be required to roll out garbage bins during the specified collection days. The private garbage hauler is to properly dispose of the refuse according to all applicable regulations.
14. New driveway(s)/access to roadways including necessary FDOT approvals. New driveways are shown on the site plan, there is no need to obtain approval from FDOT, since the new driveway is within Jefferson Avenue, which is not a State Roadway.
15. Entry gate analysis is included within the traffic study report, based on the 95th percentile queue. The proposed project will have an automatic gate setback at least 20 feet from the R/W line to provide space for one queueing passenger car outside the City's R/W. **Please note the proposed parking garages do not exceed 20 feet in depth, thus it is not necessary to provide queueing length per vehicle greater than 20 feet.**
16. The proposed driveway is 18 feet wide, which provides ample space for turning vehicles to access and leave the site. During the meeting on 12/14/2023 it was noted the driveway has adequate space. The study is to provide a passenger vehicle maneuverability analysis. Additionally, the maneuverability analysis should be prepared at the project driveway and its single internal drive-aisle.
17. Parking is shown within the site plan. Each townhome is to have two parking spaces each, with an additional two parking spaces for common use at the end of the internal drive-aisle.
18. Valet analysis is not applicable to the project.
19. School Traffic Operational Plan is not applicable to the project
20. Transportation Demand Management (TDM) strategies

January 30, 2024

TRAFFIC STUDY METHODOLOGY
ATTACHMENT 1
CONCEPT SITE PLAN



1 SITE PLAN

SCALE: 1/8" = 1'-0"

Rev.	Date	Rev.	Date
1		11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	
11		21	
12		22	
13		23	
14		24	
15			

ZONING PHASE

1709 JEFFERSON AVE

MIAMI BEACH, FL 33139

Owner:
Name --
Address --
Address -
Tel: --
Email -

Consultant:
Name
Address
Address --
Tel:
Email

Consultant:
Name
Address
Address --
Tel:
Email

Consultant:
Name
Address
Address --
Tel:
Email

Consultant:
Name
Address
Address --
Tel:
Email

Consultant:
Name
Address
Address --
Tel:
Email

Consultant:
Name
Address
Address --
Tel:
Email

Architect:
Kobi Karp Architecture and Interior Design, Inc.
571 NW 28th STREET
Miami, Florida 33137 USA
Tel: +1(305) 573 1818
Fax: +1(305) 573 3766

KOBI KARP
Lic. # AR0012578

SITE PLAN

Date:	Sheet No.
Scale:	A2.00
Project:	

January 30, 2024

TRAFFIC STUDY METHODOLOGY
ATTACHMENT 2
ITE TRIP GENERATION, US CENSUS DATA, 2045 LRTP DIRECTIONAL DISTRIBUTION REPORT, AND TRAFFIC DATA COLLECTION

1709 JEFFERSON AVE

PROPOSED WEEKDAY ADT

ITE Code / Description	Quantity	Units	Peak Hour Trips			Multimodal Reduction	Net Peak Hour Trips		
			In	Out	Total		In	Out	Total
215 / Single-Family Attached Housing	10	DU	36	36	72	20%	29	29	58
						Totals	**29**	**29**	**58**

PROPOSED WEEKDAY AM PEAK HOUR

ITE Code / Description	Quantity	Units	Peak Hour Trips			Multimodal Reduction	Net Peak Hour Trips		
			In	Out	Total		In	Out	Total
215 / Single-Family Attached Housing	10	DU	2	4	6	20%	2	3	5
						Totals	**2**	**3**	**5**

PROPOSED WEEKDAY PM PEAK HOUR

ITE Code / Description	Quantity	Units	Peak Hour Trips			Multimodal Reduction	Net Peak Hour Trips		
			In	Out	Total		In	Out	Total
215 / Single-Family Attached Housing	10	DU	5	3	8	20%	4	2	6
						Totals	**4**	**2**	**6**

ITE Trip Generation - 11th Edition

Land Use: 215
Single-Family Attached Housing

Description

Single-family attached housing includes any single-family housing unit that shares a wall with an adjoining dwelling unit, whether the walls are for living space, a vehicle garage, or storage space.

Additional Data

The database for this land use includes duplexes (defined as a single structure with two distinct dwelling units, typically joined side-by-side and each with at least one outside entrance) and townhouses/rowhouses (defined as a single structure with three or more distinct dwelling units, joined side-by-side in a row and each with an outside entrance).

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in British Columbia (CAN), California, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Dakota, Utah, Virginia, and Wisconsin.

Source Numbers

168, 204, 211, 237, 305, 306, 319, 321, 357, 390, 418, 525, 571, 583, 638, 735, 868, 869, 870, 896, 912, 959, 1009, 1046, 1056, 1058, 1077

Single-Family Attached Housing
(215)

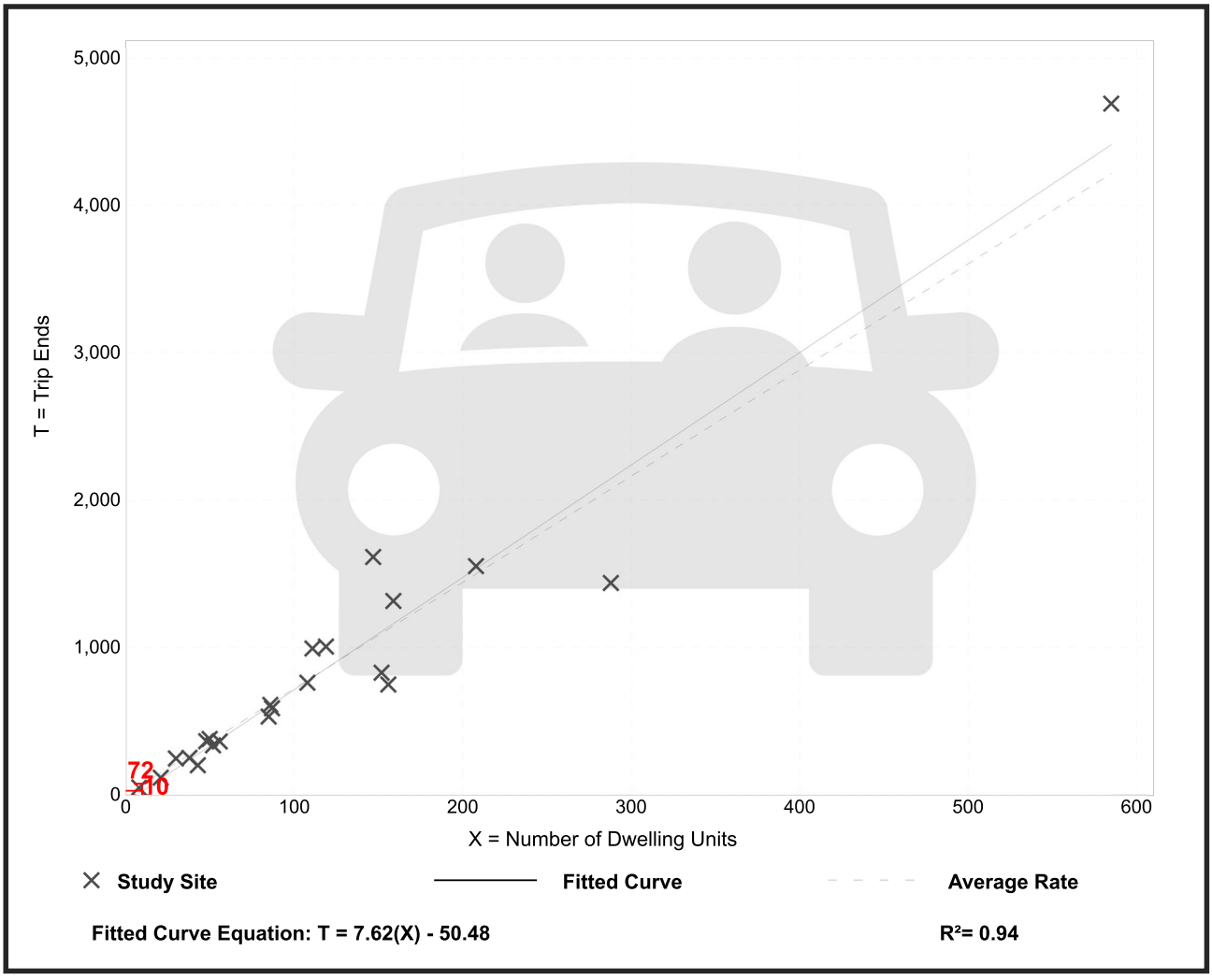
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 22
Avg. Num. of Dwelling Units: 120
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.20	4.70 - 10.97	1.61

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Single-Family Attached Housing
(215)

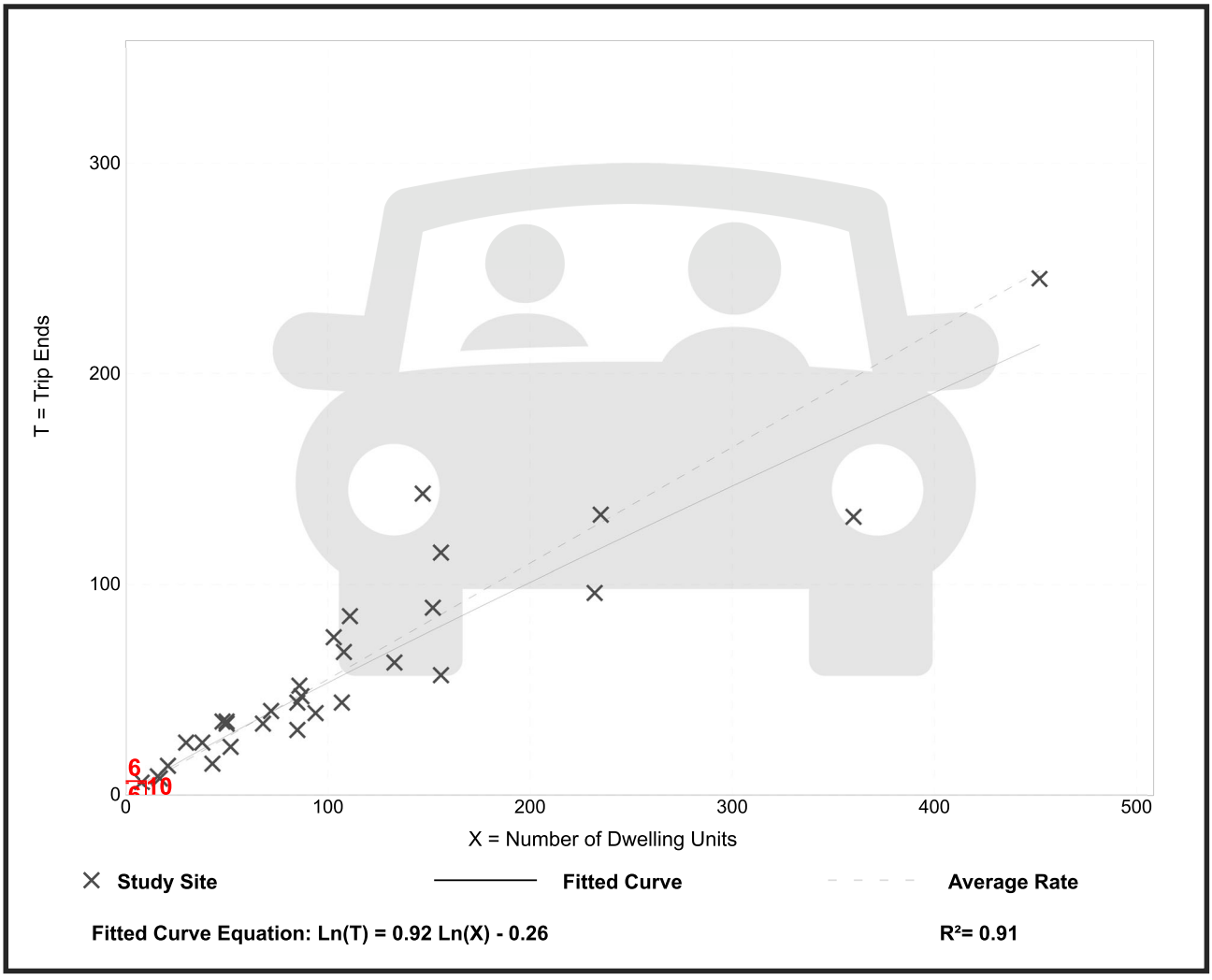
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
AM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 31
Avg. Num. of Dwelling Units: 110
Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.55	0.35 - 0.97	0.16

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Single-Family Attached Housing
(215)

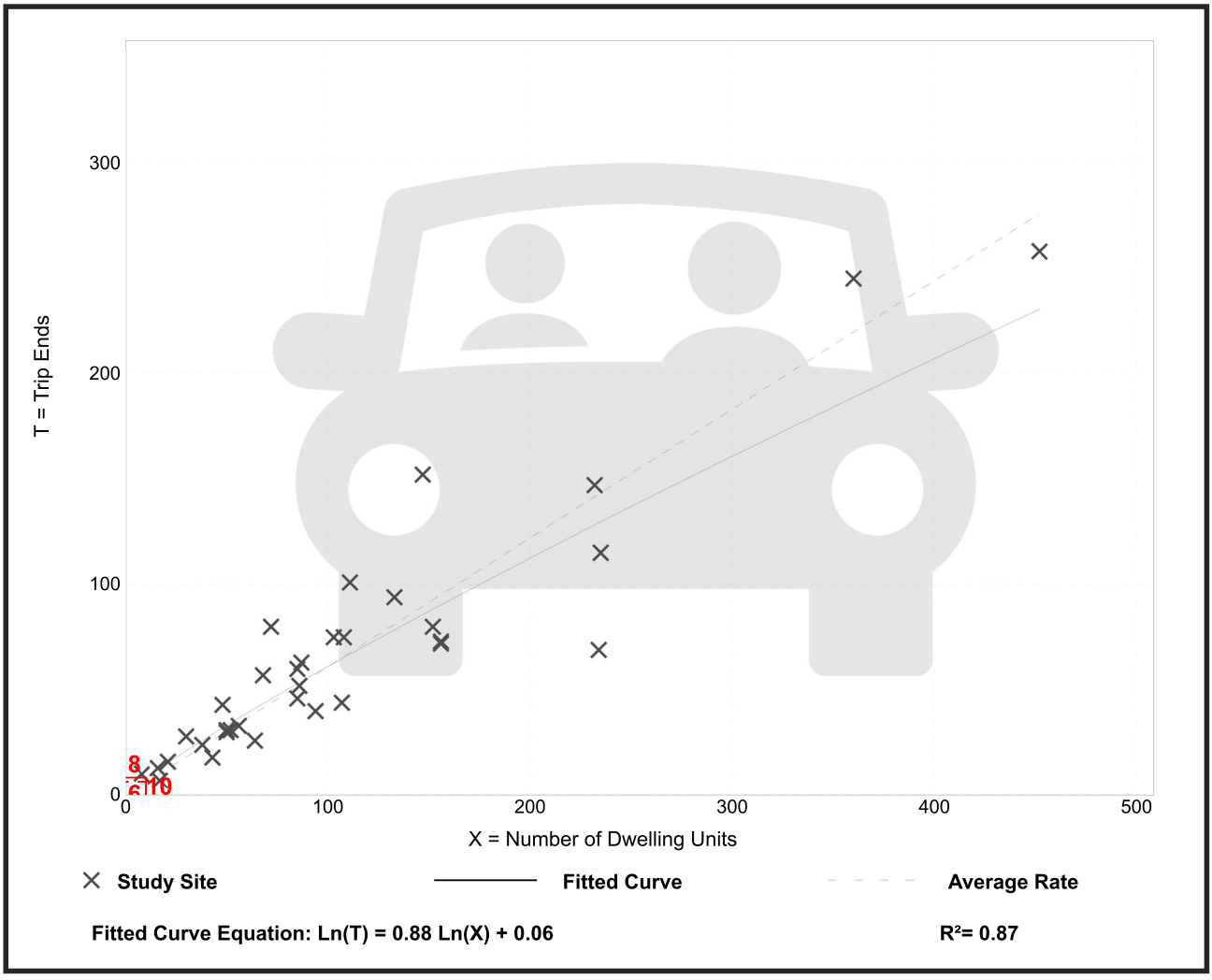
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 34
Avg. Num. of Dwelling Units: 110
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.61	0.29 - 1.25	0.18

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

MEANS OF TRANSPORTATION TO WORK BY VEHICLES AVAILABLE

United States Census Bureau

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.

	United States	
Label	Estimate	Margin of Error
Total:	152,891,752	±149,819
No vehicle available	6,298,680	±49,012
1 vehicle available	31,422,618	±117,551
2 vehicles available	61,801,315	±185,070
3 or more vehicles available	53,369,139	±166,780
Car, truck, or van - drove alone:	104,249,513	±136,937
No vehicle available	1,580,531	±29,738
1 vehicle available	19,701,567	±73,979
2 vehicles available	43,283,148	±133,720
3 or more vehicles available	39,684,267	±142,947
Car, truck, or van - carpooled:	11,921,065	±69,985
No vehicle available	599,486	±17,049
1 vehicle available	2,452,307	±34,518
2 vehicles available	4,366,569	±44,474
3 or more vehicles available	4,502,703	±44,867
Public transportation (excluding taxicab):	3,728,343	±36,906
No vehicle available	1,554,809	±25,465
1 vehicle available	1,137,414	±22,511
2 vehicles available	640,079	±14,107
3 or more vehicles available	396,041	±13,136
Walked:	2,858,418	±31,619
No vehicle available	709,516	±18,908
1 vehicle available	857,169	±20,321
2 vehicles available	753,612	±15,296
3 or more vehicles available	538,121	±15,860
Taxicab, motorcycle, bicycle, or other means:	2,850,491	±34,969
No vehicle available	561,967	±12,777
1 vehicle available	778,691	±17,553
2 vehicles available	846,256	±21,567
3 or more vehicles available	663,577	±19,392
Worked from home:	27,283,922	±105,055
No vehicle available	1,292,371	±19,631
1 vehicle available	6,495,470	±61,103
2 vehicles available	11,911,651	±89,390
3 or more vehicles available	7,584,430	±56,519

Table Notes

MEANS OF TRANSPORTATION TO WORK BY VEHICLES AVAILABLE

Survey/Program: American Community Survey

Universe: Workers 16 years and over in households

Year: 2021

Estimates: 1-Year

Table ID: B08141

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.

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.

Source: U.S. Census Bureau, 2021 American Community Survey 1-Year Estimates

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 2021 American Community Survey (ACS) data generally reflect the March 2020 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 delineations 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:

-

The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself.

N

The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area.

(X)

The estimate or margin of error is not applicable or not available.

median-

The median falls in the lowest interval of an open-ended distribution (for example "2,500-")

median+

The median falls in the highest interval of an open-ended distribution (for example "250,000+").

**

The margin of error could not be computed because there were an insufficient number of sample observations.

***

The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.

*****

A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.

National Data & Surveying Services

Intersection Turning Movement Count

Location: Jefferson Ave & 17thSt
City: Miami Beach
Control: 2-Way Stop(NB/SB)

Project ID: 23-140493-002
Date: 12/19/2023

Data - Total

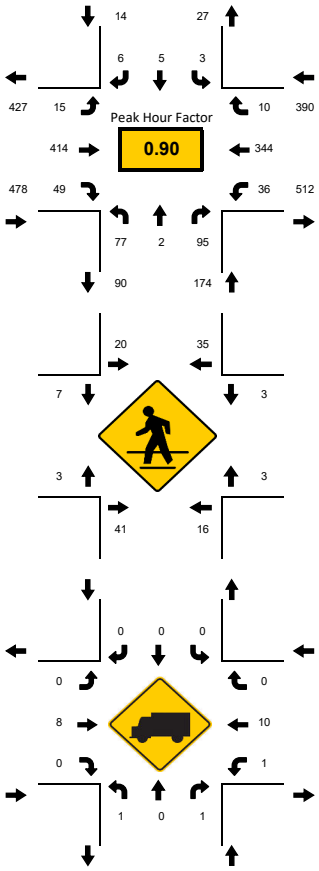
NS/EW Streets:	Jefferson Ave				Jefferson Ave				17thSt				17thSt				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	1	0	0	1	0	0	0	87	0	0	2	30	0	0	123
7:15 AM	3	0	1	0	0	0	2	0	1	60	6	0	3	27	0	0	103
7:30 AM	3	0	1	0	1	0	1	0	1	74	14	0	2	30	0	0	127
7:45 AM	7	1	1	0	0	1	1	0	2	75	5	0	0	31	0	0	124
8:00 AM	4	1	2	0	2	1	1	0	4	77	8	0	1	30	1	0	132
8:15 AM	6	2	2	0	2	0	2	0	3	85	13	0	4	25	2	0	146
8:30 AM	6	2	3	1	0	0	2	0	1	88	5	0	3	45	4	0	160
8:45 AM	4	1	2	0	0	2	0	0	2	99	8	0	9	38	3	0	168
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	35	7	13	1	5	5	9	0	14	645	59	0	24	256	10	0	1083
APPROACH %'s :	62.50%	12.50%	23.21%	1.79%	26.32%	26.32%	47.37%	0.00%	1.95%	89.83%	8.22%	0.00%	8.28%	88.28%	3.45%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	20	6	9	1	4	3	5	0	10	349	34	0	17	138	10	0	606
PEAK HR FACTOR :	0.833	0.750	0.750	0.250	0.500	0.375	0.625	0.000	0.625	0.881	0.654	0.000	0.472	0.767	0.625	0.000	0.902
	0.750				0.750				0.901				0.793				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	23	1	16	0	0	0	2	0	3	115	6	0	6	82	5	1	260
4:15 PM	16	2	13	0	0	2	2	0	5	104	10	0	7	111	3	0	275
4:30 PM	19	0	19	0	1	2	0	0	5	95	17	0	7	70	3	0	238
4:45 PM	6	0	33	0	1	1	2	0	3	111	8	0	17	68	1	0	251
5:00 PM	36	0	30	0	1	0	2	0	2	104	14	0	5	95	3	0	292
5:15 PM	22	1	20	0	0	0	0	0	2	79	4	0	8	84	1	0	221
5:30 PM	26	2	16	0	0	1	2	0	5	102	12	0	6	75	2	0	249
5:45 PM	21	1	10	0	0	1	2	0	3	102	6	0	6	86	3	0	241
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	169	7	157	0	3	7	12	0	28	812	77	0	62	671	21	1	2027
APPROACH %'s :	50.75%	2.10%	47.15%	0.00%	13.64%	31.82%	54.55%	0.00%	3.05%	88.55%	8.40%	0.00%	8.21%	88.87%	2.78%	0.13%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	77	2	95	0	3	5	6	0	15	414	49	0	36	344	10	0	1056
PEAK HR FACTOR :	0.535	0.250	0.720	0.000	0.750	0.625	0.750	0.000	0.750	0.932	0.721	0.000	0.529	0.775	0.833	0.000	0.904
	0.659				0.875				0.980				0.806				

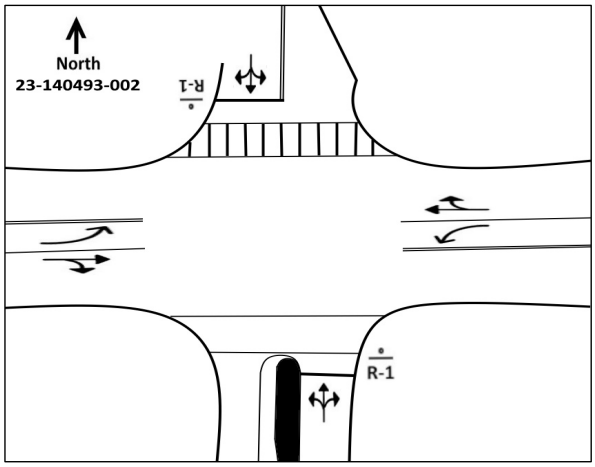
LOCATION: Jefferson Ave & 17thSt
CITY/STATE: Miami Beach, FL

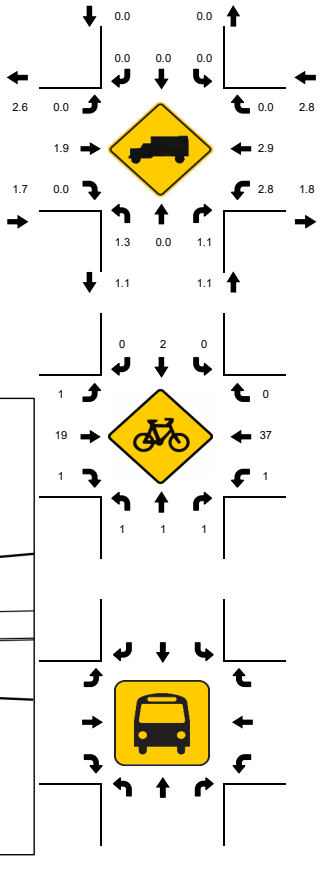
PROJECT ID: 23-140493-002
DATE: Tue, Dec 19, 2023

Peak-Hour: 04:15 PM - 05:15 PM
Peak 15-Minute: 05:00 PM - 05:15 PM



National Data & Surveying Services





15-Min Count Period Beginning At	Jefferson Ave Northbound					Jefferson Ave Southbound					17thSt Eastbound					17thSt Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	23	1	16	0		0	0	2	0		3	115	6	0		6	82	5	1		260	1024
4:15 PM	16	2	13	0		0	2	2	0		5	104	10	0		7	111	3	0		275	1056
4:30 PM	19	0	19	0		1	2	0	0		5	95	17	0		7	70	3	0		238	1002
4:45 PM	6	0	33	0		1	1	2	0		3	111	8	0		17	68	1	0		251	1013
5:00 PM	36	0	30	0		1	0	2	0		2	104	14	0		5	95	3	0		292	1003
5:15 PM	22	1	20	0		0	0	0	0		2	79	4	0		8	84	1	0		221	711
5:30 PM	26	2	16	0		0	1	2	0		5	102	12	0		6	75	2	0		249	490
5:45 PM	21	1	10	0		0	1	2	0		3	102	6	0		6	86	3	0		241	241
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	144	8	132	0		4	8	8	0		20	444	68	0		68	444	12	0		**1360**	
Heavy Trucks	4	0	4	0		0	0	0	0		0	16	0	0		4	20	0	0		**48**	
Pedestrians		80					72					32					12				**196**	
Bicycles	4	4	4	0		0	8	0	0		4	44	4	0		4	40	0	0		**116**	
Buses																						
Stopped Buses																						

Peak Season Conversion Factor

2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 8739 MIAMI-DADE I 395

WEEK	DATES	SF	MOCF: 0.94 PSCF
1	01/01/2022 - 01/01/2022	1.02	1.09
2	01/02/2022 - 01/08/2022	1.02	1.09
3	01/09/2022 - 01/15/2022	1.02	1.09
4	01/16/2022 - 01/22/2022	1.01	1.07
5	01/23/2022 - 01/29/2022	0.99	1.05
6	01/30/2022 - 02/05/2022	0.98	1.04
7	02/06/2022 - 02/12/2022	0.96	1.02
* 8	02/13/2022 - 02/19/2022	0.95	1.01
* 9	02/20/2022 - 02/26/2022	0.94	1.00
*10	02/27/2022 - 03/05/2022	0.94	1.00
*11	03/06/2022 - 03/12/2022	0.93	0.99
*12	03/13/2022 - 03/19/2022	0.93	0.99
*13	03/20/2022 - 03/26/2022	0.93	0.99
*14	03/27/2022 - 04/02/2022	0.94	1.00
*15	04/03/2022 - 04/09/2022	0.94	1.00
*16	04/10/2022 - 04/16/2022	0.95	1.01
*17	04/17/2022 - 04/23/2022	0.95	1.01
*18	04/24/2022 - 04/30/2022	0.95	1.01
*19	05/01/2022 - 05/07/2022	0.95	1.01
*20	05/08/2022 - 05/14/2022	0.96	1.02
21	05/15/2022 - 05/21/2022	0.96	1.02
22	05/22/2022 - 05/28/2022	0.98	1.04
23	05/29/2022 - 06/04/2022	1.00	1.06
24	06/05/2022 - 06/11/2022	1.01	1.07
25	06/12/2022 - 06/18/2022	1.03	1.10
26	06/19/2022 - 06/25/2022	1.02	1.09
27	06/26/2022 - 07/02/2022	1.02	1.09
28	07/03/2022 - 07/09/2022	1.01	1.07
29	07/10/2022 - 07/16/2022	1.00	1.06
30	07/17/2022 - 07/23/2022	1.01	1.07
31	07/24/2022 - 07/30/2022	1.01	1.07
32	07/31/2022 - 08/06/2022	1.02	1.09
33	08/07/2022 - 08/13/2022	1.02	1.09
34	08/14/2022 - 08/20/2022	1.03	1.10
35	08/21/2022 - 08/27/2022	1.04	1.11
36	08/28/2022 - 09/03/2022	1.06	1.13
37	09/04/2022 - 09/10/2022	1.08	1.15
38	09/11/2022 - 09/17/2022	1.10	1.17
39	09/18/2022 - 09/24/2022	1.08	1.15
40	09/25/2022 - 10/01/2022	1.07	1.14
41	10/02/2022 - 10/08/2022	1.05	1.12
42	10/09/2022 - 10/15/2022	1.04	1.11
43	10/16/2022 - 10/22/2022	1.04	1.11
44	10/23/2022 - 10/29/2022	1.04	1.11
45	10/30/2022 - 11/05/2022	1.04	1.11
46	11/06/2022 - 11/12/2022	1.04	1.11
47	11/13/2022 - 11/19/2022	1.05	1.12
48	11/20/2022 - 11/26/2022	1.04	1.11
49	11/27/2022 - 12/03/2022	1.03	1.10
50	12/04/2022 - 12/10/2022	1.03	1.10
51	12/11/2022 - 12/17/2022	1.02	1.09
52	12/18/2022 - 12/24/2022	1.02	1.09
53	12/25/2022 - 12/31/2022	1.02	1.09

* PEAK SEASON

23-FEB-2023 09:11:23 830UPD 6_8739_PKSEASON.TXT

Miami-Dade TPO 2045 Directional Trip Distribution

Miami-Dade 2015 Base Year Direction Trip Distribution Summary											
TAZ of Origin		Trips / Percent	Cardinal Directions								Total Trips
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
651	3551	Trips	601	40	126	-	25	267	541	390	2,069
651	3551	Percent	30.2	2.0	6.3	-	1.2	13.4	27.2	19.6	
652	3552	Trips	740	133	112	92	80	539	627	907	3,332
652	3552	Percent	22.9	4.1	3.5	2.8	2.5	16.7	19.4	28.1	
653	3553	Trips	597	120	187	238	48	604	488	661	2,984
653	3553	Percent	20.3	4.1	6.4	8.1	1.6	20.5	16.6	22.5	
654	3554	Trips	648	-	246	192	190	739	849	890	3,940
654	3554	Percent	17.3	-	6.6	5.1	5.1	19.7	22.6	23.7	
655	3555	Trips	2,579	-	-	-	1,029	2,523	3,354	2,903	13,375
655	3555	Percent	20.8	-	-	-	8.3	20.4	27.1	23.4	
656	3556	Trips	683	-	-	-	187	546	1,103	960	3,541
656	3556	Percent	19.6	-	-	-	5.4	15.7	31.7	27.6	

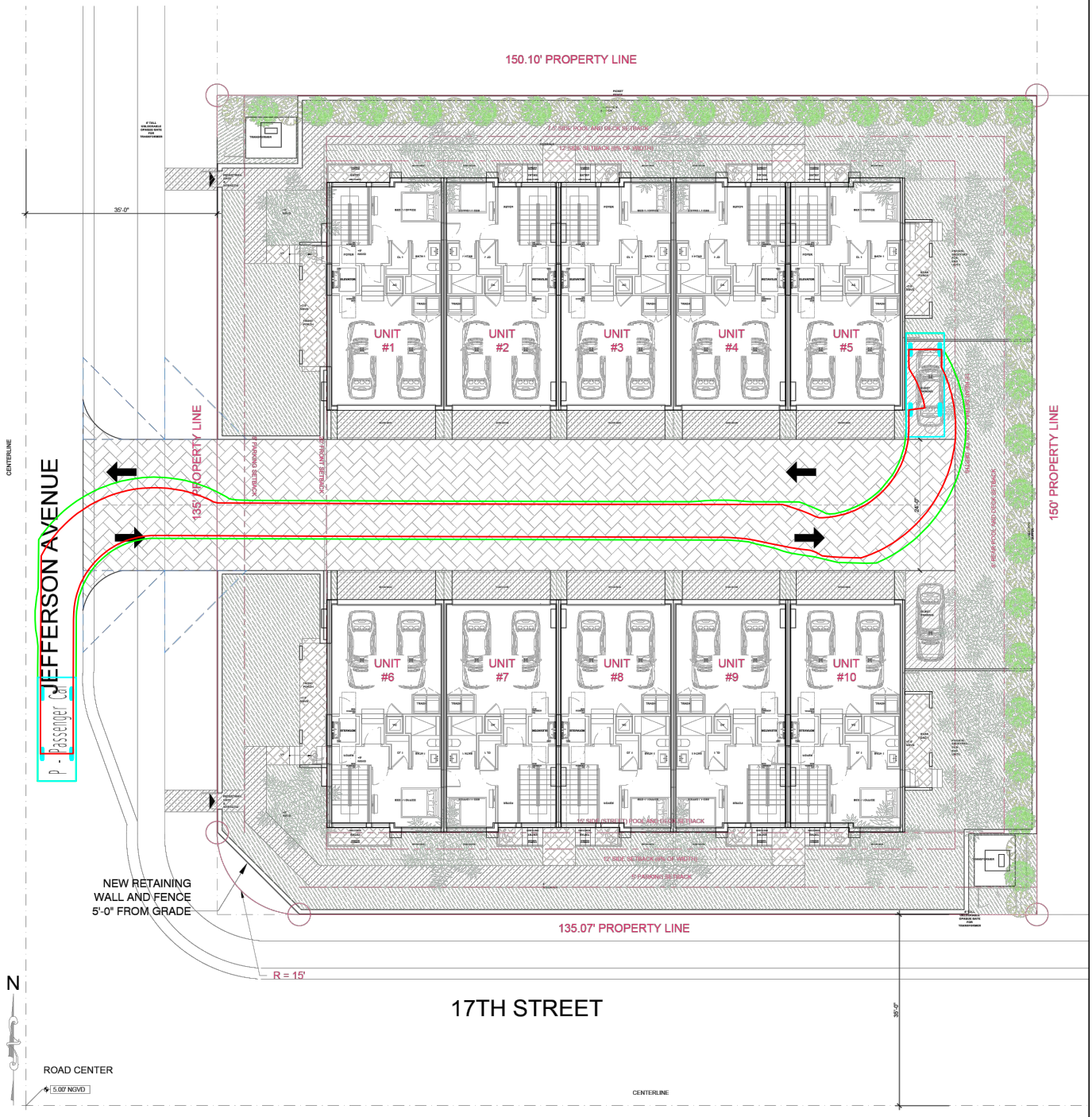
Miami-Dade 2045 Cost Feasible Plan Direction Trip Distribution Summary											
TAZ of Origin		Trips / Percent	Cardinal Directions								Total Trips
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
651	3551	Trips	500	33	118	-	44	610	964	424	2,777
651	3551	Percent	18.6	1.2	4.4	-	1.6	22.7	35.8	15.8	
652	3552	Trips	834	141	140	71	102	864	1,319	966	4,613
652	3552	Percent	18.8	3.2	3.2	1.6	2.3	19.5	29.7	21.8	
653	3553	Trips	563	73	181	185	40	875	1,115	522	3,691
653	3553	Percent	15.8	2.1	5.1	5.2	1.1	24.6	31.4	14.7	
654	3554	Trips	527	-	154	189	209	1,276	1,357	971	4,960
654	3554	Percent	11.3	-	3.3	4.0	4.5	27.2	29.0	20.7	
655	3555	Trips	2,507	-	-	-	984	3,119	4,529	3,116	15,245
655	3555	Percent	17.6	-	-	-	6.9	21.9	31.8	21.9	
656	3556	Trips	752	-	-	-	201	872	1,503	1,028	4,509
656	3556	Percent	17.3	-	-	-	4.6	20.0	34.5	23.6	
657	3557	Trips	255	42	13	51	17	325	482	206	1,441
657	3557	Percent	18.4	3.0	1.0	3.7	1.2	23.4	34.6	14.8	

APPENDIX N
Site Maneuverability Analysis

SITE MANEUVERABILITY ANALYSIS

LOCATION: 1709 JEFFERSON AVENUE, MIAMI BEACH, FL ANALYSIS: IN - VISITOR

DATE: 01/31/2024 DESIGN VEHICLE: PASSENGER CAR (P)

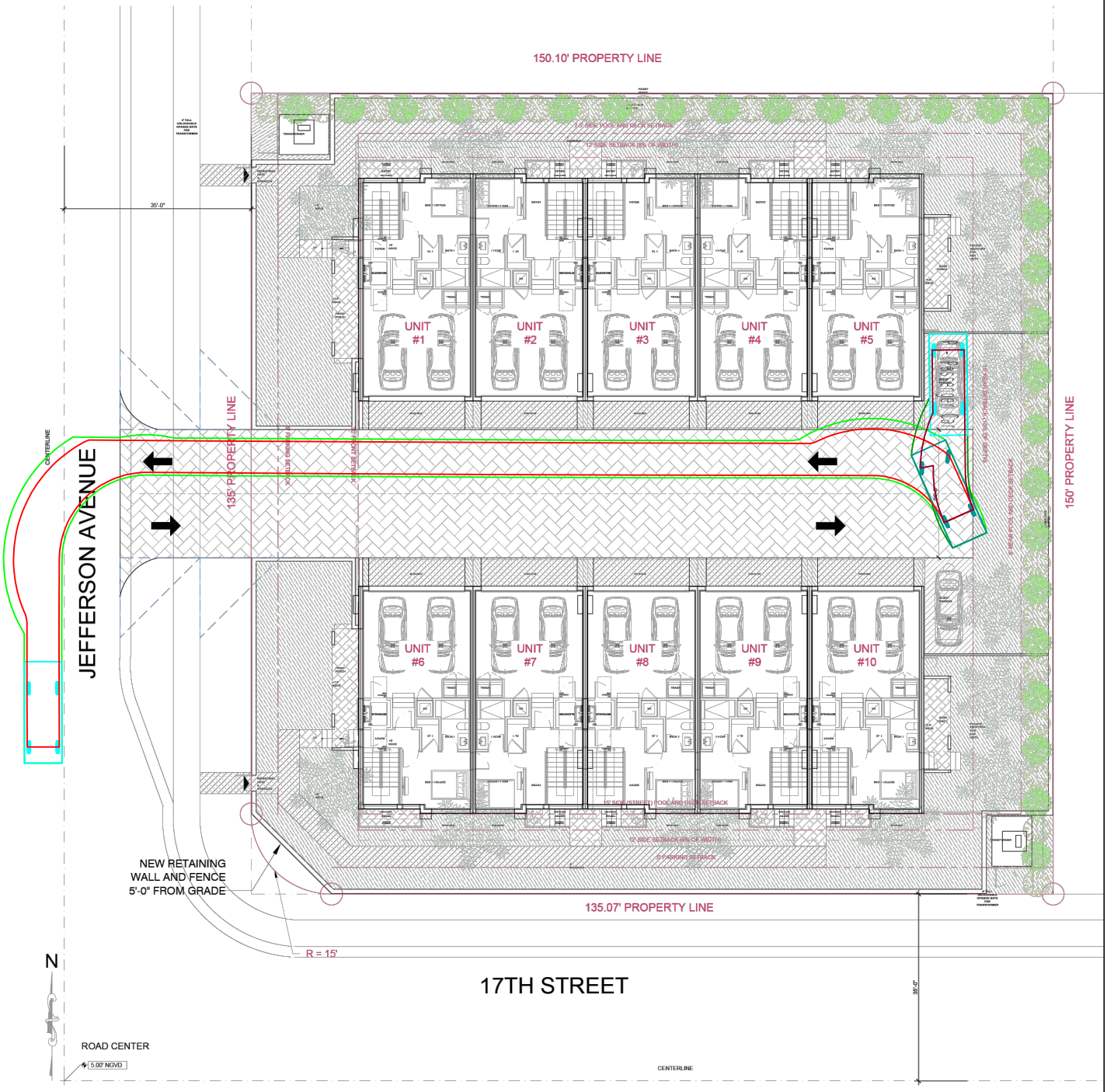


SHEET NO. 1

SITE MANEUVERABILITY ANALYSIS

LOCATION: 1709 JEFFERSON AVENUE, MIAMI BEACH, FL ANALYSIS: OUT - VISITOR

DATE: 01/31/2024 DESIGN VEHICLE: PASSENGER CAR (P)

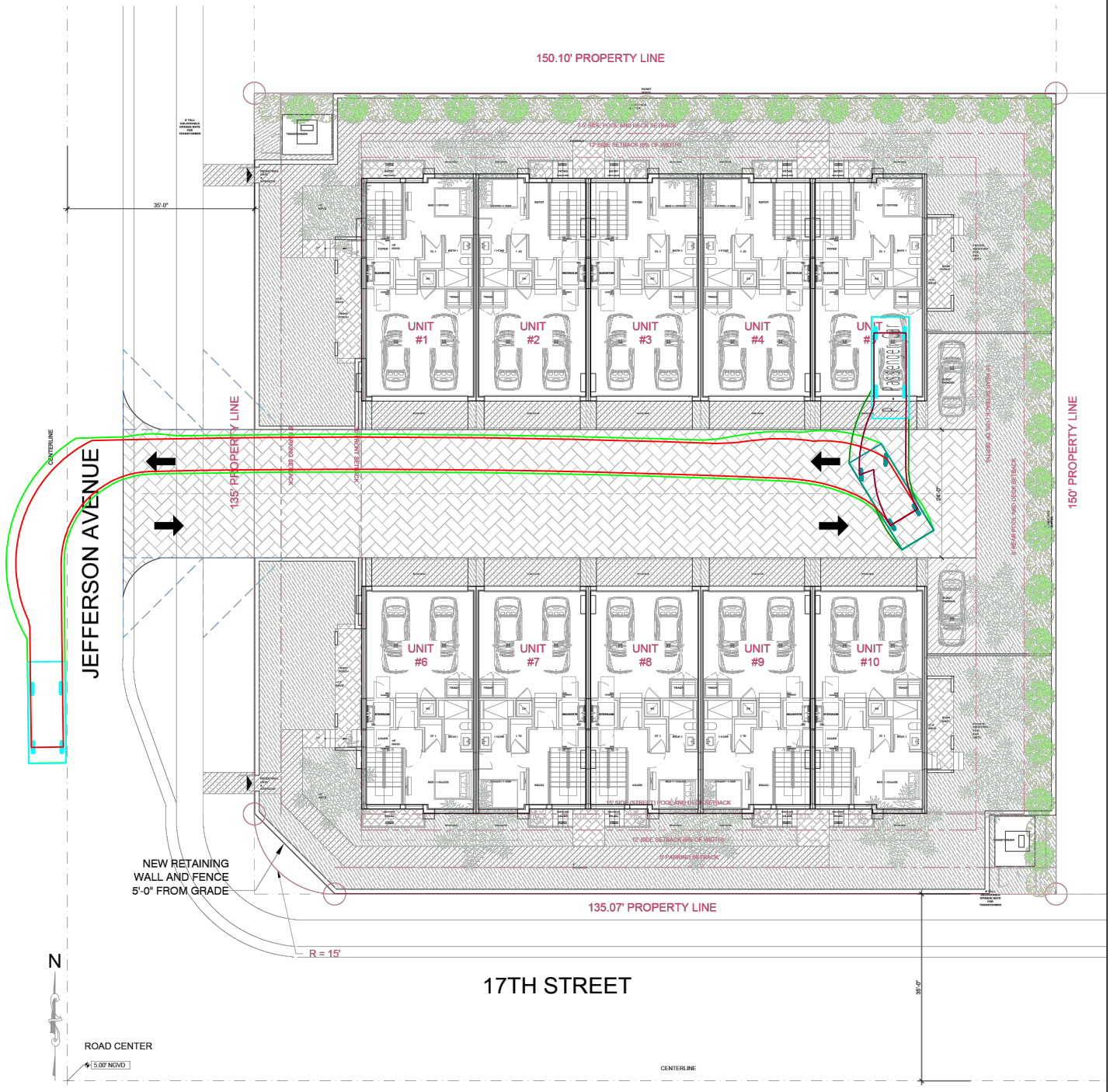


SHEET NO. 2

SITE MANEUVERABILITY ANALYSIS

LOCATION: 1709 JEFFERSON AVENUE, MIAMI BEACH, FL ANALYSIS: OUT - RESIDENT

DATE: 01/31/2024 DESIGN VEHICLE: PASSENGER CAR (P)

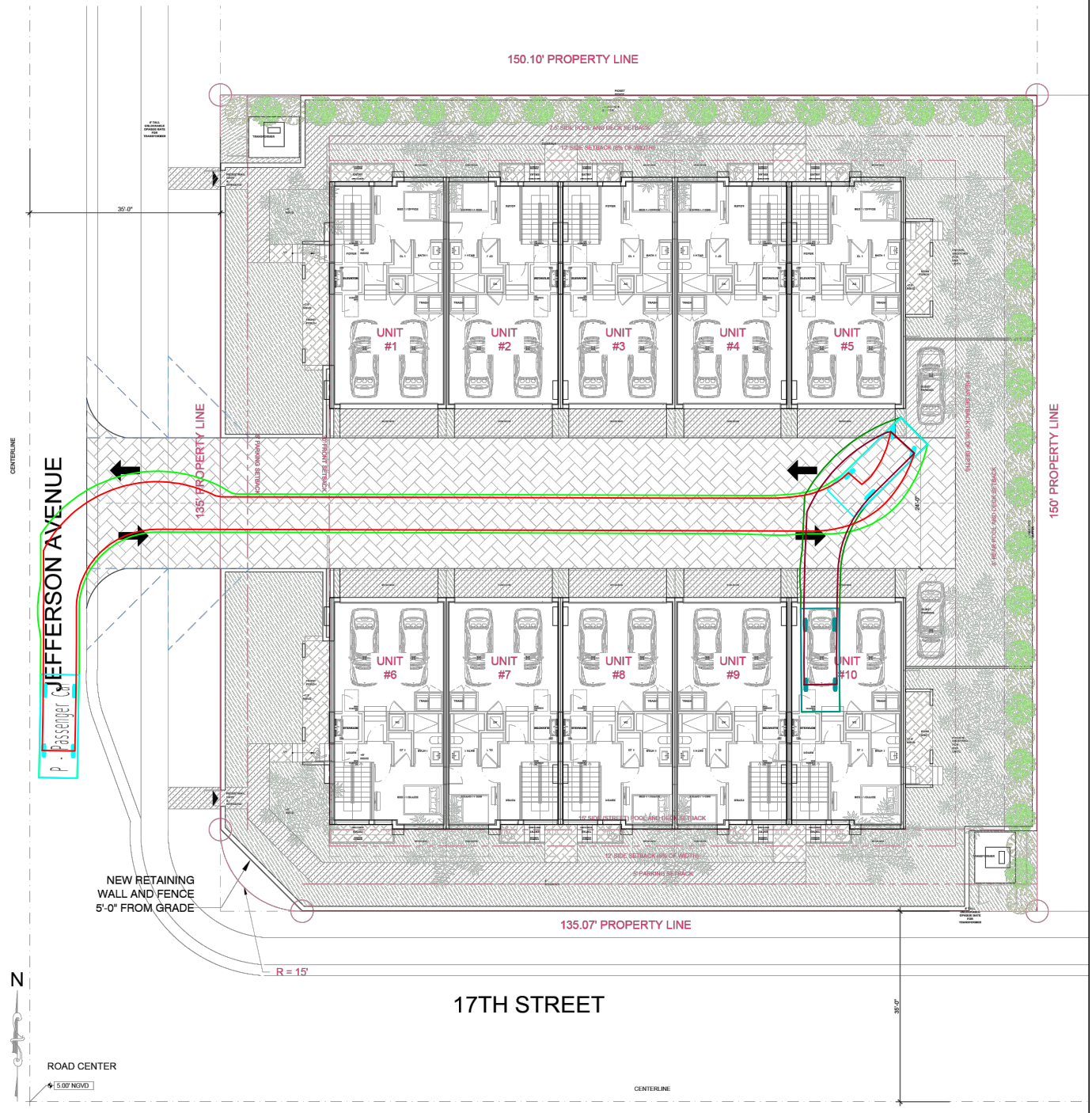


SHEET NO. 3

SITE MANEUVERABILITY ANALYSIS

LOCATION: 1709 JEFFERSON AVENUE, MIAMI BEACH, FL ANALYSIS: IN - RESIDENT

DATE: 01/31/2024 DESIGN VEHICLE: PASSENGER CAR (P)



SHEET NO. 4