



Memorandum

To: BETA
315 Norwood Park South, 2nd floor
Norwood, MA 02062

Date: February 4, 2021

Project #: 14559.00

From: Randall C. Hart, Principal
Matthew Duranleau, EIT

Re: Empirical Data Memorandum
Proposed Recreational Marijuana Dispensary
232 Boylston Street, Newton, Massachusetts

At the January 26, 2021 Land Use Hearing on the proposed MedMen project, the city's peer consultant suggested that empirical traffic data should be considered, if available, for the proposed facility to be located at 232 Boylston Street in Newton, Massachusetts. The concern is related to anticipated customer flow and the ability to provide enough parking spaces to accommodate the customer flow. As stated at the hearing and in other documents prepared and submitted to the City and the Peer Consultant (The BETA Group), the proposed operation will be an appointment only operation initially with limited appointments and if and when the operator wishes to move the operation away from the appointment only requirement, they will have to go back to the City Council for approval to modify the operation. At that time, there will be ample data related to customer activity and parking operations, so the city will be able to consider the request from a well-informed position.

Empirical Data Review

Based on that comment, VHB researched data for similar type facilities in the area. VHB found data that was collected by Vanasse and Associates (VAI) at the NETA recreational marijuana dispensary located at 160 Washington Street in Brookline, Massachusetts. This site is located just off Route 9, approximately three miles east of the proposed facility. The counts were conducted in June 2019, which is approximately three months after the NETA facility started its recreational sales operation. The NETA facility is substantially larger than the proposed facility, with approximate 20 registers as compared to the eight registers proposed at the MedMen facility. In addition, the VAI work included application of existing mode share data that was collected from a similar dispensary in Cambridge, Massachusetts (Sira Naturals). To date, the VHB analysis hasn't taken any credit for mode share data even though it is clear that the site will have multi-modal access which would include at a minimum; bus/train/walk/bike access and perhaps a shuttle that is being considered for various uses in the immediate area.

To assess the potential effect of multi modal access to the site while considering the VAI empirical data, VHB applied the data to the site three ways, (1) assuming that the modal splits that VAI applied are applied to the MedMen site, (2) assuming that 50% of the modal splits that VAI applied are applied to the MedMen site, and (3) assuming that no modal share is applied to the site. Based on the VAI empirical data, provided as an Attachment, the following conclusions have been made regarding the number of parked vehicles that would be necessary during peak hour under each mode share alternative. The following tables represent a summary of the data.

Table 1 Parking Requirements with Mode Splits from NETA Study

Peak Hour	NETA Vehicle Trips ^a	Trip Rate per Register ^b	MedMen Vehicle Trips ^c	MedMen Parking Needs per Hour ^d
Weekday Evening	174 trips	8.7 trips/register	70 trips	35 opportunities
Saturday MIDDAY	134 trips	6.7 trips/register	54 trips	27 opportunities

a – Total peak hour vehicle trips (entering and exiting) generated by the NETA facility based on mode shares and vehicle occupancy ratio from the VAI data (not including employee trips).
 b – Total person trips per register (NETA; 20 registers).
 c – Total vehicle trips estimated to be generated by the MedMen facility based on the NETA trip rate per register (MedMen; 8 registers).
 d – Parking opportunities needed at MedMen site based on peak hour trip count (one opportunity equals two trips, one entering and one exiting).

Table 2 Parking Requirements with 50-Percent Mode Splits from NETA Study

Peak Hour	NETA Vehicle Trips ^a	Trip Rate per Register ^b	MedMen Vehicle Trips ^c	MedMen Parking Needs per Hour ^d
Weekday Evening	247 trips	12.4 trips/register	99 trips	50 opportunities
Saturday MIDDAY	191 trips	9.6 trips/register	77 trips	39 opportunities

a – Total peak hour vehicle trips (entering and exiting) generated by the NETA facility based on 50-percent of mode splits from the VAI data (not including employee trips).
 b – Total person trips per register (NETA; 20 registers).
 c – Total vehicle trips estimated to be generated by the MedMen facility based on the NETA trip rate per register (MedMen; 8 registers).
 d – Parking opportunities needed at MedMen site based on peak hour trip count (one opportunity equals two trips, one entering and one exiting).

Table 3 Parking Requirements with No Mode Share Applied from NETA Study

Peak Hour	NETA Vehicle Trips ^a	Trip Rate per Register ^b	MedMen Vehicle Trips ^c	MedMen Parking Needs per Hour ^d
Weekday Evening	338 trips	16.9 trips/register	135 trips	68 opportunities
Saturday MIDDAY	260 trips	13.0 trips/register	104 trips	52 opportunities

a – Total peak hour vehicle trips (entering and exiting) generated by the NETA facility based on 100-percent vehicle mode share from the VAI data (not including employee trips).
 b – Total person trips per register (NETA; 20 registers).
 c – Total vehicle trips estimated to be generated by the MedMen facility based on the NETA trip rate per register (MedMen; 8 registers).
 d – Parking opportunities needed at MedMen site based on peak hour trip count (one opportunity equals two trips, one entering and one exiting).

As noted in previous documentation, the average customer experience at the MedMen facility is expected to last approximately ten minutes and the MedMen facility will have 19 parking spaces on site with the ability to park up to 114 vehicles per hour. To be more conservative, we have estimates that the average customer experience would last approximately 15 minutes instead of ten minutes, which would translate to the ability to park up to 76 vehicles per hour. Using any of the methodologies to calculate the proposed mode share, the analyses presented in previous documentation and the empirical data presented above illustrate that the proposed MedMen site will provide enough parking spaces if the proposed facility generates trips at a similar rate as the nearby NETA facility.

It should also be noted that the counts at the NETA facility were conducted in June 2019 when the NETA facility was one of the only recreational marijuana dispensaries that was open in the Boston area. When the MedMen facility opens, there will be other nearby facilities that are already online. Therefore, the counts at the NETA facility in June 2019 likely attracted customers from a much capture-larger area than the MedMen facility is likely to attract.

Proposed Operations

As noted previously, the proposed operation will be an appointment only operation initially and if and when the operator wishes to move the operation away from the appointment only requirement, they will have to go back to the City Council for approval to modify the operation. At that time, there will be ample data related to customer activity, and parking operations so the city will be able to consider the request from a well-informed position.

The appointment only operation will consist of eight points of sale in the building and six appointment slots per hour, resulting in a total of 48 potential available appointments per hour. This applies to each day of the week. In addition, there will always be at least one parking attendant onsite (two if necessary) to assist with the parking operations.

While it is MedMen's experience that customers would be on-site for approximately ten minutes, if we consider a very conservative estimate of 15 minutes for each customer on site, we would need approximately 12 parking spaces for the facility (48 appointments divided by four parking opportunities per space per hour). The site is proposed to have 19 parking spaces, which is more than necessary.

Conclusion

As discussed in previous documentation, the 19 parking spaces on-site are expected to be sufficient to serve the site, even if the average customer transaction lasts for 15 minutes as opposed to ten minutes. In addition, the 19 parking spaces will also be more than sufficient if the proposed MedMen site generated trips at a similar rate as the nearby NETA facility.

Attachments

NETA Empirical Data (by VAI)

Table 3
TRIP GENERATION SUMMARY
CANNABIS DISPENSARY

Time Period/Direction	Person Trips									Total Trips
	Proposed Cannabis Dispensary (10 Registers) ^a	Drive Alone Trips ^b	Ridesharing Trips ^c	Transit Trips ^d	Pedestrian Trips ^e	Bicycle Trips ^f	Other Trips ^g	Automobile Trips ^h	Employees Trips	
Weekday Evening Peak Hour:										
Entering	169	69	22	27	32	10	8	87	3	90
<u>Exiting</u>	<u>169</u>	<u>69</u>	<u>22</u>	<u>27</u>	<u>32</u>	<u>10</u>	<u>8</u>	<u>87</u>	<u>1</u>	<u>88</u>
Total	338	138	44	54	64	20	16	174	4	178
Saturday Midday Peak Hour:										
Entering	130	53	17	21	25	8	7	67	2	69
<u>Exiting</u>	<u>130</u>	<u>53</u>	<u>17</u>	<u>21</u>	<u>25</u>	<u>8</u>	<u>7</u>	<u>67</u>	<u>0</u>	<u>67</u>
Total	260	106	34	42	50	16	14	134	2	136

^aBased on costumer counts conducted at the Existing Cannabis Dispensary in Brookline June 19. Projection on Costumes per register Rate. (20 Registers)

^bAssume 41 percent of total person trips.

^cAssume 13 percent of total person trips.

^dAssume 16 percent of total person trips.

^eAssume 19 percent of total person trips.

^fAssume 6 percent of total person trips.

^gAssume 5 percent of total person trips.

^hDrive-alone plus rideshare person trips divided by vehicle occupancy ratio of 1.05 persons per vehicle per local census data



Neta has primarily an entrance door and a separate exist door. The below "in" count represent pedestrian entering. The out number was neglected and we assume the entering and exiting on volumes were equal.

Accurate Counts
978-664-2585

N/S Street : Entrance to NETA
E/W Street: Boylston Street
City/State : Brookline, MA
Weather : Clear

File Name : 82740001
Site Code : 82740001
Start Date : 6/7/2019
Page No : 1

Friday

Groups Printed- Peds

Start Time	From North		From South		Int. Total
		OUT		IN	
04:00 PM		13		82	95
04:15 PM		5		91	96
04:30 PM		9		73	82
04:45 PM		8		92	100
Total		35		338	373
05:00 PM		6		61	67
05:15 PM		2		72	74
05:30 PM		4		88	92
05:45 PM		7		92	99
Total		19		313	332
Grand Total		54		651	705
Apprch %		100		100	
Total %		7.7		92.3	

Poy => 2
Register = 10 + 4 + 4 = ≈ 20 Register

Rate = 16,9

Rate per hour = 338 costumes hour

Neta has primarily an entrance door and a separate exist door. The below "in" count represent pedestrian entering. The out number was neglected and we assume the entering and exiting on volumes were equal.

Accurate Counts
978-664-2565

SAT

File Name : 827400S1
Site Code : 82740001
Start Date : 6/8/2019
Page No : 1

N/S Street : Entrance to NETA
E/W Street: Boylston Street
City/State : Brookline, MA
Weather : Clear

Groups Printed- Peds

Start Time	From North		From South		Int. Total
	OUT	IN	OUT	IN	
11:00 AM	3	70			73
11:15 AM	1	55			56
11:30 AM	5	73			78
11:45 AM	2	51			53
Total	11	249			260
12:00 PM	3	66			69
12:15 PM	6	69		259	75
12:30 PM	0	63			63
12:45 PM	3	47			50
Total	12	245			257
01:00 PM	0	71			71
01:15 PM	1	58			59
01:30 PM	2	69			71
01:45 PM	1	56			57
Total	4	254			258
Grand Total	27	748			775
Apprch %	100	100			
Total %	3.5	96.5			

01 10 05

Cannabis Retail Stores Summary Form

Project Site:		
1	Store Address.	580 Massachusetts Avenue
2	Total floor area of store (including sales, back of house, other).	5,078 sf
3	Retail sales area (including customer waiting areas).	2,647 sf
4	Maximum customer capacity – sales area.	45 occupants.
5	Maximum customer capacity – waiting area.	104 occupants
Employees:		
6	Number of full-time employees (total).	Total employees: 5 Total employees: 2 each day
7	Number of part-time employees (total).	Total employees: 18 Total employees: 12 (each day)
8	Maximum number of employees on-site at one time.	14 employees
	Employee mode shares:	Obtained from Cambridge Website, Transportation Data: 2006 - 2008 Cambridge Journey to Work.
9	% single-occupancy vehicle (SOV) (including ride-hailing):	46.4%
10	% high-occupancy vehicle (HOV):	8.6%
11	% public transit:	25.4%
12	% walk:	12.4%
13	% bike:	3.4%
14	% other:	3.8%
Customers:		
15	Number of customers per day.	1400
16	Maximum number of customers expected at any one time.	56
	Customer mode shares:	Based upon Sira Natural's Survey 2018
17	% single-occupancy vehicle (SOV) (including ride-hailing):	41%
18	% high-occupancy vehicle (HOV):	13%
19	% public transit:	16%
20	% walk:	19%
21	% bike:	6%
22	% other:	5%

Transit Availability:		
23	List the public transportation services within ¼ mile of the site, including type (subway, bus, bike share), walking distance, and frequency.	<p><u>Subway</u></p> <ul style="list-style-type: none"> • MBTA Red line - 421 ft. north - 2 minutes walking – Frequency: 9 -12 minutes <p><u>Bus</u></p> <ul style="list-style-type: none"> • Route 1 - Harvard - Dudley via Massachusetts Avenue -116 ft. north – 1 minutes walking • Route 47 - Central Square, Cambridge - Broadway Station -116 ft. north – 1 minutes walking • Route 64 - Oak Square - University Park or Kendall/MIT-116 ft. north – 1 minutes walking • Route 70 -Cedarwood - Central Square, Cambridge -116 ft. north – 1 minutes walking • Route CT1 - Central Square - Boston Medical Center -116 ft. north – 1 minutes walking • Route 70A - North Waltham - Central Square, Cambridge - 116 ft. north– 1 minutes walking <p><u>Bike Share</u></p> <ul style="list-style-type: none"> • Central Square at Mass Ave / Essex St - 116 ft. north– 1 minutes walking – 16 Docks
24	List the duration and frequency of public transit services for weekdays and weekends.	<p><u>Subway</u></p> <ul style="list-style-type: none"> • Frequency: 9 -12 minutes <p><u>Bus</u></p> <ul style="list-style-type: none"> • Weekday Frequency: 9 to 20 minutes • Saturday Frequency: 10 to 20 minutes
Auto Parking Availability:		
25	List public parking facilities within 500 feet of site (with addresses/locations, distance, and number of spaces) and parking occupancy for minimum one weekday (e.g., minimum 10 am, 12 pm, 3 pm, 5 pm, 7 pm), and minimum one Saturday (e.g., minimum noon, 3 pm and 7 pm).	<p>Municipal Lot #4 – 96 Bishop Allen Drive - Spaces: 16 (closed) Municipal Lot #5 - 84 Bishop Allen Drive - Spaces: 73 Green Street Garage - 260 Green St - Spaces: 269 On Street Parking = Spaces: 49</p> <p><u>Vacant Spaces</u> Weekday 10:00 AM: 50 vacant spaces Weekday 12:00 PM: 15 vacant spaces Weekday 3:00 PM: 107 vacant spaces Weekday 5:00 PM: 165 vacant spaces Weekday 7:00 PM: 28 vacant spaces Saturday 10:00 AM: 0 vacant spaces Saturday 12:00 PM: 61 vacant spaces Saturday 3:00 PM: 58 vacant spaces Saturday 5:00 PM: 0 vacant spaces Saturday 7:00 PM: 131 vacant spaces</p>
26	Estimated peak parking demand needed for employees.	7
27	Estimated peak parking demand for customers.	40
28	Number of employee parking spaces on-site.	0
29	Number of customer parking spaces on-site.	0
30	Number of employee parking spaces off-site (describe location and distance from site).	7
31	Number of customer parking spaces off-site (describe location and distance from site).	40

Bicycle Parking Availability:

31	Number of Employee long-term bicycle parking spaces on the Project site.	11
32	Number of Customer short-term bicycle parking spaces on the Project site.	0 (204 Nearby Spaces are available within 500ft radius distance from the site)
33	Number of public bicycle parking spaces within 100 feet of the main entrance of the site.	70 bike racks with storage capacity of 2 bikes

Loading and Delivery:

34	Address of proposed Loading and Delivery Service Location (note whether it is on-street or off-street).	All loading delivers will be handled utilizing an existing loading zone area on Green Street. The North East side of Green street is mostly loading and commercial parking only. There are two egress doors in close proximity to the loading zone. The door furthest away from Green street shall be for loading and deliveries.
35	List the types of loading and delivery trips that will service the site (e.g., product delivery, cash pick-up, refuse collection) and expected number of trips per week for each type.	Product: 3 times per week Cash: Max twice per day Trash: 3 times per week

Project Trip Generation:

36	Daily, Morning and Evening Peak Hour Employees and Customer trip generation by mode.		Employees			Customers		
			Daily	Evening	Saturday	Daily	Evening	Saturday
		SOV	6	3	2	574	139	106
		HOV	1	1	0	182	44	34
		Transit	4	2	1	224	54	42
		Walk	2	1	0	266	64	49
		Bike	0	0	0	84	20	16
		Other	1	0	0	70	17	13



**Registered Marijuana Dispensary Operations
January 1st, 2018 – December 31st, 2018**

**Report to the
*City of Cambridge***



PATIENT DEMOGRAPHIC DATA

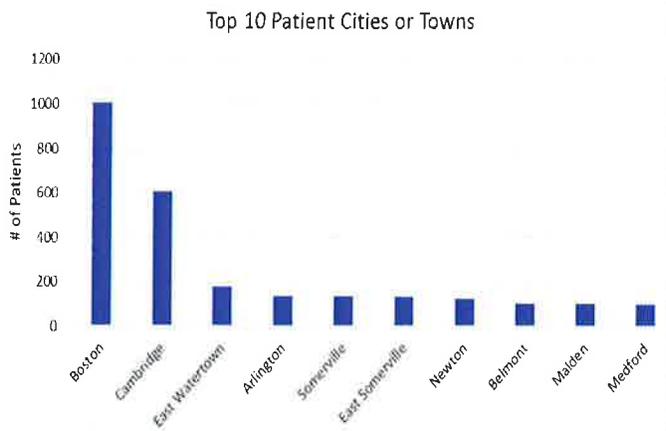
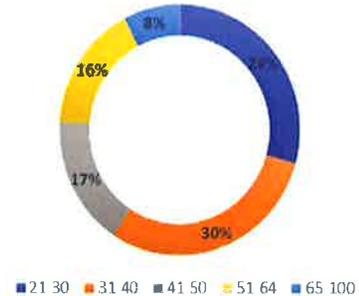
Like the City of Cambridge, SIRANATURALS serves a diverse community of patients with a wide range of ages, schedules and conditions. A convenient location, extensive hours and trained Patient Advocates ensure Sira Naturals meets the needs of all its patients. Our Cambridge location is open from 11AM – 9PM every day.

AGE RANGE

Average Age: 39 years old

Median Age: 35 years old

Patient Age Range 2018



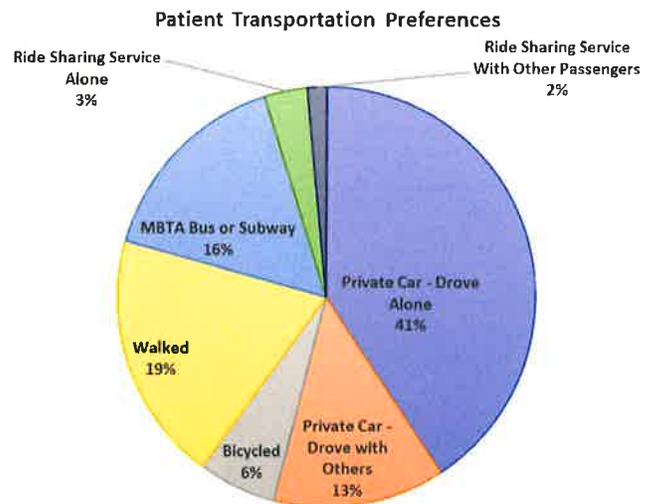
WHERE OUR PATIENTS ARE FROM

We are proud to have served patients from 297 different towns and cities in Massachusetts since opening in March! The majority of our patients are coming from the city of Cambridge- which represents approximately 10% of our total patient population. The surrounding suburbs of Boston and Cambridge makeup another 20% of our total patient population. This 30% segment is close to several public transportation stops and stations.

HOW OUR PATIENTS REACH US

The patients who visit our Cambridge facility arrive there in a variety of ways. Half of all visitors come by car, which they or a close relation drives, or by way of an MBTA bus.

While 25% of patients arrive at Sira Naturals Cambridge dispensary under their own power on foot or by bike, the remaining 21% of patients visit by leveraging a Red Line train or a ride service such as Uber or Lyft.



customers made share