STAFF REPORT

Meeting Date: April 21, 2015

To: Honorable Mayor & City Council

From: Chad Lynn, Assistant Director of Public Works Services

Subject: Transmission of the Disabled Placard Usage Study Conducted for the Department of Public Works Services

Attachments: 1. Parking Disabled Placard Usage Study

INTRODUCTION

The City of Beverly Hills, through both the City Council and the City's Traffic and Parking Commission, is committed to pursuing and supporting the reform of the use and misuse of Disabled Parking Placards (DP) in Beverly Hills and throughout the State. This includes the increased enforcement of DP abuse within the City, the consideration of increased enforcement for DP misuse and the consideration of legislation to improve the state regulations related to DP issuance and use.

DISCUSSION

In February 2014, the City appointed Jeffery S. Levine Special Policy Advisor for Disabled Placard Reform for the City of Beverly Hills with the purpose of pursing legislative reform in the areas of disabled placard usage specifically related to curbing and controlling misuse. This appointment was after Mr. Levine completed his service with the Traffic and Parking Commission, however, in March 2015, Mr. Levine was reappointed to the Traffic and Parking Commission. Commissioner Levine has created relationships with national and local disabled groups, including the American Association of People with Disabilities and the Center for Independent Living and with state and local representatives to pursue disabled placard reform. To support this effort, Mr. Levine has also worked to establish a coalition to educate, inform and support new legislation with Professors Dr. Donald Shoup and Dr. Fernando Torres-Gil of UCLA and USC.

It was determined that the primary role for the City of Beverly Hills would be to support a coalition of cities and disabled organizations seeking disabled placard reform which would including both enforcement and legislation. In support of that mission, the attached study (Attachment 1) was commissioned to examine the local usage of placards in the City of Beverly Hills and to create a model for other communities to study, highlighting similarities and differences related to this usage.

The study concluded the following:

- Study was conducted over two one-week periods in August 2014 on the following streets within the Business Triangle and South Beverly Drive
    - Brighton Way, Dayton Way, N Camden Drive, N Beverly Drive, N Roxbury Dive, N Linden Drive, N Canon Drive, Clifton Way, N Crescent Drive, N Bedford Drive, S Santa Monica Boulevard, N Rodeo Drive, and S Beverly Drive
- Overall occupancy by disabled placard vehicles was 32%
    - Occupancy for the Business Triangle was 39% (not including S Beverly Drive)
- Although high users may be more visual, low users composed a majority of the occupancy
    - Repetitive use of parking was observed among license plates
        - Low users: 84% of vehicles
        - High users: 2% of vehicles
    - Frequency of use can also be observed within the total number of occurrences
        - Low users: 1,362 vehicles contributed 52% of all observations
        - High users: 35 vehicles contributed 13% of all observations
- High users typically parked in only 1-2 locations
- The incidence of disabled placard use was generally even across the three time periods, with a slightly higher amount from the Midday time period
    - Morning (10am – Noon) – 33%
    - Midday (Noon – 2pm) – 37%
    - Afternoon (2pm – 5pm) – 30%
- Occupancy by street was the highest for
    - Brighton Way (49%)
    - Dayton Way (46%)
    - N Camden Drive (46%)
- Occupancy by street was the lowest for
    - Santa Monica Boulevard (20%)
    - Rodeo Drive (20%)
    - S Beverly Drive (8%)
- If fees were collected, the result would be an estimated 35% increase in Parking Meter Revenue
    - Total Number of Meters in Service – Approximately 2650
    - Total Annual Revenue – Approximately $5.4 Million
    - Estimated Non-Paid Meter Usage – Estimated at $1.9 Million

RECOMMENDATION

This report transmits information to the City Council related to the Disabled Placard study and the support of legislative reform for the use of Disabled Placards statewide. The Traffic and Parking Commission, the Special Policy Advisor for Disabled Placard Reform and staff will continue to build a coalition of representatives of the Disabled Community and Cities to seek and support this reform unless otherwise directed by the City Council.

George Chavez
Approved By

Attachment 1

City of Beverly Hills
Parking Disabled Placard Usage Study

City of Beverly Hills

Public Works & Transportation

DIXON

RESOURCES UNLIMITED

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1/15/2015

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Executive Summary

City of Beverly Hills Parking Disabled Placard Usage Study

Number of Disabled Placards Observed	
License Plate Collected	2,988
No License Plate Collected	234
Total Observations	3,222

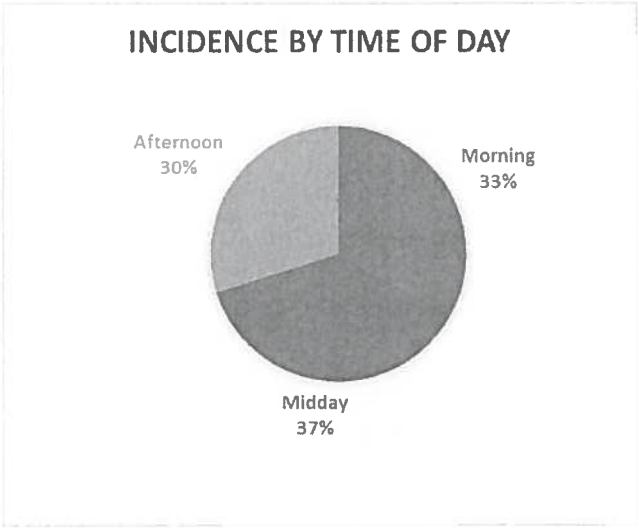
Overall Disabled Placard Occupancy	32%
Central Business Triangle Occupancy	39%

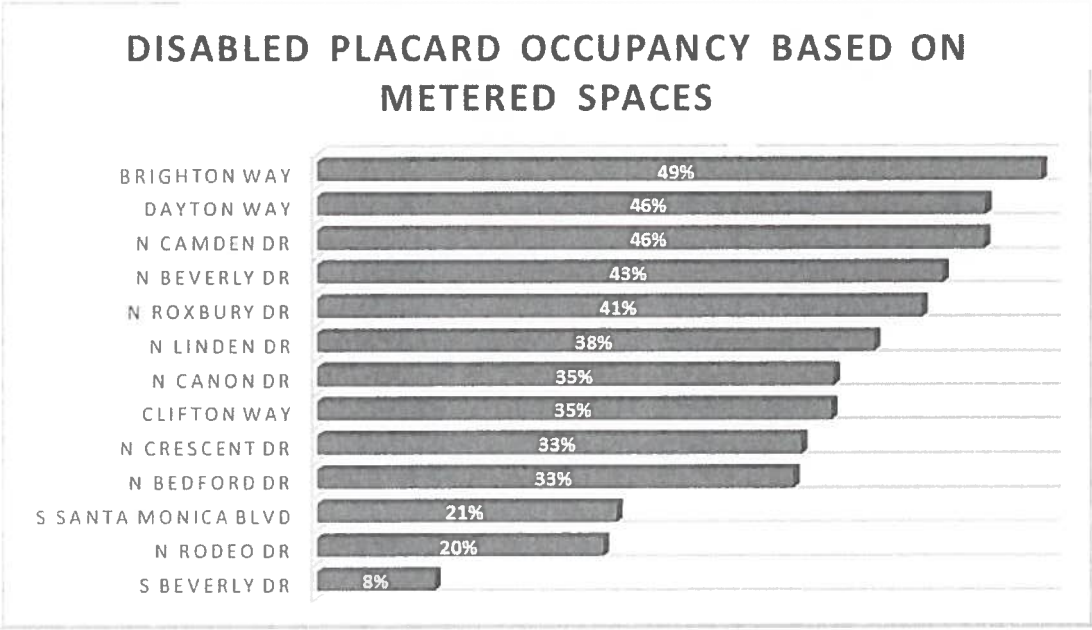
Impact on Parking by Frequency of Use

User	# of License Plates	% Impact
Low	1,362	52%
Medium	220	35%
High	35	13%
	1,617	100%

Dispersion of Parking Location

User	Number of Locations Spotted		
	1	2	3
Low	92%	8%	
Medium	59%	32%	9%
High	45%	43%	13%





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Study Title

City of Beverly Hills Parking Disabled Placard Usage Study

Study Objectives

The Disabled Placard Usage Study focused on the use of disabled placards in on-street, metered parking locations within the City of Beverly Hills. The study focused on two locations:

- Beverly Hills "business triangle" (South of Santa Monica Blvd., West of Crescent Dr., North of Wilshire Blvd.)
- South Beverly Drive between Wilshire Blvd. and Olympic Blvd.

The Study took place from August 5 – 9, 2014 and August 12 – 16, 2014. Observations were conducted Tuesdays through Saturdays on an hourly basis between morning, midday, and afternoon. The purpose of the data collection was to identify lengths of stay for vehicles with disabled placards.

It is important to note that the month of August is typically when tourist season tends to slow down in Beverly Hills. Furthermore, businesses tend to require fewer employees during this time period as well. Therefore, we believe our results to be conservative compared to the high tourism season that Beverly Hills experiences during the middle of the summer.

Study Methodology

Initially, in order to maximize data collection efficiency, the field analyst was scheduled to traverse the study area on a bicycle. The intention was for the field analyst to cover the entire study area on a consistent basis throughout the day while visually inspecting vehicles parked at on-street, metered locations while displayed a disabled placard. Due to the significant number of disabled placards throughout the study area, the use of a bicycle actually proved to be a hindrance for effective data

collection. Also, due to the frequency of disabled placards, during the first 2 days of sampling, the collector was only able to survey each street once per day. On the third day, the study area was broken into 2 routes in order to allow for data collection three times each day. Each route was completed three times a day, over alternate days.

A single sample collector visually inspected each car parked in on-street, metered parking spaces within the study area to identify cars displaying a disabled placard.

- If a placard was identified, then the sample collector utilized a mobile phone app to record the location, and license plate. The date and time were recorded automatically by the mobile app.
- Data was collected between August 8 – 16, 2014
- Each street was observed over the following time periods:
  - Morning 10:00 am – 12:00 pm
  - Midday 12:00 pm – 2:00 pm

Afternoon 2:00 pm – 5:00 pmStudy Sample

Number of Meters per Street Sampled

Street	Number of Meters
S Beverly Dr	169
Brighton Way	99
N. Canon Dr	91
N. Beverly Dr	80
N. Camden Dr	60
N. Crescent Dr	49
Santa Monica Blvd.	39
Dayton Way	38
N. Bedford Dr	34
N. Rodeo Dr	27
N. Roxbury Dr	19
Clifton Way	13
N. Linden Dr	9
Grand Total	727

Thirteen (13) streets within the City of Beverly Hills Central Business Triangle and South Beverly Drive were included in the study sample. This area contained a total of 727 metered, on-street parking spaces.

Quantity of Observations

Each street was sampled on both sides of the street, 14 times during the study period. The time for each occurrence was broken into morning, midday or afternoon.

No license plate was recorded for 234 of the total occasions. All of these were a result of a temporary license plate. The remaining 2,988 occasions included adequate license plate information.

Of the 2,988 occasions where a license plate was recorded, 1,617 plates were unique plates (54% unique plates).

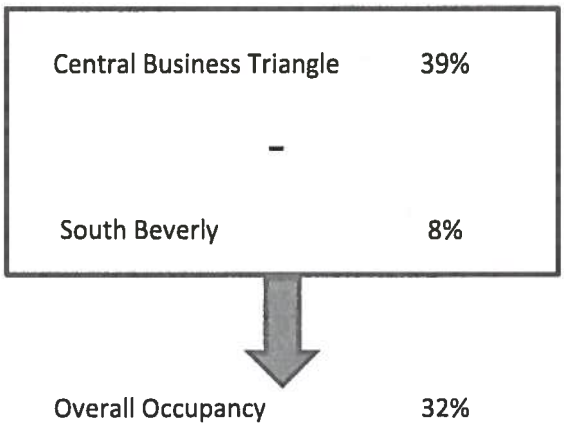
Number of Disabled Placards Observed	
License Plate Collected	2,988
No License Plate Collected	234
Total Observations	3,222

Overall Occupancy

The total number of on street, metered spaces within the study area is 727 spaces. The data collector observed all 727 spaces 14 times during the study period providing an overall study sample of 10,178 spaces studies. In total, disabled placards were observed 3,222 times during the study period. This accounts for **an overall occupancy within the study area of 32%**.

During the analysis of these data, it was observed that Disabled Placard use on South Beverly was at a much lower rate than within the Central Business Triangle (CBT). When this is combined with the large number of meters on this section of South Beverly (n=169), the overall occupancy of 32% in the total study area is artificially lower than for just the Central Business Triangle. In fact, when the data for South Beverly was excluded from this analysis, **the CBT occupancy rose to 39%.**

Influence of South Beverly on dampening the Overall Occupancy Percentage

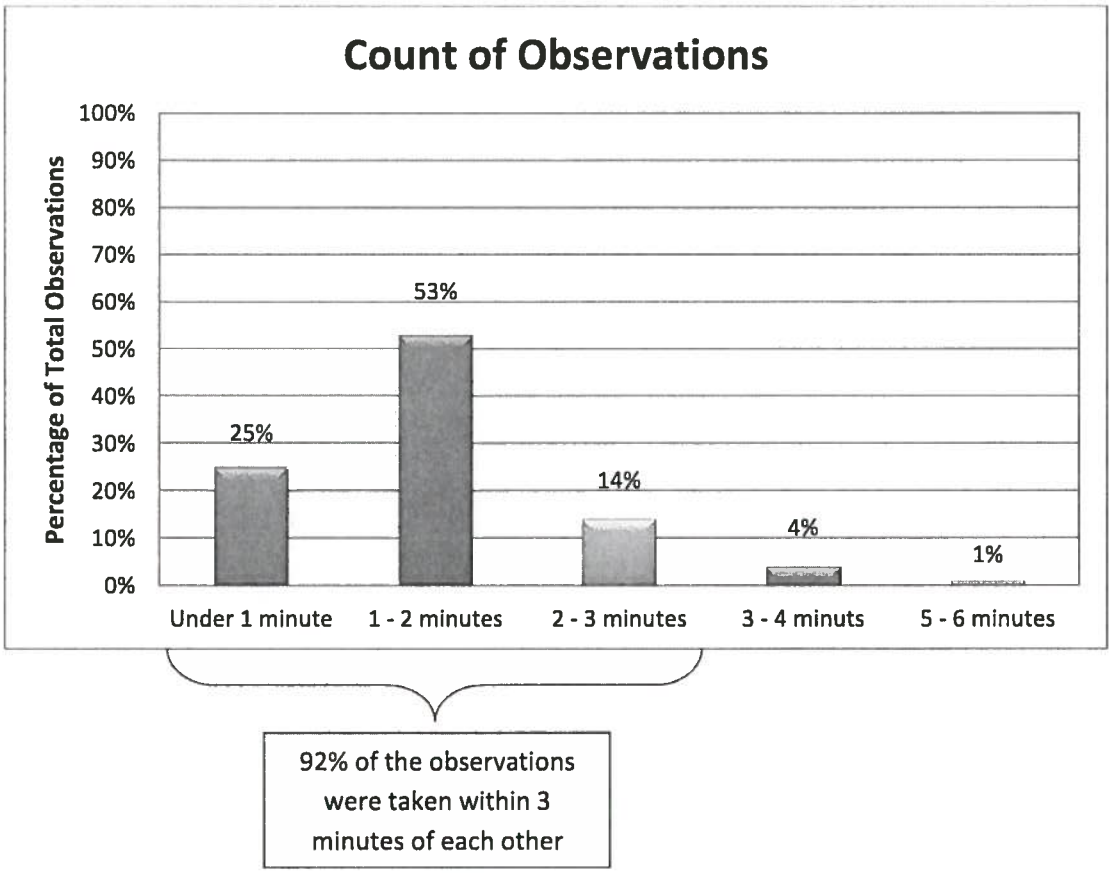


*Note: the overall occupancy (31.65%) was rounded up to 32%

The resulting recommendation for reviewing these results is to consider the Central Business Triangle and South Beverly as two separate areas.

Frequency of Observations

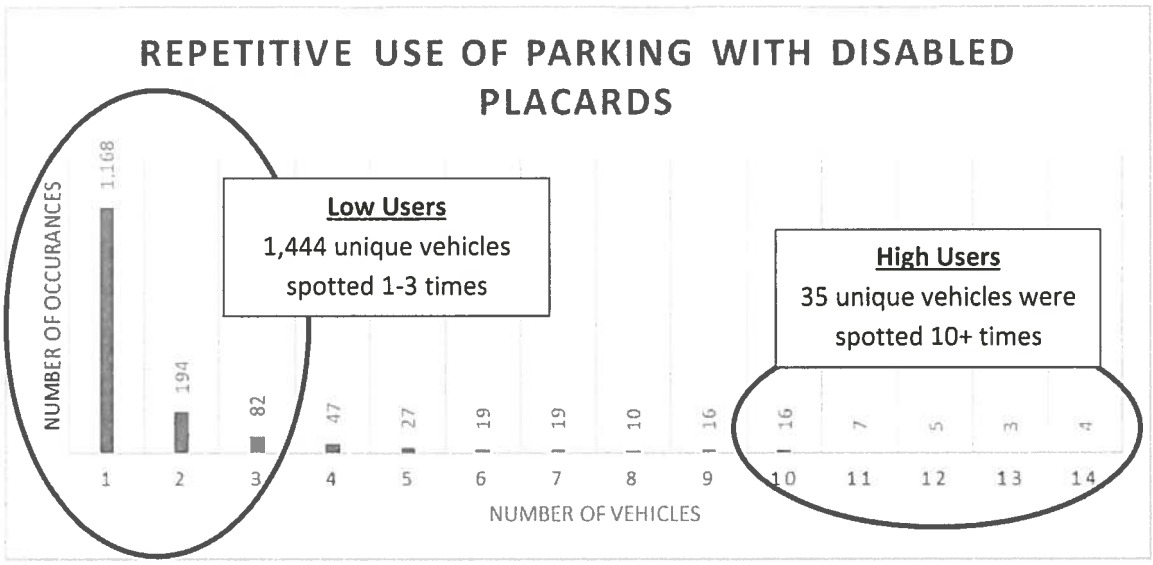
As previously stated, the frequency of disabled placard observations was substantial. Initially, in order to maximize efficiency, the data collection was to be completed via a collector on a bicycle visually inspecting each car parked in on-street, metered spaces for disabled placards. Due to the large number of disabled placards the use of a bicycle actually proved to be inefficient for data collection. The majority of observations (92%) were collected within 2 minutes of each other. And 78% of the total observations were collected within 1 minute. This highlights the prevalence of vehicles displaying disabled placards within the study area. The remaining 3% of observations had longer intervals due to breaks made by the data collector.



Repetitive Use of Parking

Repetitive use of parking with a disabled placard was observed within license plates recorded during the 14 sampling cycles. Each of the 1,617 unique license plates was examined to determine repetitive use. It is important to evaluate repetitive use to get a feeling of the overall parker profile and analyze the habitual user. For instance, one user who's car with a personalized "Starbucks" license plate would park directly out front of Starbucks in the same prime parking location every day of the observation period.

Low users are defined as vehicles that were spotted with a disabled placard one to three times during the sample period. There were 1,444 unique license plates (89% of the total number of license plates collected) observed one to three times during all of the 14 times the study area was sampled.



High users are defined as a vehicle being spotted with a disabled placard 10 – 14 times during the sample period. There were 35 unique vehicles (2% of the total number of license plates collected) which were spotted 10 – 14 times. Within that number, there were 4 vehicles which were spotted all 14 times that the streets were sampled.

For the purposes of simplification, the remaining users which were observed between 4 and 9 times are categorized as **Medium Users** (n=138).

Frequency of Use

Frequency of use can be utilized to isolate the impact of a car with a disabled placard parking for a short period of time versus one which parks all day, every day within the study area. In order to get a sense of the impact created by each group, the number of license plates was multiplied by the incidence. In other words if 194 license plates were seen twice on the street, the actual impact was 388 spaces occupied by vehicles with placards. Therefore, the overall impact of the placard user was analyzed looking at the total number of license plates collected, not simply unique users. Analyzing the different parker profiles (low, medium, and high users) against the total number of license plates observed provides the direct percentage impact that each user group has on frequency of use.

Direct Impact on Parking Frequency of Use

User	# of License Plates	% Impact
Low (1-3)	1,802	60%
Medium (4-9)	794	27%
High (10-14)	392	13%
	2,988	100%

For **low users** (1, 444 vehicles), the unique license plates that were identified one – three times accounted for 60% of the total impact. These are assumed to be visitors coming to the City a few times for a specific purpose and not returning.

High users (35 vehicles) contributed greatly to the overall impact which was 13% of the disabled placard observations during the study period. These vehicles were parked every day and virtually all day within the study area. These users can be categorized as habitual placard users that take up spaces on a daily basis.

Dispersion of Parking Location

Dispersion of Parking Location

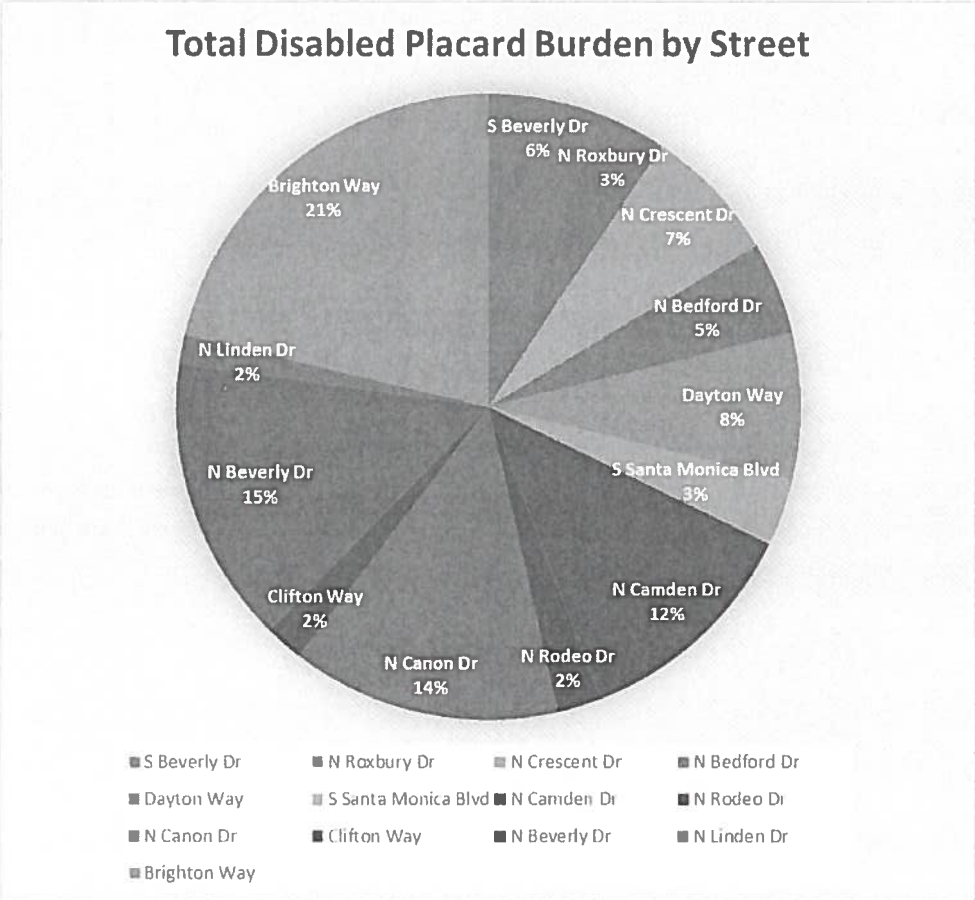
	Number of Locations Spotted		
User	1	2	3
Low (1-3)	92%	8%	
Medium (4-9)	59%	32%	9%
High (10-14)	45%	43%	13%

In order to truly gauge the affect placard use is having on occupancy of on street spaces, it is important to look at where the placards are typically parking. Are placard users parking in multiple areas around town or do they typically stay within the same area (i.e. their work or home)? When looking at how many different locations unique users are parking, it was confirmed that frequent users had favorite places to park. **High users** were typically (88% of the time: 45% + 43%) observed in only on one or two block faces. **Medium users** were most frequently (59% of the time) observed on the same street. No repeat parkers were found to park on more than 3 block faces. The data confirms that frequent placard users have favorite locations to park.

Disabled Placard Burden by Street

As stated previously, the overall occupancy of disabled placard use within the entire study area was 32%. When all 3,222 occurrences were broken out by street, 62% of the vehicles displaying disabled placards were observed on only 4 streets: Brighton, N Beverly, N Canon, and N Camden. This is not surprising, given that these streets have the most meters, excluding South Beverly.

Note that S Beverly contributes only 6% of the observations, even when there are twice as many meters on S Beverly than on any other street.

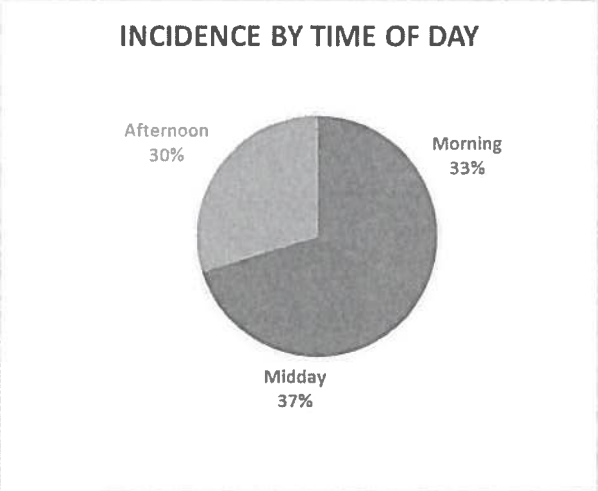


Incidence by Time of Day

Data was collected during 3 distinct time periods:

- Morning 10:00 am – 12:00 pm
- Midday 12:00 pm – 2:00 pm
- Afternoon 2:00 pm – 5:00 pm

Overall, parking by vehicles displaying a disabled placard was generally consistent throughout the day. There was a slightly higher incidence during the Midday time period, but this is also associated with a higher overall occupancy for all vehicles given the lunch time traffic.



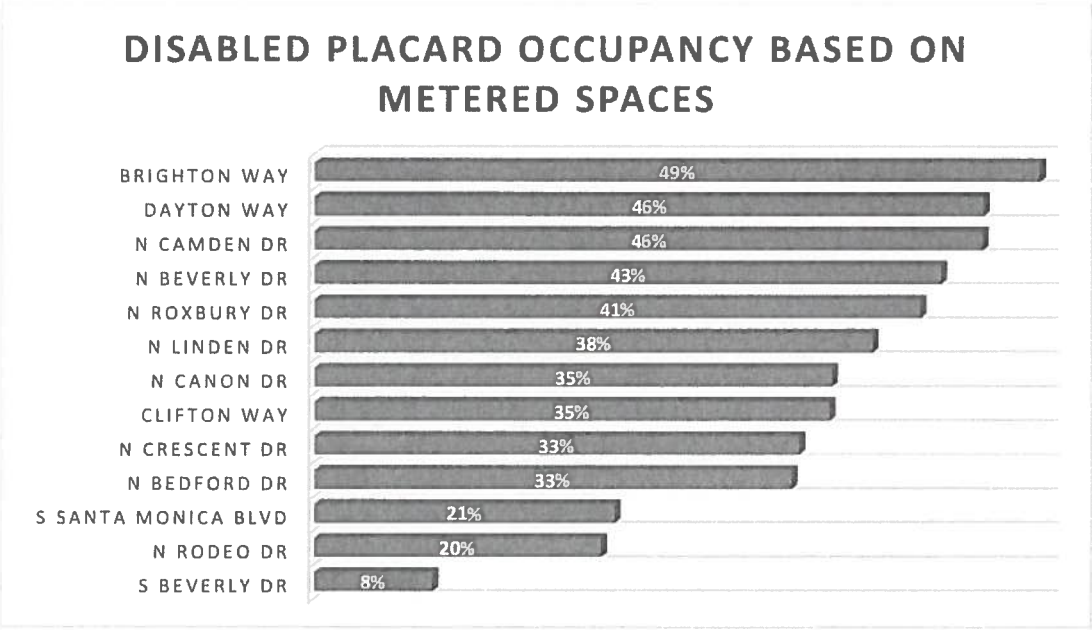
When drilling down to the street level, the higher incidence during the Midday time period can be observed for 8 out of the 12 streets. However, there were a few streets (N Linden and N Beverly) which had higher incidences of disabled placard use during the Morning time period.

Incidence by Street			
	Morning	Midday	Afternoon
Brighton	30%	**37%**	33%
Clifton	27%	**45%**	28%
Dayton	31%	34%	**35%**
N Bedford	25%	**42%**	33%
N Beverly	**36%**	32%	32%
N Camden	34%	**37%**	29%
N Canon	**38%**	**38%**	24%
N Crescent	27%	**44%**	29%
N Linden	**40%**	27%	33%
N Rodeo	31%	**47%**	22%
N Roxbury	31%	**36%**	33%
S Beverly	34%	**40%**	26%
S Santa Monica	**38%**	**38%**	25%

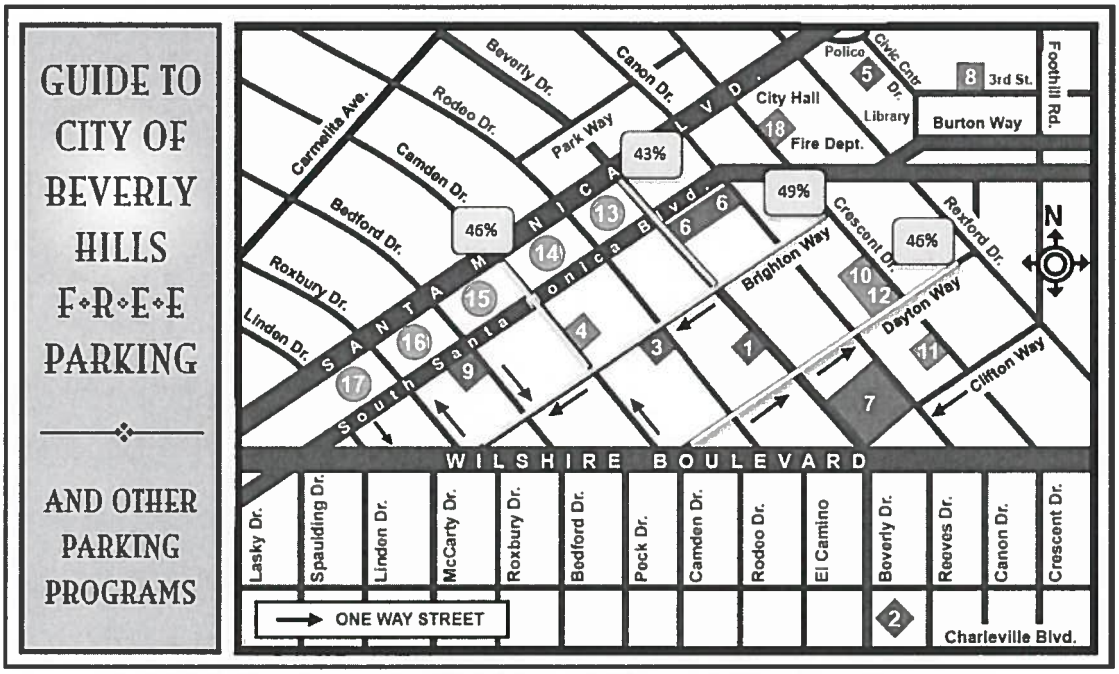
Occupancy by Location

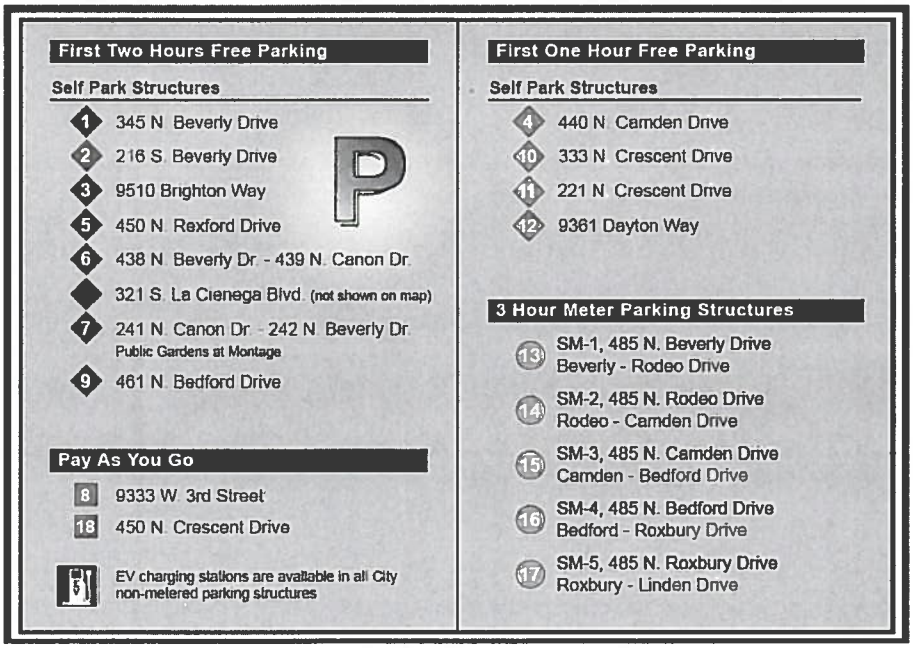
When examining disabled placard occupancy for each individual street it is necessary to analyze the number of placard users by the total number of paid parking spaces on the given street. There were several streets (Brighton, Dayton, N Camden, N Beverly and N Roxbury) with occupancy in the 40-50% range averaged over the study period. Brighton Way had 49% occupancy, meaning that nearly half of all metered parking spaces are occupied by vehicles displaying a disabled placard.

South Santa Monica Blvd. and N. Rodeo Drive had occupancy around 20%, while South Beverly had the lowest disabled placard occupancy with only 8%.



It is also important to note the alternative parking options (i.e. off street garages) that are within close proximity to streets that yielded the highest number of placard observations. The map below shows the off street parking garages within Beverly Hills and the 4 streets with the highest percentage of placard occupancy; Brighton (49%), Dayton Way (46%), N Camden (46%), and N Beverly (43%).





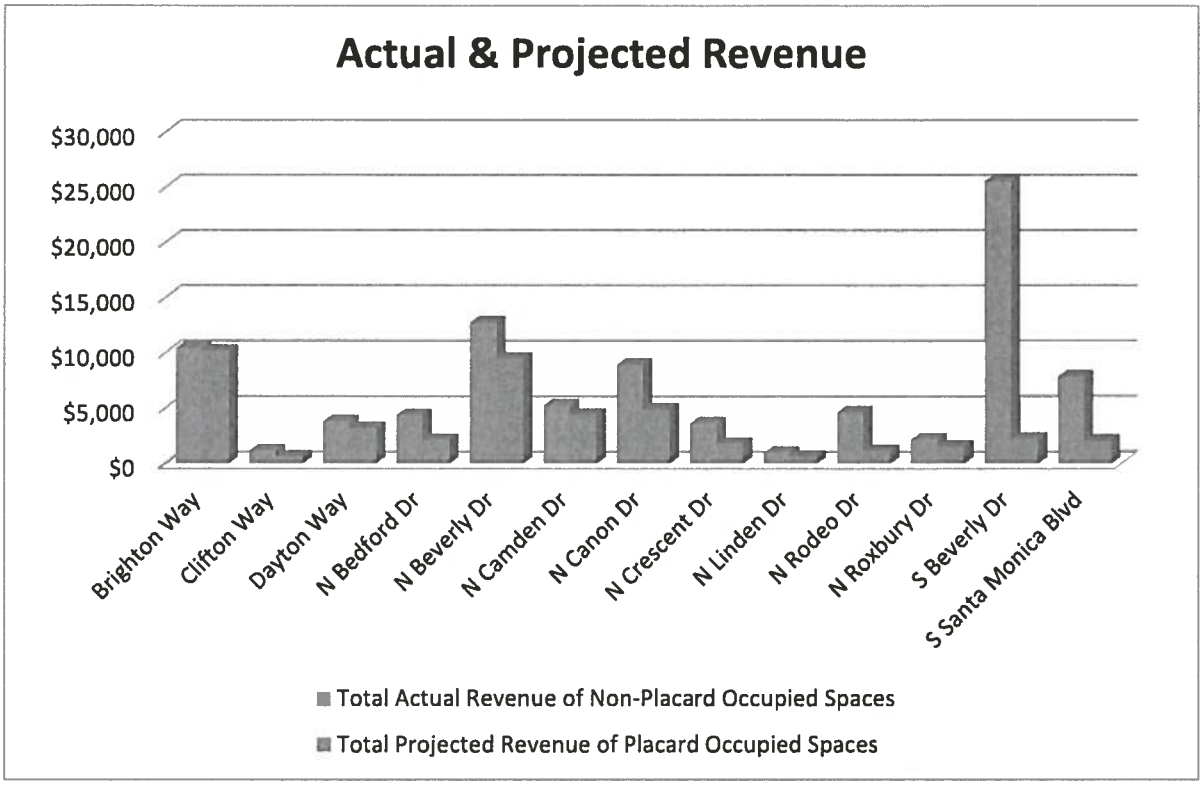
Impact of Placard Use on Revenue

While analyzing the percentage of placard use on metered streets, it is important to identify the effect on potential revenue for the City of Beverly Hills. As previously outlined, vehicles displaying disabled placards are allowed to park for free in metered spaces throughout the City. With placard user occupancy levels at 40-50% on some streets, the revenue impact of placard use is striking. Utilizing data obtained from the IPS single space parking meters we have outlined the total revenue by street during the study period. By comparing this data to the percent of placard occupancy, we can estimate the impact of placard use on revenue by street. Based upon total number of spaces by street and the actual parking meter revenue collected during the study period the report identifies the actual revenue for the utilization of non-placard occupied spaces.

- Non-placard Occupied Spaces = Total # of spaces by street less placard occupied spaces by street
- Total Actual Revenue of Non Placard Occupied spaces is derived from the IPS Data Management System
- Placard Occupied Spaces = Total # of spaces multiplied by the average placard occupancy by street
- Total Average Projected Revenue of Placard Occupied Spaces = Total average revenue per space (non-placard) multiplied by the placard occupied spaces.
- Projected Annual Revenue of Placard Occupied Spaces = Average projected revenue of placard occupied spaces per day multiplied by 303 parking operating days.

As outlined below if all utilized parking spaces were paid, the projected parking meter revenue increase would be an estimated 33%. For the evaluation period, the estimated revenue increase would have been over $44,000 for the study area. Based upon these projections, disabled placard use is accounting for an annual loss of approximately $1.9M of parking meter revenues.

Street	Total # of Spaces	Placard Occupancy	Non Placard Occupied Spaces	Total Actual Revenue of Non-Placard Occupied Spaces	Total Average Revenue per Space (Non Placard)	Placard Occupied Spaces	Total Projected Revenue of Placard Occupied Spaces	Total Projected Revenue	Average Projected Revenue of Placard Occupied Spaces per Day	Projected Annual Revenue of Placard Occupied Spaces
Brighton Way	99	49%	50.0	$10,381	$207.62	49.0	$10,173.38	$20,554.38	$1,453.34	$440,362.02
Clifton Way	13	35%	8.4	$1,169	$138.69	4.6	$634.03	$1,803.03	$90.58	$27,444.61
Dayton Way	38	46%	20.6	$3,824	$185.25	17.4	$3,215.34	$7,039.34	$459.33	$139,178.10
N Bedford Dr	34	33%	22.9	$4,389	$191.42	11.1	$2,119.30	$6,508.30	$302.76	$91,735.37
N Beverly Dr	80	43%	45.8	$12,690	$277.16	34.2	$9,482.85	$22,172.85	$1,354.69	$410,472.15
N Camden Dr	60	46%	32.6	$5,259	$161.11	27.4	$4,407.43	$9,666.43	$628.63	$190,778.90
N Canon Dr	91	35%	58.9	$8,956	$152.17	32.1	$4,891.02	$13,847.02	$698.72	$211,711.27
N Crescent Dr	49	33%	32.8	$3,648	$111.27	16.2	$1,804.13	$5,452.13	$257.73	$78,093.09
N Linden Dr	9	38%	5.6	$981	$176.08	3.4	$603.69	$1,584.69	$86.24	$26,131.25
N Rodeo Dr	27	20%	21.7	$4,644	$213.87	5.3	$1,130.45	$5,774.45	$161.49	$48,932.22
N Roxbury Dr	19	41%	11.1	$2,173	$195.01	7.9	$1,532.24	$3,705.24	$218.89	$66,324.26
S Beverly Dr	169	8%	155.4	$25,525	$164.30	13.6	$2,241.51	$27,766.51	$320.22	$97,025.18
S Santa Monica Blvd	39	21%	31.0	$7,822	$252.32	8.0	$2,018.58	$9,840.58	$288.37	$87,375.71
			Totals				$44,253.96	$135,714.96		$1,915,564.12
								33%		


Actual & Projected Revenue
$30,000
$25,000
$20,000
$15,000
$10,000
$5,000
$0
Brighton Way
Clifton Way
Dayton Way
N Bedford Dr
N Beverly Dr
N Camden Dr
N Canon Dr
N Crescent Dr
N Linden Dr
N Rodeo Dr
N Roxbury Dr
S Beverly Dr
S Santa Monica Blvd
Total Actual Revenue of Non-Placard Occupied Spaces
Total Projected Revenue of Placard Occupied Spaces

Study Conclusions

- Overall occupancy by disabled placard vehicles was substantial at 32%, with occupancy for the Central Business Triangle of 39%
- A majority (92%) of the observations were taken within 2 minutes of each other
- Although high users may be more visual, low users compose a majority of the burden on the available parking
    - Repetitive use of parking was observed among license plates
        - Low users: 84% of vehicles
        - High users: 2% of vehicles
    - Frequency of use can also be observed within the total number of occurrences
        - Low users: 1,362 vehicles contributed 52% of all observations
        - High users: 35 vehicles contribute 13% of all observations
- High users typically parking in only 1-2 locations
- Four streets account for nearly 62% of the total occupancy (Brighton, N Beverly, N Canon, N Camden)
- The incidence of disabled placard use seems to be even across the three time periods, with a slightly higher amount from the Midday time period
- Occupancy by street was the highest for Brighton (49%), Dayton (46%), and Camden (46%)
    - Lowest occupancy observed for Santa Monica (20%), Rodeo Drive (20%), and S Beverly (8%)
- The projected revenue increase would be an estimated 33% in incremental parking meter revenue