

Memorandum

To: Bob Nguyen
Greg Marshall
Rice University

From: Gerald Salzman
David Taxman
Leslie Lewinski

Date: July 30, 2009

Subject: Neighborhood Parking Study
Houston, Texas

This memorandum presents the results of a neighborhood parking study performed near the campus of Rice University in Houston, Texas. This analysis is part of an effort by Rice University to identify the types of users of the vehicles parking along neighborhood streets near the Rice campus. Rice University reached out to neighborhood residents to gain an understanding of which streets and during what time periods they feel are being heavily utilized by non-residents. Attention was heavily placed on identifying any student, staff or visitors heading to Rice University, which consistently is referred to in the report as Rice University affiliates. This does not include joggers using the soft sidewalk around the perimeter of the campus.

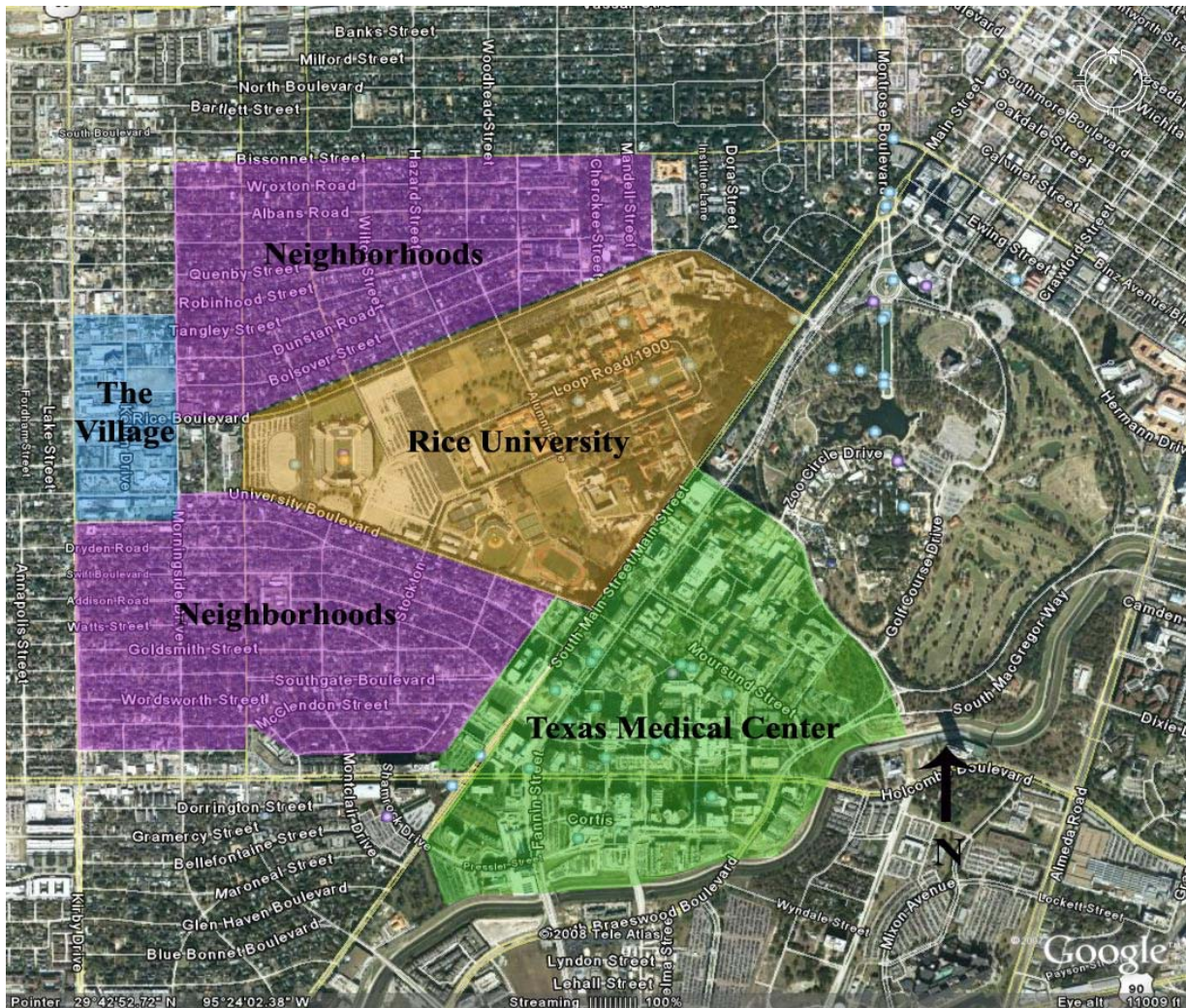
This study included an extensive survey effort in which turnover counts and field notes were collected for the on-street parking locations identified by neighborhood residents. This study will help identify the users of the neighborhood street parking, and may provide the basis for future strategies to reduce the utilization of on-street parking by non-residents.

Study Area

Figure 1 shows the geographic makeup of the study area. The area includes three large employers, which include: the Texas Medical Center, Rice University, and a pedestrian-oriented

collection of independent retail shops, restaurants and taverns known colloquially as the “The Village” (Village). There are also several residential neighborhoods grouped roughly into two clusters: those north of the Rice campus and the Village and those south of the Village and Rice, and closer to the Texas Medical Center. The many land uses in the area create the potential for many different user groups to park on neighborhood streets, including neighborhood residents and visitors, Rice University affiliates, Texas Medical Center staff and visitors, joggers, employees and patrons of nearby retail/restaurant establishments in the Village.

Figure 1 – Rice University and Surrounding Areas



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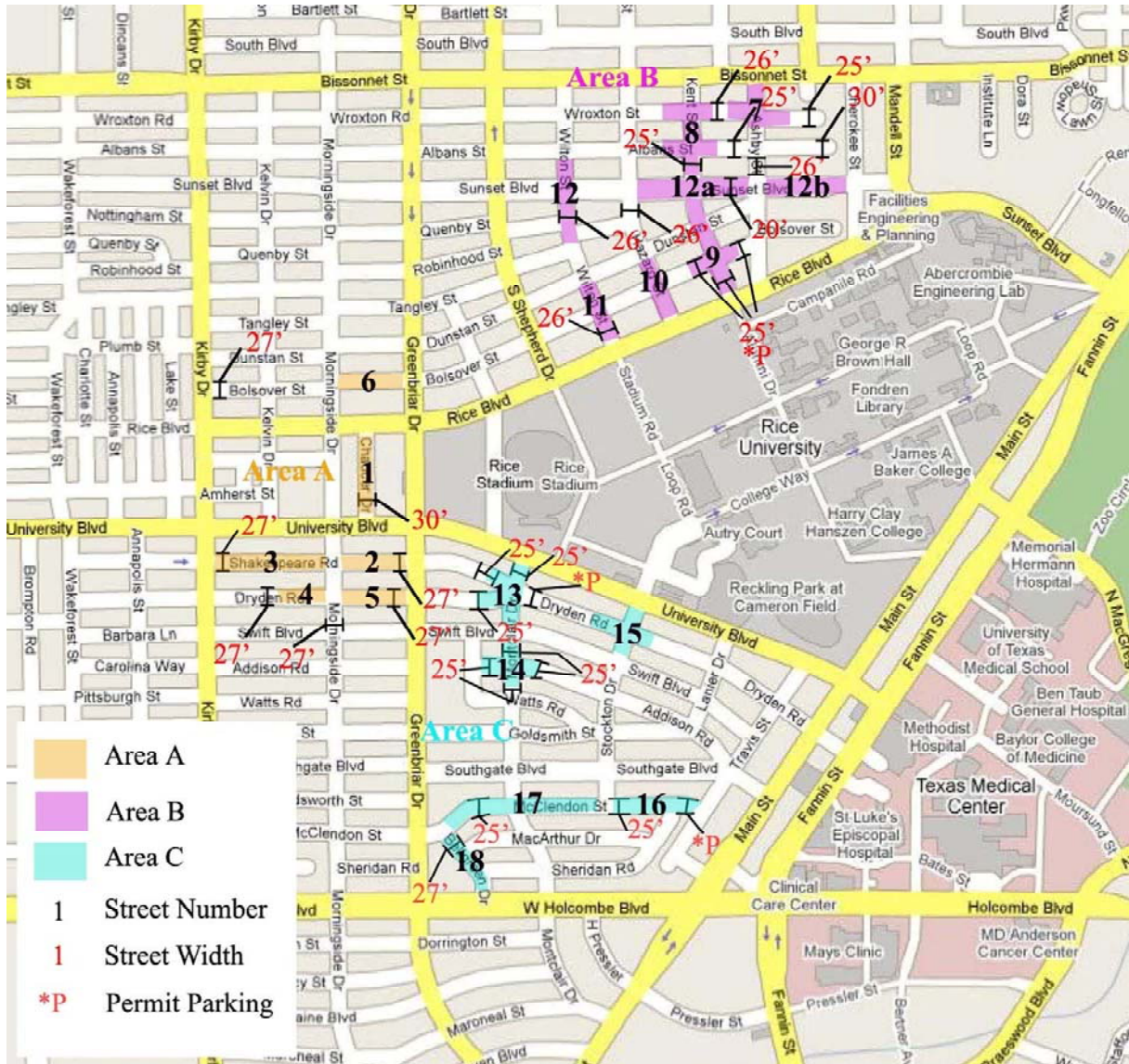
Data Collection

Neighborhood residents identified three main areas and 20 locations within these areas where they feel on-street parking is heavily utilized by non-residents. The neighborhood residents also identified the time periods the on-street parking at these locations should be analyzed, whether it was on a weekday or weekend or during the morning, afternoon, or evening. The neighborhood comments regarding the non-residents utilizing on-street parking at each location (retail customers, Rice affiliates, medical center staff, etc.) helped define the category of users, which the survey staff identified.

Turnover counts were conducted every 30 minutes in order to identify the length of stay, approximate time of arrival and departure, and occupancy of every vehicle parking on-street during the survey times. The industry standard for turnover counts is every hour. Thirty minute counts provide a more accurate understanding of the parking patterns in each area. Also, observations were noted regarding any identifying qualities (clothing, age, items being carried, direction of travel, hang tags, or identifying stickers on vehicles, etc.) that would help determine the owner of a sample of the vehicles parked on-street. It was assumed that vehicles parked on-street before the morning count started (6 AM or 7 AM) or after the evening (12 AM or 10 PM) count ended belonged to a resident, unless there was a reason to believe otherwise. The data was collected by DESMAN staff and field crew. **Figure 2** displays the three main areas (Areas A, B, and C) and each of the 20 locations where on-street parking turnover surveys were conducted.

Also shown on **Figure 2** are the widths of each street where turnover counts were conducted. One main concern of local residents is the difficulty of traversing through two-way streets that permit on-street parking on both sides of the street. The average width of a car is 6 feet, so when vehicles are allowed to park on each side of the street and a vehicle is traveling in each direction, at least 24 feet is necessary ($6 \times 4 = 24$). Many of the streets are 25 feet or 26 feet wide, which only provides 1 or 2 feet of extra width. These narrow streets can become difficult to drive down when vehicles are parked along both sides of the street and traffic is traveling in both directions.

Figure 2 – On-Street Parking Survey Locations



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Table 1 lists each area and location where parking turnover counts and notes concerning the owners of vehicles parked on-street were collected, a summary of how many counts were conducted for each time period, and the number of vehicles that were surveyed at each location. Also shown in **Table 1** for each location, are the number of on-street spaces, peak parking occupancy, and the percent occupancy during the peak parking period.

At certain areas, counts were conducted on both weekdays and weekends, based on neighborhood comments. The time periods that non-residents are utilizing on-street parking at each location is in direct relation to the peak parking periods of the land uses located in close proximity. The on-street parking restrictions (no parking, residential parking, etc.) were also considered in determining when counts were conducted.

These surveys were performed from Tuesday, April 15, 2008 to Monday, May 5, 2008 and from February 19, 2009 through March 2, 2009. The day counts were performed from either 6 AM to 5 PM or 7 AM to 5 PM and the night counts were performed from 4 PM to 10 PM or 5 PM to 10 PM. These time periods were chosen to thoroughly capture the types of patrons utilizing on-street parking. The surveys were conducted over a total of approximately 600 hours. The counts were performed on days without rain and when Rice University was in regular session. A total of 1,004 cars were surveyed in Area A, 337 in Area B, and 342 in Area C, for a total of 1,683 vehicles.

Table 1 – List of Survey Locations

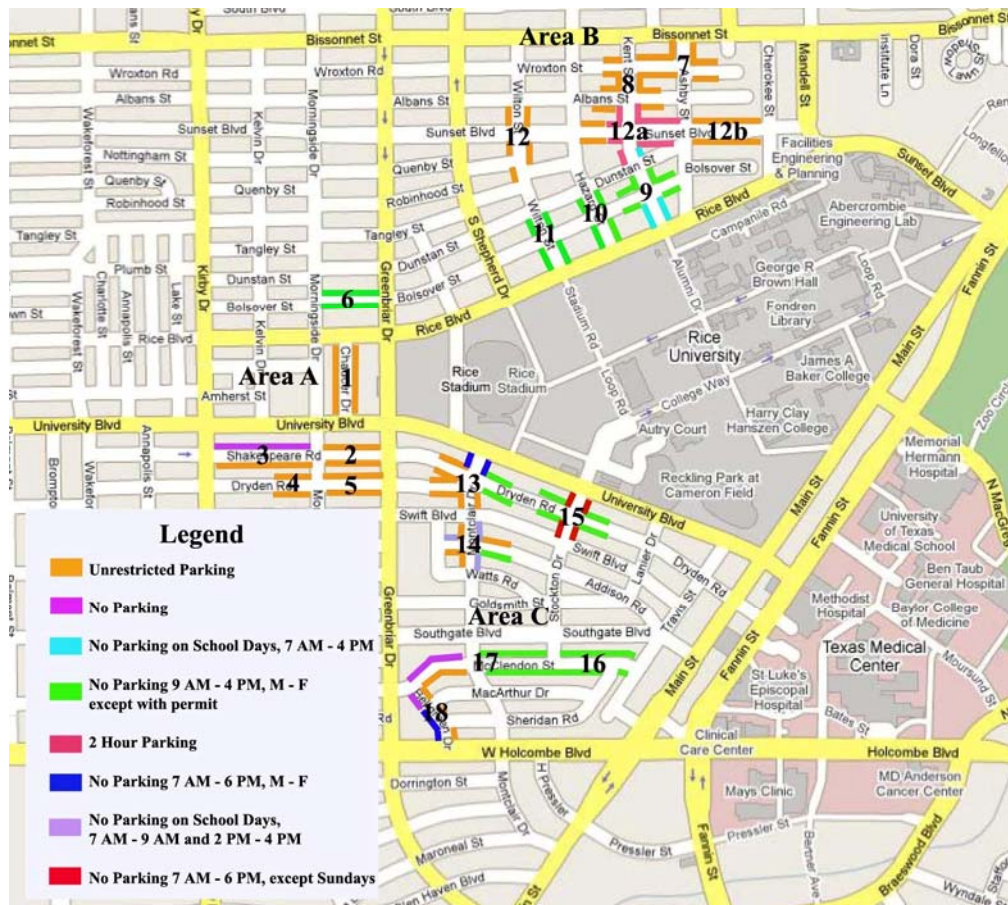
Area	Location #	Description	Day	Date	Time	# of Vehicles Surveyed	# of Spaces	Peak Occupancy	% Occupied
A	1	Chaucer Drive: from Rice Blvd. to University Blvd.	Tuesday Wednesday Thursday Friday Wednesday	4/15/2008 4/16/2008 4/17/2008 4/18/2008 4/23/2008	6 AM - 5 PM 4 PM - 10 PM 6 AM - 5 PM 6 AM - 5 PM 4 PM - 10 PM	383	50	48	96%
	2	Shakespeare Street: from Greenbrier Dr. to Morningside Dr.	Tuesday Wednesday Thursday	4/15/2008 4/16/2008 4/17/2008	6 AM - 5 PM 6 AM - 5 PM 6 AM - 5 PM	163	41	23	56%
	3	Shakespeare Street: from Morningside Dr. to Kirby Dr.	Tuesday Wednesday Thursday Wednesday Saturday Friday Wednesday	4/15/2008 4/16/2008 4/17/2008 4/23/2008 2/21/2009 2/27/2009 2/28/2009	6 AM - 5 PM 4 PM - 10 PM 6 AM - 5 PM 4 PM - 10 PM 4 PM - 10 PM 4 PM - 12 AM 7 AM - 10:30 AM	305	40	35	80%
	4	Dryden Road: half of street west of Morningside Dr.	Tuesday Thursday	4/15/2008 4/17/2008	6 AM - 5 PM 6 AM - 5 PM	24	19	3	16%
	5	Dryden Road: from Greenbrier St. to Morningside Dr.	Tuesday Wednesday Thursday	4/15/2008 4/16/2008 4/17/2008	6 AM - 5 PM 6 AM - 5 PM 6 AM - 5 PM	71	45	13	29%
	6	Bolsover Street: from Greenbrier Dr. to Morningside Dr.	Tuesday Wednesday Thursday	4/15/2008 4/16/2008 4/17/2008	6 PM - 12 AM 4 PM - 10 PM 4 PM - 10 PM	31	45	10	22%
B	7	Ashby Street: from Bissonnet Ave. to Wroxton Rd. and in both the east and west direction for 4 to 5 spaces on Wroxton Rd.	Friday Monday Tuesday	4/18/2008 4/21/2008 4/22/2008	7 AM - 5 PM 7 AM - 5 PM 7 AM - 5 PM	40	72	8	11%
	8	Kent Street: from Sunset Blvd. to Wroxton Rd. and in both the east and west direction for 4 to 5 spaces on Wroxton Rd. and Albans Rd.	Monday Tuesday Wednesday	4/21/2008 4/22/2008 4/23/2008	7 AM - 5 PM 7 AM - 5 PM 7 AM - 5 PM	50	41	15	37%
	9	Kent Street: from Sunset Blvd. to Rice Blvd. and in both the east and west direction for 4 to 5 spaces on Bolsover St.	Monday Tuesday Wednesday	4/21/2008 4/22/2008 4/23/2008	4 PM - 10 PM 4 PM - 10 PM 4 PM - 10 PM	92	72	25	35%
	10	Hazard Street: from Dunstan St. to Rice Blvd.	Friday Monday Tuesday	4/18/2008 4/21/2008 4/22/2008	4 PM - 10 PM 4 PM - 10 PM 4 PM - 10 PM	23	41	6	15%
	11	Wilton Street: from Dunstan St. to Rice Blvd.	Friday Monday Tuesday	4/18/2008 4/21/2008 4/22/2008	4 PM - 10 PM 4 PM - 10 PM 4 PM - 10 PM	20	39	4	10%
	12	Wilton Street: from Albans St. to Tanglely St.	Monday Tuesday	4/21/2008 4/22/2008	7 AM - 5 PM 7 AM - 5 PM	48	41	12	29%
	12a	Sunset Boulevard: from Hazard St. to Ashby St.	Monday	4/21/2008	7 AM - 5 PM	25	36	13	36%
	12b	Sunset Boulevard: from Ashby St. to Cherokee St.	Monday	4/21/2008	7 AM - 5 PM	39	26	20	77%
C	13	Montclair Drive from University Blvd. to Swift Blvd., Shakespeare Road 4 to 5 spaces west of Montclair Dr., and Dryden Rd. 4 to 5 spaces east and west of Montclair Dr.	Wednesday Thursday Friday Saturday	4/23/2008 2/19/2009 2/20/2009 2/21/2009	7 AM - 5 PM 7 AM - 5 PM 7 AM - 5 PM 7 AM - 5 PM	69	15	13	87%
	14	Montclair Drive from Swift Blvd. to 4 to 5 spaces south of Addison Rd. and Addison Road from School Pl. to 4 to 5 spaces east of Montclair Dr.	Wednesday Wednesday Friday	4/23/2008 2/18/2009 2/20/2009	7 AM - 5 PM 7 AM - 5 PM 7 AM - 5 PM	79	17	15	88%
	15	Stockton Drive from University Blvd. to Swift Blvd. and Dryden Road east and west Stockton Dr.	Wednesday Wednesday Thursday Saturday	4/23/2008 2/18/2009 2/19/2009 2/21/2009	7 AM - 5 PM 4 PM - 10 PM 4 PM - 10 PM 6 AM - 5 PM	41	47	20	43%
	16	McClendon Street: from Travis St. to Stockton Dr.	Wednesday Wednesday Thursday Friday Saturday	4/23/2008 4/23/2008 2/19/2009 2/20/2009 2/28/2009	12 PM - 5 PM 5 PM - 10 PM 7 AM - 5 PM 5 PM - 10 PM 7 AM - 5 PM	86	39	16	41%
	17	McClendon Street: from Bellgreen Dr. to Stockton Dr.	Wednesday Wednesday Friday Monday	4/23/2008 4/23/2008 2/20/2009 3/2/2009	7 AM - 5 PM 5 PM - 10 PM 7 AM - 5 PM 7 AM - 5 PM	36	50	10	20%
	18	Bellgreen Drive: from McClendon St. to 4 to 5 spaces south of Sheridan Rd.	Wednesday Friday Saturday	2/18/2009 2/20/2009 2/28/2009	7 AM - 5 PM 7 AM - 5 PM 4 PM - 10 PM	31	25	13	52%
Total Survey Area						1,656	801	322	40%

On-Street Parking Restrictions

As part of this study, an inventory of the on-street parking restrictions for the areas analyzed was conducted. **Figure 3** illustrates the on-street parking restrictions at each of the 20 locations. These on-street parking restrictions were considered in determining when the parking surveys were conducted.

Most of the streets in the area have unrestricted parking. A few of the streets adjacent to the Rice University campus have on-street parking restrictions during school days (Monday through Friday) and school/business hours (7 AM to 6 PM). Parking is prohibited on some of the streets during these hours and on some parking is only permitted with a residential permit.

Figure 3 – On-Street Parking Restrictions at Each Location



Data Summary and Analysis

AREA A – WEST of CAMPUS

Location 1 – Chaucer Drive from Rice Blvd. to University Blvd.

At Location 1 there were 3 weekday morning/afternoon (6 AM to 5 PM) surveys and 2 weekday night (4 PM to 10 PM) surveys conducted. Chaucer Drive between Rice Blvd. and University Blvd. is located just west of Rice University campus. The street consists of a multi-tenant office building, a dental practice, a dance studio, a Rice day care facility which was under construction, some residential homes, a church parking lot and a local restaurant. The street has unrestricted on-street parking and it attracted construction workers, restaurant workers and patrons, people visiting the office building and Rice affiliates.

Table 2 shows the parking duration results for the surveys conducted at Location 1, where a total of 383 vehicles were surveyed. Based on the turnover counts 46% of the vehicles are parked on-street for at most 2 hours. Ten percent of the vehicles are parked overnight. Thirteen percent of the vehicles surveyed were parked six hours or longer. This shows this street has high turnover. Based on the turnover counts, it was determined that at the peak period (2 PM) 48 vehicles were parked on Chaucer Drive and it was 96% occupied (**Table 1**), which reveals that this location’s on-street parking is highly utilized.

Table 2 – Parking Duration Results for Surveys Conducted at Location 1

Date and Time	Number of Cars Parked for Each Time Duration													Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+	
4/15/2008 6AM-5PM	32	20	11	15	13	4	4	5	7	6	2	3	5	7
4/16/2008 4PM-10PM	3	4	0	6	1	1	1	3	0	0	0	0	0	14
4/17/2008 6AM-5PM	7	10	13	4	4	0	3	6	3	2	2	34	3	7
4/18/2008 6AM-5PM	7	7	10	11	2	3	2	6	0	0	0	0	5	3
4/23/2008 4PM-10PM	4	6	6	4	4	11	4	8	3	2	1	0	0	9
% of Vehicles at Each Duration	15%	13%	11%	11%	6%	2%	3%	6%	3%	2%	1%	12%	4%	10%

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Table 3 shows a sample of the type of people parked on-street in Location 1 that we were able to identify. The destination for a total of 82 people parking was recorded. Based on the results, 54% of the parkers on Chaucer Drive are accessing the restaurants (employees or patrons) in the area, 20% are construction workers or service personnel, and 15% are residents. Some Rice affiliates were observed parking at this location. They represented 2% of the identified people utilizing on-street parking at this location.

Table 3 – Patrons Observed Parking at Location 1

Construction Worker	Leasing Office	Rice Affiliate	Restaurant	Gardener	Resident	Office Building	Exercise	TOTAL	Unidentified Vehicles
16	2	2	44	2	12	3	1	82	301
20%	2%	2%	54%	2%	15%	4%	1%	100%	

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Location 2 – Shakespeare Drive from Greenbriar Dr. to Morningside Dr.

Three weekday morning/afternoon (6 AM to 5 PM) surveys were conducted and a total of 163 vehicles were surveyed at Location 2. Shakespeare Drive between Greenbriar Dr. and Morningside Dr. is unrestricted parking with all residential homes lining the street including homes under construction/renovation at the time of the survey. The location is west of the Rice campus and east of the Village.

Table 4 illustrates the turnover counts for each of the three surveys. The majority of the vehicles (23%) surveyed were resident’s vehicles which were parked on-street overnight. Based on the turnover counts, it was determined that at the peak period (1:30 PM) 23 vehicles were parked on Shakespeare Drive and it was 56% occupied (**Table 1**).

Table 5 provides a sample of the owners of the vehicles parked on-street. The primary vehicles observed parking on-street at this location were residents and home maintenance workers. The other two main categories of parkers observed were construction workers and restaurant workers. There were no Rice affiliates identified utilizing on-street parking at Location 2.

Table 4 - Parking Duration Results for Surveys Conducted at Location 2

Date and Time	Number of Cars Parked for Each Time Duration											Overnight		
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr		6hr	6hr+
4/15/2008 6AM-5PM	3	4	3	1	4	3	2	1	0	3	0	5	5	15
4/16/2008 6AM-5PM	4	9	5	2	5	0	6	2	1	4	0	0	1	11
4/17/2008 6AM-5PM	17	1	10	2	1	2	9	3	2	3	0	0	2	12
% of Vehicles at Each Duration	15%	9%	11%	3%	6%	3%	10%	4%	2%	6%	0%	3%	5%	23%

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Table 5 - Patrons Observed Parking at Location 2

Home Maintenance	Construction Worker	Restaurant	Resident	TOTAL	Unidentified Vehicles
5	3	2	7	17	146
29%	18%	12%	41%	100%	

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Location 3 – Shakespeare Drive from Morningside Dr. to Kirby Dr.

Location 3 is Shakespeare Drive from Morningside Dr. to Kirby Dr. No parking is permitted on the north side of Shakespeare Drive and there is unrestricted on-street parking allowed on the south side of the street. This area of Shakespeare Drive is located just south of The Village. The south side of the street is all residential with a mix of homes and apartment buildings.

Table 6 provides the results for each of the parking turnover surveys performed at Location 3. One weekday morning (7 AM to 10:30 AM), two weekday morning/afternoon (6 AM to 5 PM) surveys, two weekday evening surveys, and one weekend evening (5 PM to 10 PM) survey was conducted at this location. A total of 305 vehicles were observed utilizing on-street parking during the total survey period. Forty-seven percent of the vehicles were parked overnight; we assume these vehicles are owned by area residents because most of the residential buildings do not provide off-street parking. Based on the turnover counts, it was determined that at the peak period (4:30 PM) 35 vehicles were parked on Shakespeare Drive at Location 3 and it was 80% occupied (**Table 1**).

Table 7 gives a sample of the vehicles where the type of owners was identified. As shown 71% of the patrons, that were identified, were residents utilizing on-street parking. There were a few people visiting residents, construction workers, patrons heading to the restaurants in Rice Village or going to jog around Rice University campus. No Rice affiliates were identified utilizing on-street parking at this location.

Table 6 - Parking Duration Results for Surveys Conducted at Location 3

Date and Time	Number of Cars Parked for Each Time Duration													Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+	
4/15/2008 6AM-5PM	14	6	0	3	11	2	3	1	1	0	2	1	1	13
4/16/2008 6AM-5PM	5	3	4	0	4	0	1	0	0	4	1	0	3	26
4/17/2008 6AM-5PM	0	1	2	0	1	1	1	0	0	2	2	3	6	23
4/23/2008 5PM-10PM	1	11	6	2	1	1	1	0	1	0	0	0	0	17
2/21/2009 4PM-10PM	0	1	0	0	1	1	2	4	4	2	2	0	0	16
2/28/2009 7AM-10:30AM	0	1	0	0	0	0	21	0	0	0	0	0	0	22
2/27/2009 4PM-12AM	0	0	1	2	0	0	0	0	0	6	0	0	0	27
% of Vehicles at Each Duration	7%	8%	4%	2%	6%	2%	10%	2%	2%	5%	2%	1%	3%	47%

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Table 7 - Patrons Observed Parking at Location 3

Home Maintenance	Construction Worker	Visitor of Resident	Area Employee	Resident	Restaurant	Exercise	TOTAL	Unidentified Vehicles
4	7	9	1	73	5	4	103	202
4%	7%	9%	1%	71%	5%	4%	100%	

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Location 4 – Half of Dryden Road west of Morningside Dr.

Location 4 is approximately half of Dryden Road west of Morningside Dr. Two surveys were conducted exclusively for this location during the weekday morning/afternoon (6 AM to 5 PM). Another weekday morning/afternoon survey was conducted for this area on April 16, 2008, but was included in the Location 5 data. This location is all residential homes with some homes under construction/renovation during the time of the survey.

Table 8 shows the parking duration results for the turnover counts at Location 4. Twenty-four vehicles were surveyed at this location. Since all of the homes on this street have their own parking, most residents do not park on-street. This is reflected in **Table 9** which shows that no vehicles were parking overnight on-street. Fifty-five percent of the vehicles were parked less than 2 hours. Based on the turnover counts, it was determined that at the peak period (12 PM) 3 vehicles were parked along Dryden Road at Location 4 and it was 16% occupied (**Table 1**).

Table 9 shows a sample of the vehicles where the owners were specifically identified at Location 4. Based on this sample 50% of the people identified were people who had business at the residences, including painters, gardeners, and a cable person. The remaining people identified parking on-street at this location were residents, visitors of residents and construction workers. There were no Rice affiliates identified parking at this location.

Table 8 - Parking Duration Results for Surveys Conducted at Location 4

Date and Time	Number of Cars Parked for Each Time Duration													Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+	
4/15/2008 6AM-5PM	1	1	0	0	0	0	0	1	0	0	0	0	2	0
4/17/2008 6AM-5PM	3	3	1	4	0	2	0	0	1	3	0	2	0	0
% of Vehicles at Each Duration	17%	17%	4%	17%	0%	8%	0%	4%	4%	13%	0%	8%	8%	0%

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Table 9 - Patrons Observed Parking at Location 4

Home Maintenance	Construction Worker	Visitor of Resident	Resident	TOTAL	Unidentified Vehicles
4	1	1	2	8	16
50%	13%	13%	25%	100%	

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Location 5 – Dryden Road from Greenbriar Dr. to Morningside Dr.

Location 5 is Dryden Road from Greenbriar Dr. to Morningside Dr. Three weekday morning/afternoon (6 AM to 5 PM) surveys were conducted. Dryden Road has unrestricted parking on both sides of the street. The count performed on Wednesday, April 16, 2008 includes Location 4. Location 5 consists of only residential homes.

Table 10 shows the turnover count results for Location 5. A total of 71 vehicles were included in this survey. Forty-eight percent of the vehicles were parked overnight and are resident vehicles. This location did not have a lot of activity and most of the vehicles parked on-street were either residents or vehicles of people visiting the resident’s home for business. Based on the turnover counts, it was determined that at the peak period (6:30 AM) 13 vehicles were parked along Dryden Road at Location 5 and it was 29% occupied (**Table 1**). Also, the peak parking period is in the morning (6:30 AM), when mostly resident vehicles are parked on-street.

Table 11 provides the type of vehicles identified parking in Location 5. As shown in **Table 11**, two types of vehicles were observed, home maintenance and residents. No Rice affiliates were identified parking on-street at this location.

Table 10 - Parking Duration Results for Surveys Conducted at Location 5

Date and Time	Number of Cars Parked for Each Time Duration													Overnight	
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+		
4/15/2008 6AM-5PM	5	6	2	1	0	0	0	0	0	0	0	0	0	4	10
4/16/2008 6AM-5PM	3	1	0	1	1	0	1	0	1	0	0	2	3	3	12
4/17/2008 6AM-5PM	1	0	1	0	0	0	1	0	1	0	1	0	1	1	12
% of Vehicles at Each Duration	13%	10%	4%	3%	1%	0%	3%	0%	3%	0%	1%	3%	11%	48%	

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Table 11 - Patrons Observed Parking at Location 5

Home Maintenance	Resident	TOTAL	Unidentified Vehicles
8	34	42	29
19%	81%	100%	

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Location 6 – Bolsover Street from Greenbriar Dr. to Morningside Dr.

Location 6 is located on Bolsover Street from Greenbriar Dr. to Morningside Dr. This location is just east of the Village. Resident permit parking is permitted on both sides of Bolsover Street. Three weekday evening (6 PM to 12 AM and 4 PM to 10 PM) surveys were conducted at this location. Evening counts were performed to determine whether retail/restaurant patrons were parking at this location and walking into the Village. Bolsover Street is lined with only residential homes. There was construction being performed on some of the homes at the time of the survey.

Table 12 illustrates the parking turnover results from the surveys at Location 6. A total of 43 vehicles were surveyed. As shown, 42% of the vehicles were parked on-street after the surveys were completed (12 AM or 10 PM). These are most likely resident vehicles, but they may also be retail/restaurant workers from the Village. Fifty-one percent of the parkers were parked on-street for 2.5 hours or less, which shows there is high turnover in the area. Based on the turnover counts, it was determined that at the peak period (9 PM) 10 vehicles were parked along Bolsover Street at Location 6 and it was 22% occupied. The peak period of parking is in the late evening (9 PM) when there would be a mix of both residents and workers/patrons from the Village parking on-street.

Table 13 is a sample of the vehicles identified at Location 6. There were four different types of parkers identified and 10 vehicles identified at this location. The four types of parkers include retail/restaurant patrons/workers, construction workers, visitors of residents and residents. No

Rice affiliates were observed parking at Location 6 and walking to campus. Area workers and patrons, heading to the Village, were observed parking on Bolsover Street.

Table 12 - Parking Duration Results for Surveys Conducted at Location 6

Date and Time	Number of Cars Parked for Each Time Duration														Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+		
4/15/2008 6PM-12AM	2	3	1	0	1	0	1	0	0	0	0	0	0	0	4
4/16/2008 4PM-10PM	0	1	1	1	1	0	0	0	1	0	0	0	0	0	4
4/17/2008 4PM-10PM	0	1	1	0	3	0	0	0	0	0	0	0	0	0	5
% of Vehicles at Each Duration	6%	16%	10%	3%	16%	0%	3%	0%	3%	0%	0%	0%	0%	0%	42%

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Table 13 - Patrons Observed Parking at Location 6

Retail /Restaurant	Construction Worker	Visitor of Resident	Resident	TOTAL	Unidentified Vehicles
2	2	2	4	10	21
20%	20%	20%	40%	100%	

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SUMMARY - AREA A

Table 14 illustrates a summary of the parking duration results for each location in Area A. A total of 1,004 parked vehicles were surveyed in Area A. Of these vehicles, 221 (22%) were observed parking overnight, and these vehicles are assumed to be owned by residents. Thirty-eight percent of the vehicles were parked for 2 hours or less

Table 14 – Summary of Parking Duration Results for Area A

Locations	Number of Cars Parked for Each Time Duration														Total Vehicles Surveyed
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+	Overnight	
Location 1	53	47	40	40	24	19	14	28	13	10	5	36	13	41	383
Location 2	24	14	18	5	10	5	17	6	3	10	0	5	8	38	163
Location 3	20	23	13	7	18	5	29	5	6	14	7	4	10	144	332
Location 4	4	4	1	4	0	2	0	1	1	3	0	2	2	0	24
Location 5	9	7	3	2	1	0	2	0	2	0	1	2	8	34	71
Location 6	2	5	3	1	5	0	1	0	1	0	0	0	0	13	31
Totals	112	100	78	59	58	31	63	40	26	37	13	49	41	270	977
% at Each Time Duration	11%	10%	8%	6%	6%	3%	6%	4%	3%	4%	1%	5%	4%	28%	

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Table 15 provides a summary of the sample of vehicles identified at each location in Area A and the peak parking occupancy at each location. Both the number and percentage of each type of parker identified parking at each location in Area A is listed. A total of 262 parkers of the 1,004 vehicles surveyed (26%) were identified. There were a variety of users utilizing on-street parking

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ASSOCIATES

Mr. Bob Nguyen
Rice University Neighborhood Parking Study

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in the area. At Location 1, Rice affiliates were identified parking on-street and walking to campus. The other non-resident parkers or people that did not have business with residents identified in Area A were some construction workers, leasing office patrons, retail/restaurant customers/workers, office building patrons and people exercising. At Locations 1, 2, 3 and 6 workers and customers of local restaurants were observed parking on-street. As shown in **Table 15**, 1% of the vehicles identified parking on-street in Area A were Rice affiliates and they were all observed parking at Location 1. During the five surveys conducted at Location 1, 82 people were identified and of these 2 were Rice affiliates.

The last column of **Table 15** lists the peak on-street parking occupancy observed during the surveys at each location. Locations 1 and 3 were found to be 80% occupied or more during their peak parking period. Location 1 on-street parking is highly utilized due to construction workers, office patrons, and restaurant workers/customers. A resident at this location would generally have a difficult time finding an on-street space. Location 3 on-street parking is highly utilized because there are apartments lining the street with no off-street parking, so residents primarily park on-street. At the other locations residents could conveniently park in front or near their home.

Table 15 – Vehicles Identified and Peak Occupancy at Each Location in Area A

	Visitor of Residents		Home Maintenance		Construction Worker		Leasing Office		Retail/Restaurant		Gardener		Resident		Office Building		Exercise		Rice Affiliate		Total Vehicles Identified		# of Spaces	Peak Occupancy
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Location 1	0	0%	0	0%	16	20%	2	2%	44	54%	2	2%	12	15%	3	4%	1	1%	2	2%	82	100%	50	96%
Location 2	0	0%	5	29%	3	18%	0	0%	2	12%	0	0%	7	41%	0	0%	0	0%	0	0%	17	100%	41	56%
Location 3	9	9%	4	4%	7	7%	0	0%	5	5%	0	0%	73	71%	1	1%	4	4%	0	0%	103	100%	40	80%
Location 4	1	13%	4	50%	1	13%	0	0%	0	0%	0	0%	2	25%	0	0%	0	0%	0	0%	8	100%	19	16%
Location 5	0	0%	8	19%	0	0%	0	0%	0	0%	0	0%	34	81%	0	0%	0	0%	0	0%	42	100%	45	29%
Location 6	2	20%	0	0%	2	20%	0	0%	2	20%	0	0%	4	40%	0	0%	0	0%	0	0%	10	100%	45	22%
TOTAL	12	4%	21	7%	29	10%	2	1%	53	18%	2	1%	132	55%	4	1%	5	2%	2	1%	262	100%	-	-

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AREA B – NORTH of CAMPUS

Location 7 – Ashby Street from Bissonnet St. to Wroxton Rd. and in both the east and west direction for 4 to 5 cars on Wroxton Road

Location 7 includes Ashby Street from Bissonnet St. to Wroxton Rd. and in both the east and west direction for 4 to 5 cars along Wroxton Road. Three weekday morning/afternoon (7 AM to 5 PM) surveys were conducted. These streets are lined with residential homes. Unrestricted on-street parking is permitted along both Wroxton Road and Ashby Street. Most vehicles parked at this location were located on Wroxton Road and not Ashby Street.

Table 16 shows the turnover count results for each of the three surveys performed at Location 7. A total of 40 vehicles were included in this survey. Based on these counts, 38% of the vehicles were parked overnight and are vehicles owned by residents. Based on the turnover counts, it was determined that at the peak period (7 AM) 8 vehicles were parked at Location 7 and it was 11% occupied. The peak parking period was in the morning (7 AM), when mostly resident vehicles are parked on-street. Rice affiliates tend to arrive to campus after 7 AM.

Table 16 - Parking Duration Results for Surveys Conducted at Location 7

Date and Time	Number of Cars Parked for Each Time Duration														Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+		
4/18/2008 7AM-5PM	0	1	0	0	1	0	0	4	0	0	0	0	0	2	0
4/21/2008 7AM-5PM	4	0	1	1	0	2	3	1	0	0	0	2	0	8	0
4/22/2008 7AM-5PM	0	1	0	0	0	1	0	0	1	0	0	0	0	7	0
Average % of Vehicles at Each Duration	10%	5%	3%	3%	3%	8%	8%	13%	3%	0%	0%	5%	5%	38%	

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Table 17 gives the number of vehicles specifically identified based on observations. All the vehicles identified were resident’s except for one cable maintenance person. No Rice affiliates were identified parking on-street at Location 7.

Table 17 - Patrons Observed Parking at Location 7

Home Maintenance	Resident	TOTAL	Unidentified Vehicles
1	17	18	22
6%	94%	100%	

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Location 8 – Kent Street from Sunset Blvd. to Wroxton Rd. and in both the east and west directions for 4 to 5 cars on Wroxton Road and Albans Road

Location 8 includes Ashby Street from Bissonnet St. to Wroxton Rd. and 4 to 5 cars in both the east and west on Wroxton Road. Three weekday morning/afternoon surveys (7AM to 5 PM) were conducted. Ashby Street, Wroxton Road, and Albans Road each permit unrestricted on-street parking. Kent Street is lined with all residential homes, which mostly include off-street parking. The closest point from Location 8 to campus is the intersection of Kent Street and Sunset Boulevard, which is three blocks away. There is a park located adjacent to Kent Street just south of Sunset Boulevard.

Table 18 shows the turnover count results for each survey. A total of 50 vehicles were included in this survey. Four vehicles were observed parking overnight, which are considered resident vehicles. Based on the turnover counts, it was determined that at the peak period (1:30 PM) 15 vehicles were parked at Location 8 and it was 37% occupied.

Table 18 - Parking Duration Results for Surveys Conducted at Location 8

Date and Time	Number of Cars Parked for Each Time Duration														Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+		
4/21/2008 7AM-5PM	3	1	3	2	1	2	0	0	1	0	5	0	0	1	
4/22/2008 7AM-5PM	0	0	0	0	0	3	0	0	1	2	0	0	5	3	
4/23/2008 7AM-5PM	2	3	0	2	1	0	7	0	0	1	1	0	0	0	
Average % of Vehicles at Each Duration	10%	8%	6%	8%	4%	10%	14%	0%	4%	6%	12%	0%	10%	8%	

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Table 19 identifies the vehicles observed by ownership. A total of 10 vehicles were identified. A variety of users were observed parking on-street, which included home maintenance, residents, Rice affiliates, people exercising, and people heading to the park. Two Rice affiliates were identified parking on-street.

Table 19 - Patrons Observed Parking at Location 8

Home Maintenance	Resident	Rice Affiliate	Exercise	Park	TOTAL	Unidentified Vehicles
2	4	2	1	1	10	
20%	40%	20%	10%	10%	100%	

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Location 9 – Kent Street from Sunset Blvd to Rice Blvd. and 4 to 5 spaces both east and west on Bolsover Street

Location 9 is on Kent Street from Sunset Blvd. to Rice Blvd. and 4 to 5 spaces in both the east and west direction on Bolsover Street. One weekend night and two weekday night surveys (4 PM to 10 PM) were conducted at Location 9, which included a total of 92 vehicles surveyed. There are various parking restrictions at this location, but primarily no parking is permitted on weekdays until 4 PM without a residential permit. There are no areas in which unrestricted parking is permitted at all times. Due to these parking restrictions only evening surveys were conducted. Kent Street is lined with residential homes and there is a park located just south of Sunset Boulevard. This location is just north of Gate #20 of the campus and there the on-street parking restrictions appear designed to prevent Rice affiliate vehicles from parking in the area.

Table 20 shows the turnover count results for each of the three surveys. Ten vehicles remained after 10 PM, which are most likely resident vehicles. There were a high percentage of vehicles parked between 2 hours and 4 hours (51%), which may represent Rice affiliates. Based on the turnover counts, it was determined that at the peak period (5:30 PM) 25 vehicles were parked at Location 9 and it was 35% occupied.

Table 21 gives a sample of the vehicles by ownership identified during the surveys. Four parkers were observed parking on-street and heading to the park. The other vehicles specifically identified were resident vehicles. Twenty-two vehicles (24%) that were included in the survey were parked at 4 PM and then left between 6 PM and 8 PM. These vehicles could potentially be Rice affiliates or visitors of residents.

Table 20 - Parking Duration Results for Surveys Conducted at Location 9

Date and Time	Number of Cars Parked for Each Time Duration													Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+	
4/23/2008 4PM-10PM	3	3	4	7	8	2	6	9	0	0	0	0	0	3
4/21/2008 4PM-10PM	0	0	0	6	0	1	7	2	4	0	1	0	0	0
4/22/2008 4PM-10PM	2	4	2	2	2	1	5	1	0	0	0	0	0	7
Average % of Vehicles at Each Duration	5%	8%	7%	16%	11%	4%	20%	13%	4%	0%	1%	0%	0%	11%

Table 21 - Patrons Observed Parking at Location 9

Park	Residents	TOTAL	Unidentified Vehicles
4	12	16	76
25%	75%	100%	

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Location 10 – Hazard Street from Dunstan St. to Rice Blvd.

Location 10 was surveyed on a Friday, Monday and Tuesday evening, and it includes Hazard Street from Dunstan St. to Rice Blvd. Hazard Street is located north of the campus, but is not located adjacent to any of the gates that provide access into campus. No parking is permitted on this portion of Hazard Street from 9 AM to 4 PM, Monday through Friday except with permit. This on-street parking restriction should prevent non-residents from parking at this location. The surveys were performed in the evening to identify the people parking on-street after the restrictions ended.

Table 22 shows the turnover results for the three evening surveys performed. A total of 23 vehicles were observed parking on-street during the three surveys. Of the 23 vehicles surveyed, 13 were still parked on-street at 10 PM, which are most likely resident vehicles. Based on the turnover counts, it was determined that at the peak period (4 PM) 6 vehicles were parked at Location 10 and it was 15% occupied, which reveals that this location’s on-street parking is rarely utilized. The number of people parking on-street diminished by half (3 vehicles) by 10 PM, revealing that approximately 3 vehicles were either visitors of residents, Rice affiliates, people exercising or people going to the park.

Table 23 is a sample of vehicle ownership identified during the surveys. A vehicle identified parking on-street belonged to someone headed to the park. No Rice affiliates were identified parking along Hazard Street.

Table 22 - Parking Duration Results for Surveys Conducted at Location 10

Date and Time	Number of Cars Parked for Each Time Duration														Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+		
4/18/2008 4PM-10PM	1	2	1	1	1	0	0	0	0	1	0	0	0	0	5
4/21/2008 4PM-10PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
4/22/2008 4PM-10PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Average % of Vehicles at Each Duration	4%	9%	4%	4%	4%	0%	13%	0%	4%	0%	0%	0%	0%	0%	57%

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Table 23 - Patrons Observed Parking at Location 10

Resident	Park	TOTAL	Unidentified Vehicles
13	1	14	9
93%	7%	100%	

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Location 11 – Wilton Street from Dunstan St. to Rice Blvd.

Location 11 includes Wilton Street from Dunstan St. to Rice Blvd. One weekend night and two weekday night surveys (4 PM to 10 PM) were conducted. Wilton Street is lined with residential homes and is located across from the stadium parking lot and access gate on campus. No parking is permitted on this portion of Wilton Street from 9 AM to 4 PM, Monday through Friday except with permit. This on-street parking restriction is the reason the surveys were performed in the evening.

Table 24 shows the turnover results for the three evening surveys conducted at Location 11. A total of 20 vehicles were found parked at this location during the surveys, which reveals the on-street parking is minimally utilized. Three vehicles remained parked on-street after 10 PM. Seventy percent of the vehicles were parked 2 hours or less, which suggests these vehicles do not belong to Rice affiliates. Based on the turnover counts, it was determined that at the peak period (6 PM) 4 vehicles were parked at Location 11 and it was 10% occupied, which reveals this locations on-street parking is rarely utilized. By 10 PM there were no vehicles parking on-street and the 4 vehicles parked on-street were people jogging in the area.

Table 25 displays the users of vehicles that were observed parking on-street during the surveys. Despite the fact that Rice provides free visitor parking in the Greenbriar parking lot, many who use the university’s crushed granite perimeter sidewalk for exercise prefer to utilize on-street parking. Nine of the 20 vehicles observed parking on-street were people jogging around Rice University. This shows that approximately half (45%) of the vehicles parking along Wilton

Street at Location 11 in the evening are people utilizing the soft sidewalk around Rice University. No Rice affiliates were identified parking on-street at this location, which is primarily because Rice University provides free parking in the Stadium Lot located across from Wilton Street in Rice Campus.

Table 24 - Parking Duration Results for Surveys Conducted at Location 11

Date and Time	Number of Cars Parked for Each Time Duration														Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+		
4/18/2008 4PM-10PM	0	2	3	2	0	0	0	0	0	0	0	0	0	0	1
4/21/2008 4PM-10PM	1	3	0	0	0	2	1	0	0	0	0	0	0	0	0
4/22/2008 4PM-10PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	2
Average % of Vehicles at Each Duration	5%	35%	20%	10%	0%	10%	5%	0%	0%	0%	0%	0%	0%	0%	15%

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Table 25 - Patrons Observed Parking at Location 11

Jogger	Resident	TOTAL	Unidentified Vehicles
9	3	12	8
75%	25%	100%	

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Location 12 – Wilton Street from Albans St. to Tangley St.

Two weekday morning/afternoon (7 AM to 5 PM) surveys were performed at Location 12, which is Wilton Street from Albans St. to Tangley St. Wilton Street is lined with residential homes and has unrestricted on-street parking.

Table 26 shows the turnover results for the two weekday surveys performed. A total of 48 vehicles were observed during the surveys. Forty-four percent of the vehicles were parked for less than two hours. Based on the turnover counts, it was determined that at the peak period (11:30 AM and 2 PM) 12 vehicles were parked at Location 12 and it was 29% occupied.

Table 26 - Parking Duration Results for Surveys Conducted at Location 12

Date and Time	Number of Cars Parked for Each Time Duration													Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+	
4/21/2008 7AM-5PM	5	4	0	0	1	2	0	1	2	1	0	0	6	0
4/22/2008 7AM-5PM	7	2	2	1	1	3	0	1	2	2	5	0	0	0
Average % of Vehicles at Each Duration	25%	13%	4%	2%	4%	10%	0%	4%	8%	6%	10%	0%	13%	0%

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Table 27 illustrates the vehicles that were specifically identified. There were a variety of vehicles parked on-street. They were primarily residents or people who had business with residents. Two Rice affiliates were observed parking on-street. Rice affiliates are most likely parking at this location during the day, because there are parking restrictions at more convenient locations in the area.

Table 27 - Patrons Observed Parking at Location 12

Visitor of Resident	Rice Affiliate	Home Maintenance	Resident	Delivery	Babysitter	TOTAL	Unidentified Vehicles
2	2	5	4	2	1	16	32
13%	13%	31%	25%	13%	6%	100%	

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Location 12a – Sunset Boulevard from Hazard St. to Ashby St.

One weekday morning/afternoon survey (7 AM to 5 PM) was conducted at location 12a, which is Sunset Boulevard from Hazard St. to Ashby St. This section of Sunset Boulevard consists of single family residential homes. There is some retail establishments located just east of Ashby Street on Sunset Boulevard. This survey was added after witnessing Rice affiliate vehicles parked on-street while in the field. Sunset Boulevard has 2-hour parking restrictions west of Ashby Street and the remaining portion of the block permits unrestricted parking.

Table 28 shows the turnover results for the weekday morning/afternoon survey conducted at Location 12a. A total of 25 vehicles were observed parking on-street during the survey. Three vehicles were parked from the night before. Based on the turnover counts, it was determined that at the peak period (12 PM) 13 vehicles were parked at Location 12a and it was 36% occupied.

Table 29 lists the users of vehicles that were specifically identified parking on-street at Location 12a. The types of patrons identified utilizing on-street parking were delivery vehicles, residents, and construction workers. No Rice affiliates were identified utilizing on-street parking at this

location during the survey. During the preliminary field work, Rice affiliates were observed parking at this location.

Table 28 - Parking Duration Results for Surveys Conducted at Location 12a

Date and Time	Number of Cars Parked for Each Time Duration														Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+		
4/21/2008 7AM-5PM	1	1	4	5	0	2	1	2	0	2	0	1	3	3	
Average % of Vehicles at Each Duration	4%	4%	16%	20%	0%	8%	4%	8%	0%	8%	0%	4%	12%	12%	

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Table 29 - Patrons Observed Parking at Location 12a

Delivery	Resident	Construction Worker	TOTAL	Unidentified Vehicles
1	4	1	6	
17%	67%	17%	100%	

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Location 12b – Sunset Boulevard from Ashby St. to Cherokee St.

One weekday survey (7AM to 5 PM) was conducted at Location 12b, which is Sunset Boulevard from Ashby St. to Cherokee St. The survey for this location was also added while in the field. This location consists of townhouses, duplexes, residential homes, and some retail establishments. Unrestricted on-street parking is permitted along Sunset Boulevard, but there are areas where no parking is permitted.

Table 30 shows the results of the turnover survey conducted at Location 12b. A total of 39 vehicles were observed during the time of the survey. Of the 39 vehicles observed 17 were parked overnight and are most likely residents. Since there are townhouses and duplexes in the area there is a higher propensity for residents to utilize on-street parking. Based on the turnover counts, it was determined that at the peak period (8:30 AM) 20 vehicles were parked at Location 12b and it was 77% occupied, which reveals that this location’s on-street parking is fairly heavily utilized.

Seventeen resident vehicles were identified parking on-street. The 29% of vehicles parked less than 2 hours. Three percent of the vehicles were parked for 4 hours or greater, which shows this location is primarily utilized by high-turnover parkers (retail patrons) or residents in the area.

Table 30 - Parking Duration Results for Surveys Conducted at Location 12b

Date and Time	Number of Cars Parked for Each Time Duration													Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+	
4/21/2008 7AM-5PM	1	5	2	3	6	3	1	0	0	1	0	0	0	17
Average % of Vehicles at Each Duration	3%	13%	5%	8%	15%	8%	3%	0%	0%	3%	0%	0%	0%	44%

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SUMMARY – AREA B

Table 31 displays the summary of the parking duration counts for each location in Area B. A total of 337 vehicles were counted and of these 54 (19%) were observed parking overnight, which are primarily residents. Thirty-five percent of the vehicles were parked less than 2 hours.

Table 31 – Summary of Parking Duration Results for Area B

Locations	Number of Cars Parked for Each Time Duration													Overnight	Total Vehicles
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+		
Location 7	4	2	1	1	1	3	3	5	1	0	0	2	2	15	40
Location 8	5	4	3	4	2	5	7	0	2	3	6	0	5	4	50
Location 9	5	7	6	15	10	4	18	12	4	0	1	0	0	10	92
Location 10	1	2	1	1	1	0	3	0	1	0	0	0	0	13	23
Location 11	1	7	4	2	0	2	1	0	0	0	0	0	0	3	20
Location 12	12	6	2	1	2	5	0	2	4	3	5	0	6	0	48
Location 12a	1	1	4	5	0	2	1	2	0	2	0	1	3	3	25
Location 12b	1	5	2	3	6	3	1	0	0	1	0	0	0	17	39
Totals	30	34	23	32	22	24	34	21	12	9	12	3	16	65	337
% at Each Time Duration	9%	10%	7%	9%	7%	7%	10%	6%	4%	3%	4%	1%	5%	19%	

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Table 32 is a summary of the vehicles identified and the peak parking occupancy at each of the locations in Area B. Of the 337 vehicles counted, 109 vehicles (32%) were identified. The non-residents or people that did not have business with a resident observed parking in Area B include patrons heading to the park, people exercising and Rice affiliates. There was one construction worker observed parking in the area and they were not affiliated with Rice University. At Location 7 no Rice affiliates were observed parking on-street, which is primarily due to its distance from campus. At Locations 8 (Kent Street north of Sunset Boulevard) 12 (Wilton Street north of Tangley Street), 12a and 12b (along Sunset Boulevard) Rice affiliate vehicles were observed parking on-street during the day. Along Sunset Boulevard some of the Rice affiliate vehicles could possibly be residents due to the townhouses and duplexes in the area, since Locations 9, 10, and 11 have restrictions preventing non-resident vehicles from parking on-street Monday through Friday before 4 PM vehicles are forced to instead park in Locations 8, 12, 12a and 12b during the day. There were a few Rice affiliates observed utilizing these areas for on-

street parking. Of the vehicles identified parking in Area B, patrons utilizing the soft sidewalk surrounding Rice University and patrons heading to the park consisted of 9% and 6% of the vehicles identified, respectively. Four Rice affiliates were observed parking on-street which consisted of 4% of all the vehicles identified parking in Area B. This shows that Rice affiliates minimally utilize on-street parking in Area B.

As shown in **Table 32**, the on-street parking spaces for all of the locations analyzed in Area B are less than 40% occupied, except for Location 12b. This reveals that even if non-residents are parking on-street at these locations, it is not inhibiting residents from locating an on-street parking space. There are still a substantial number of spaces available for on-street parking, except in Location 12b (east end of Sunset Boulevard) where there is an apartment complex.

Table 32 – Vehicles Identified and Peak Occupancy at Each Location in Area B

	Visitor of Residents		Home Maintenance		Construction Worker		Babysitter		Delivery		Resident		Park		Exercise		Rice Affiliate		Total Vehicles Identified		# of Spaces		Peak Occupancy	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Location 7	0	0%	1	6%	0	0%	0	0%	0	0%	17	94%	0	0%	0	0%	0	0%	18	100%	72	11%		
Location 8	0	0%	2	20%	0	0%	0	0%	0	0%	4	40%	1	10%	1	10%	2	20%	10	100%	41	37%		
Location 9	0	0%	0	0%	0	0%	0	0%	0	0%	12	75%	4	25%	0	0%	0	0%	16	100%	72	35%		
Location 10	0	0%	0	0%	0	0%	0	0%	0	0%	13	93%	1	7%	0	0%	0	0%	14	100%	41	15%		
Location 11	0	0%	0	0%	0	0%	0	0%	0	0%	3	25%	0	0%	9	75%	0	0%	12	100%	39	10%		
Location 12	2	13%	5	31%	0	0%	1	6%	2	13%	4	25%	0	0%	0	0%	2	13%	16	100%	41	29%		
Location 12a	0	0%	0	0%	1	17%	0	0%	1	17%	4	67%	0	0%	0	0%	0	0%	6	100%	36	36%		
Location 12b	0	0%	0	0%	0	0%	0	0%	0	0%	17	100%	0	0%	0	0%	0	0%	17	100%	26	77%		
TOTAL	2	2%	8	7%	1	1%	1	1%	3	3%	74	68%	6	6%	10	9%	4	4%	109	100%				

AREA C – SOUTH of CAMPUS

Location 13 – Montclair Drive from University Blvd. to Swift Blvd, Shakespeare Road 4 to 5 spaces west of Montclair Dr. and Dryden Road 4 to 5 spaces east and west of Montclair Dr.

Location 13 is along Montclair Drive from University Blvd. to Swift Blvd. and Dryden Road and Shakespeare Road east and west of Montclair Dr. This area is just south of the campus across from Rice Stadium, which is located on the west end of campus. The streets are lined with residential homes. Three weekday (7 AM to 5 PM) and one weekend day (7 AM to 5 PM) surveys were conducted at Location 13. Along Montclair Drive north of Dryden Road no parking is permitted from 7 AM to 6 PM Monday through Friday. Also, along Dryden Road east of Montclair Drive no parking is permitted 9 AM to 4 PM Monday through Friday except with permit. The remaining areas have unrestricted on-street parking. Due to the on-street parking restrictions and its location close to Rice Stadium a weekend day survey was performed along with weekday surveys.

Table 33 shows the turnover results for the four surveys conducted at Location 13. A total of 69 vehicles were recorded parking in the area during the surveys. During the weekend survey (2/21/2009), most of the parkers utilized on-street parking for less than 2 hours. During the weekday surveys many of the vehicles were parked for 5 hours or longer. Based on the turnover counts, it was determined that at the peak period (10 AM) 13 vehicles were parked at Location 13 and it was 87% occupied, which reveals that this location’s on-street parking is heavily utilized in the areas where parking is permitted during the day.

Table 34 lists the vehicles where the purpose of parking on-street was identified. There were a variety of patrons parking at Location 13, which include Rice affiliates, residents, medical center staff, home maintenance, people exercising, visitors of residents and hotel employees. The Rice affiliates, Texas Medical Center staff and Hilton Hotel employees were found to be primarily parking in the areas where unrestricted on-street parking is permitted.

Table 33 - Parking Duration Results for Surveys Conducted at Location 13

Date and Time	Number of Cars Parked for Each Time Duration												Overnight	
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr		6hr+
4/23/2008 7AM-5PM	0	0	2	3	1	0	1	1	1	0	1	0	2	7
2/19/2009 7AM-5PM	1	2	4	0	0	0	1	0	1	1	1	0	6	7
2/20/2009 7AM-5PM	1	1	1	1	1	1	0	0	0	1	0	0	6	9
2/21/2009 7AM-5PM	1	1	1	0	0	0	0	1	0	0	0	0	0	0
% of Vehicles at Each Duration	4%	6%	12%	6%	3%	1%	3%	3%	3%	3%	3%	0%	20%	33%

Table 34 - Patrons Observed Parking at Location 13

Rice Affiliate	Resident	Medical Center	Exercise	Visitor of Resident	Area Employee/Visitor	Hotel Employee	TOTAL	Unidentified Vehicles
9	13	4	7	5	2	6	46	23
20%	28%	9%	15%	11%	4%	13%	100%	

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Location 14 – Montclair Drive from Swift Blvd to 4 or 5 spaces south of Addison Rd. and Addison Road from School Pl. to 4 or 5 spaces east of Montclair Dr.

Location 14 includes Montclair Drive from Swift Blvd. to 4 or 5 spaces south of Addison Rd. and along Addison Road from School Pl. to 4 or 5 spaces east of Montclair Dr. Three weekday morning/afternoon (7 AM to 5 PM) surveys were conducted in 2008 and two morning/afternoon (7AM to 5 PM) surveys were conducted in 2009 at Location 14. On the east side of Montclair Drive and the north side of Addison Road west of Montclair Drive no parking is permitted on school days from 7 AM to 9 AM and 2 PM to 4 PM. Also, on the south side of Addison Road east of Montclair Drive no parking is permitted 9 AM to 4 PM, Monday through Friday except with permit. The remaining areas allow unrestricted on-street parking. This area is lined with residential homes and there is an elementary school located at Addison Road and School Place.

Table 35 shows the turnover results for the three surveys performed at Location 14. A total of 79 vehicles were observed parking on-street. There was a wide range of parking durations. During the weekdays, there is a large amount of short-term parkers (less than 2 hours) due to the parents picking-up or dropping-off their children at the elementary school. Approximately 38% of the on-street parkers utilize parking for more than 6 hours or overnight. This suggests that many of the area residents utilize on-street parking. Based on the turnover counts, it was determined that at the peak period (3:30 PM) 15 vehicles were parked at Location 14 and it was 88% occupied, which reveals that this location’s on-street parking is heavily utilized in the areas where parking is permitted during the day. The peak parking period was during the time (3:30 PM) when parents were picking-up their children from the nearby elementary school.

Table 35 - Parking Duration Results for Surveys Conducted at Location 14

Date and Time	Number of Cars Parked for Each Time Duration												Overnight	
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr		6hr+
4/23/2008 7AM-5PM	10	7	3	1	3	4	0	1	0	1	0	0	0	1
2/18/2009 7AM-5PM	1	0	0	0	0	0	0	0	0	2	0	0	0	18
2/20/2009 7AM-5PM	2	3	0	3	3	1	4	0	0	0	0	0	0	2
% of Vehicles at Each Duration	16%	13%	4%	5%	8%	6%	5%	1%	0%	4%	0%	0%	0%	25%

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Table 36 is a sample of the identifiable vehicles observed parking on-street. Forty-four percent of the people parking on-street were residents. Due to the elementary school in the area, many (28%) of the people parking on-street were either dropping-off/picking-up their children or had business at the elementary school. The elementary school was not in session (3/16/2009 to 3/20/2009) during the 2009 survey period. With the elementary school not in session, this may have caused more Rice affiliates to park in this area. Seven Rice affiliates were identified utilizing on-street parking at Location 14.

Table 36 - Patrons Observed Parking at Location 14

Elementary School	Home Maintenance	Rice Affiliate	Resident	Exercise	TOTAL	Unidentified Vehicles
11	3	7	17	1	39	40
28%	8%	18%	44%	3%	100%	

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Location 15 – Stockton Drive from University Blvd. to Swift Blvd. and Dryden Road 4 or 5 spaces east and west of Stockton Dr.

Location 15 includes Stockton Drive from University Blvd. to Swift Blvd. and on Dryden Road for 4 or 5 spaces in the east and west direction from Stockton Dr. This area is directly south of campus across from Gate 8. The area is lined with residential homes. Along Stockton Drive no parking is permitted 7 AM to 6 PM except on Sundays. On Dryden Road no parking is permitted 9 AM to 4 PM, Monday through Friday except with a permit. There were a total of 4 surveys conducted at this location. One weekday morning/afternoon (7 AM to 5 PM) survey, two weekday evening (4 PM to 10 PM) surveys, and one weekend day (6 AM to 5 PM) survey was conducted at Location 15. This variety of survey times will help determine who is parking in this area during different time periods.

Table 37 shows the turnover results for the four surveys performed at Location 15. Forty-one vehicles were observed parking in this area during the surveys. The vehicles parked during the weekday were mostly parked for greater than 3 hours and the vehicles parked during the weekday evenings and weekend day were primarily parked for less than three hours. This suggests that vehicles parked during the weekday evenings and weekend days are there for short-term business at either a residence or at Rice University. During the Saturday (2/21/2009) survey, all of the vehicles were parked overnight from the previous night. This suggests that during weekend evenings, residents highly utilize on-street parking. Based on the turnover counts, it was determined that at the peak period (10:30 AM) it was 43% occupied.

Table 37 - Parking Duration Results for Surveys Conducted at Location 15

Date and Time	Number of Cars Parked for Each Time Duration													Overnight	
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+		
4/23/2008 7AM-5PM	1	0	0	0	0	0	1	0	3	0	0	0	0	4	0
2/18/2009 4PM-10PM	0	1	10	1	0	0	0	0	0	0	0	0	0	0	0
2/19/2009 4PM-10PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/21/2009 6AM-5PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	19
% of Vehicles at Each Duration	2%	2%	24%	2%	0%	0%	2%	0%	7%	0%	0%	0%	0%	12%	46%

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Table 38 lists the user and number of vehicles that were specifically identified parking on-street during the surveys at Location 15. Twenty-four of the 41 cars counted were identified; of these, the majority (83%) were residents utilizing on-street parking. There was one Rice affiliate identified utilizing on-street parking during the surveys.

Table 38 - Patrons Observed Parking at Location 15

Medical Center	Rice Affiliates	Resident	Exercise	TOTAL	Unidentified Vehicles
1	1	20	2	24	
4%	4%	83%	8%	100%	

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Location 16 – McClendon Street from Travis St. to Stockton Dr.

Location 16 is McClendon Street from Travis St. to Stockton Dr. Three and a half morning/afternoon weekday (7 AM to 5 PM) surveys, three weekday evening (5 PM to 10 PM) surveys and one weekend morning/afternoon (7 AM to 5 PM) were conducted at Location 16. No parking is permitted on McClendon Street 9 AM to 4 PM, Monday through Friday except with permit. This area is lined with residential homes and Texas Medical Center is located just east of Travis Street.

Table 39 shows the turnover results for the five surveys performed at Location 16. A total of 86 vehicles were observed utilizing on-street parking at this location. Sixteen percent of the vehicles were parked on-street overnight. Many of the overnight vehicles could either be employees of the Texas Medical Center or area residents. Based on the turnover counts, it was determined that at the peak period (10:30AM) 16 vehicles were parked at Location 16 and it was 41% occupied.

Table 39 - Parking Duration Results for Surveys Conducted at Location 16

Date and Time	Number of Cars Parked for Each Time Duration													Overnight
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+	
4/23/2008 12PM-5PM	3	1	1	1	0	0	0	0	1	6	0	0	0	0
4/23/2008 5PM-10PM	2	3	2	3	1	0	1	2	2	0	0	0	0	2
2/19/2009 7AM-5PM	2	2	1	0	1	1	0	5	1	0	2	2	9	6
2/20/2009 5PM-10PM	1	3	0	0	3	0	0	0	0	1	1	0	0	3
2/28/2009 7AM-5PM	0	0	0	0	0	0	0	0	0	0	0	0	8	3
% of Vehicles at Each Duration	9%	10%	5%	5%	6%	1%	1%	8%	5%	8%	3%	2%	20%	16%

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Table 40 lists the vehicles that were specifically identified parking at Location 16. The majority (59%) of vehicles are residents. The second largest group (28%), utilizing on-street parking are employees or visitors of the Texas Medical Center. There were no Rice University affiliates identified parking on-street at Location 16.

Table 40 - Patrons Observed Parking at Location 16

Medical Center	Residents	Gardener	Visitor of Resident	TOTAL	Unidentified Vehicles
8	17	1	3	29	57
28%	59%	3%	10%	100%	

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Location 17 – McClendon Street from Bellgreen Dr. to Stockton Dr.

Location 17 consists of McClendon Street from Bellgreen Dr. to Stockton Dr. This area is lined with residential homes and there is a commercial building with retail and office uses located just west of Bellgreen Drive. Five weekday morning/afternoon (7 AM to 5 PM) surveys and one weekday evening (5 PM to 10 PM) survey were conducted at Location 16 during 2008 and 2009. McClendon Street from Stockton Drive to Montclair Drive prohibits parking 9 AM to 4 PM, Monday through Friday except with permit. West of Montclair Drive no parking is permitted on the north side of the street and unrestricted parking is permitted on the south side of McClendon Street.

Table 41 shows the turnover results for the four surveys performed at Location 17. Three weekday morning/afternoon (7 AM to 5 PM) and one weeknight (5 PM to 10 PM) surveys were conducted at Location 17. A total of 36 vehicles were parked on-street during the surveys. The majority (62%) of vehicles utilizing on-street parking, parked for 5 or more hours and these are considered residents utilizing on-street parking. Based on the turnover counts, it was determined

that at the peak period (4:30 PM) 10 vehicles were parked at Location 17 and it was 20% occupied.

Table 41 - Parking Duration Results for Surveys Conducted at Location 17

Date and Time	Number of Cars Parked for Each Time Duration												Overnight	
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr		6hr+
4/23/2008 7AM-5PM	0	0	0	1	1	0	0	0	3	0	1	0	5	0
4/23/2008 5PM-10PM	5	3	0	0	0	0	0	0	0	0	0	0	0	0
2/20/2009 7AM-5PM	0	0	0	0	0	0	0	0	0	0	0	0	1	15
3/02/2009 7AM-5PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
% of Vehicles at Each Duration	14%	11%	0%	3%	3%	0%	0%	0%	8%	0%	3%	0%	17%	42%

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Table 42 lists the type of vehicles specifically identified parking at Location 17. The majority (84%) of vehicles identified utilizing on-street parking were area residents. There was one Rice affiliate identified parking in this area during the survey periods. This shows that parking at Location 17 is utilized primarily by residents.

Table 42 - Patrons Observed Parking at Location 17

Area					Unidentified Vehicles
Rice Affiliate	Employee	Resident	Gardener	TOTAL	
1	1	16	1	19	17
5%	5%	84%	5%	100%	

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Location 18 – Bellgreen Drive from McClendon St. to 4 to 5 spaces south of Sheridan Rd.

Location 18 consists of Bellgreen Drive from McClendon St. to 4 to 5 spaces south of Sheridan Rd. The east side of the street is lined with residential homes and there is a commercial building with retail and office buildings located on the west side of Bellgreen Drive. Two weekday morning/afternoon (7 AM to 5 PM) and one weekday (4 PM to 10 PM) surveys were conducted at Location 18. On the west side of Bellgreen Drive no parking is permitted 7 AM to 6 PM, Monday through Friday. On the east side of Bellgreen Drive unrestricted parking is permitted.

Table 43 shows the results of the turnover surveys performed at Location 18. A total of 31 vehicles were surveyed at this location. The majority (74%) of vehicles were parking on-street for more than 6 hours. We assume that if a patron is utilizing on-street parking for more than 6 hours or overnight, they are an area resident or an area employee. Based on the turnover counts,

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it was determined that at the peak period (9:30 AM) 13 vehicles were parked at Location 18 and it was 52% occupied, which reveals that this location's on-street parking is fairly utilized.

Table 43 - Parking Duration Results for Surveys Conducted at Location 18

Date and Time	Number of Cars Parked for Each Time Duration													Overnight	
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+		
2/18/2009 7AM-5PM	1	0	0	1	0	0	0	0	0	1	0	0	0	10	3
2/20/2009 7AM-5PM	0	1	0	0	0	1	1	0	0	0	0	0	0	2	6
2/28/2009 4PM-10PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% of Vehicles at Each Duration	3%	10%	0%	3%	0%	3%	3%	0%	0%	3%	0%	0%	0%	39%	35%

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Table 44 lists the vehicles which were specifically identified parking at Location 18. There were a total of 27 identified vehicles out of 31 vehicles surveyed. This shows that 89% of the identified vehicles are either area residents or local employees. The majority of the vehicles that were identified belonged to area employees who utilize on-street parking and then walk to their place of business. There were no Rice affiliates identified parking at Location 18 during the surveys.

Table 44 - Patrons Observed Parking at Location 18

Area Employee	Resident	Home Maintenance	Construction Worker	Gardener	TOTAL	Unidentified Vehicles
14	10	1	1	1	27	4
52%	37%	4%	4%	4%	100%	

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SUMMARY – AREA C

Table 45 shows the summary of the parking duration counts for each location in Area C. A total of 342 vehicles were surveyed parking in Area C. Of the 342 vehicles, 92 (27%) were parked overnight and are most likely area residents. Approximately 29% of the vehicles were parked for 2 hours or less. This shows that this area does not have a large portion of short-term parkers.

Table 45 – Summary of Parking Duration Results for Area C

Locations	Number of Cars Parked for Each Time Duration														Total Vehicles
	0.5hr	1hr	1.5hr	2hr	2.5hr	3hr	3.5hr	4hr	4.5hr	5hr	5.5hr	6hr	6hr+	Overnight	
Location 13	3	4	8	4	2	1	2	2	2	2	2	0	14	23	69
Location 14	13	10	3	4	6	5	4	1	0	3	0	0	20	10	79
Location 15	1	1	10	1	0	0	1	0	3	0	0	0	5	19	41
Location 16	8	9	4	4	5	1	1	7	4	7	3	2	17	14	86
Location 17	5	4	0	1	1	0	0	0	3	0	1	0	6	15	36
Location 18	1	3	0	1	0	1	1	0	0	1	0	0	12	11	31
Totals	31	31	25	15	14	8	9	10	12	13	6	2	74	92	342
% at Each Time Duration	9%	9%	7%	4%	4%	2%	3%	3%	4%	4%	2%	1%	22%	27%	

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Table 46 gives a summary of all the vehicles identified and the peak parking occupancy at each of the locations in Area C. Of the 342 vehicles counted in Area C, 184 (54%) were identified. The vehicles identified that were neither residents nor people who had business with residents consisted of patrons affiliated with the local elementary school, hotel employees, Texas Medical Center customers/workers, people utilizing the soft sidewalk around Rice University, area employees, and affiliates of Rice University. Based on the analysis, the areas where Rice University affiliates were considerably observed parking on-street were at Locations 13 and 14. The unrestricted parking in Location 13 is being heavily utilized by non-residents and at Location 14 there were 7 Rice affiliates identified. One Rice affiliate was witnessed parking at Location 17 and at Location 15. Most of the patrons parking at Location 16, who were not residents or affiliated with residents, were heading to the Texas Medical Center. At Locations 17 and 18 the patrons parking on-street, who were not residents or had business with residents, were employees of the nearby commercial space. As shown in **Table 46**, 18 (10%) of all the vehicles identified parking on-street in Area C were Rice affiliates.

As shown in **Table 46**, the on-street parking at Locations 13 and 14 are highly utilized (greater than 85% occupied). The on-street parking at all other locations (15, 16, 17, and 18) were not highly utilized (less than 55% occupied). At Location 14, the utilization of on-street parking increases substantially due to parents picking-up their children from the nearby elementary school during the morning (7 AM to 8 AM) and afternoon (3 PM to 4 PM) hours.

Table 46 – Vehicles Identified and Peak Occupancy at Each Location in Area C

	Visitor of Resident		Home Maintenance		Elementary School		Hotel Employee		Postal Worker		Resident		Medical Center		Exercise		Rice Affiliate		Gardener		Construction Worker		Area Employee		Total Vehicles Identified		# of Spaces		Peak Occupancy	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Location 13	5	11%	0	0%	0	0%	6	13%	0	0%	13	28%	4	9%	7	15%	9	20%	0	0%	1	2%	2	4%	46	100%	15	87%		
Location 14	0	0%	3	8%	11	28%	0	0%	0	0%	17	44%	0	0%	1	3%	7	18%	0	0%	0	0%	0	0%	39	100%	17	88%		
Location 15	0	0%	0	0%	0	0%	0	0%	0	0%	20	53%	1	4%	2	8%	1	4%	0	0%	0	0%	0	0%	24	100%	47	43%		
Location 16	3	10%	0	0%	0	0%	0	0%	0	0%	17	59%	8	28%	0	0%	0	0%	1	3%	0	0%	0	0%	29	100%	39	33%		
Location 17	0	0%	0	0%	0	0%	0	0%	0	0%	16	84%	0	0%	0	0%	1	5%	1	5%	0	0%	1	5%	19	100%	50	32%		
Location 18	0	0%	1	4%	0	0%	0	0%	0	0%	10	37%	0	0%	0	0%	0	0%	1	4%	1	4%	14	52%	27	100%	25	52%		
TOTAL	8	4%	4	2%	11	6%	6	3%	0	0%	93	51%	13	7%	10	5%	18	10%	3	2%	2	1%	17	9%	184	100%	-	-		

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COMPARATIVE ANALYSIS

By performing half-hour turnover counts, and taking note of the identifiable vehicles parking on-street in the locations identified by local residents around Rice University, DESMAN developed an understanding of who is utilizing on-street parking. **Table 47** shows a summary of all the vehicles identified parking on-street and the peak parking occupancy at each location. A total of 1,683 vehicles were surveyed and 555 vehicles parking on-street were identified. A total of 24 Rice affiliates (4%) were identified parking on-street over 600 hours of survey time. The Rice affiliate parkers were observed at Locations 1, 8, 12, 13, 14, 15, and 17. Some of the parkers identified as Rice affiliates may not actually be Rice affiliates, but were people heading to Rice University. The other categories of people parking on-street which were not residents or had business with residents, consisted of construction workers (6%), elementary school visitors (2%), hotel employees (1%), leasing office workers (<1%), retail/restaurant workers/customers (10%), Texas Medical Center employees (2%), area employees (3%), office building workers/customers (1%), people visiting the park (1%), and people using the soft sidewalk around Rice University (5%). Four of the locations (Locations 1, 3, 13, and 14), had a peak parking occupancy greater than 80%, which is considered a high occupancy level. The largest group, identified parking on-street, were residents which consisted of 54% of the people identified.

Two Rice affiliates were identified parking on-street in Area A, which is 1% of all the vehicles utilizing on-street parking in Area A. Both of these vehicles were located in Location 1 where the on-street parking was heavily utilized (96%).

In Area B a total of 4 Rice affiliate vehicles were observed parking on-street, with 2 in Location 8 and 2 in Location 12. This is 4% of the vehicles parking on-street in the area. These locations (8 and 12) do not have on-street parking restrictions. The areas with on-street parking restrictions, to prevent non-resident parkers during the day, had no Rice affiliate vehicles parked on-street. The percentage of people utilizing the park and soft sidewalk around Rice University that were parking in Area B is higher than the percentage of Rice affiliates parking in Area B.

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Table 47 - Summary of Vehicles Identified and Peak Occupancy at Each Location

	Visitor of Residents		Home Maintenance		Construction Worker		Elementary School		Hotel Employee		Babysitter		Delivery		Leasing Office		Retail/ Restaurant		Medical Center		Gardener		Resident		Area Employee		Office Building		Park		Exercise		Rice Affiliate		Total Vehicles Identified	Total Vehicles Surveyed	% of Vehicles Identified	# of Spaces	Peak Occupancy
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	#	%	#	%		
Location 1	0	0%	0	0%	16	20%	0	0%	0	0%	0	0%	0	0%	2	2%	44	54%	0	0%	2	2%	12	15%	0	0%	3	4%	0	0%	1	1%	2	2%	82	383	21%	50	96%
Location 2	0	0%	5	29%	3	18%	0	0%	0	0%	0	0%	0	0%	0	0%	2	12%	0	0%	0	0%	7	41%	0	0%	0	0%	0	0%	0	0%	0	0%	17	163	10%	41	56%
Location 3	9	9%	4	4%	7	7%	0	0%	0	0%	0	0%	0	0%	0	0%	5	5%	0	0%	0	0%	73	71%	0	0%	1	1%	0	0%	4	4%	0	0%	103	332	31%	40	80%
Location 4	1	13%	4	50%	1	13%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	25%	0	0%	0	0%	0	0%	0	0%	0	0%	8	24	33%	19	16%
Location 5	0	0%	8	19%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	34	81%	0	0%	0	0%	0	0%	0	0%	0	0%	42	71	59%	45	29%
Location 6	2	20%	0	0%	2	20%	0	0%	0	0%	0	0%	0	0%	0	0%	2	20%	0	0%	0	0%	4	40%	0	0%	0	0%	0	0%	0	0%	0	0%	10	31	32%	45	22%
Location 7	0	0%	1	6%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	17	94%	0	0%	0	0%	0	0%	0	0%	0	0%	18	40	45%	72	11%
Location 8	0	0%	2	20%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	4	40%	0	0%	0	0%	1	10%	1	10%	2	20%	10	50	20%	41	37%
Location 9	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	12	75%	0	0%	0	0%	4	25%	0	0%	0	0%	16	92	17%	72	35%
Location 10	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	13	93%	0	0%	0	0%	1	7%	0	0%	0	0%	14	23	61%	41	15%
Location 11	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3	25%	0	0%	0	0%	0	0%	9	75%	0	0%	12	20	60%	39	10%
Location 12	2	13%	5	31%	0	0%	0	0%	0	0%	1	6%	2	13%	0	0%	0	0%	0	0%	0	0%	4	25%	0	0%	0	0%	0	0%	0	0%	2	13%	16	48	33%	41	29%
Location 12a	0	0%	0	0%	1	17%	0	0%	0	0%	0	0%	1	17%	0	0%	0	0%	0	0%	0	0%	4	67%	0	0%	0	0%	0	0%	0	0%	0	0%	6	25	24%	36	36%
Location 12b	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	17	100%	0	0%	0	0%	0	0%	0	0%	0	0%	17	39	44%	26	77%
Location 13	5	11%	0	0%	0	0%	0	0%	6	13%	0	0%	0	0%	0	0%	0	0%	4	9%	0	0%	13	28%	2	4%	0	0%	0	0%	7	15%	9	20%	46	69	67%	15	87%
Location 14	0	0%	3	8%	0	0%	11	28%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	17	44%	0	0%	0	0%	0	0%	1	3%	7	18%	39	79	49%	17	88%
Location 15	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	4%	0	0%	20	83%	0	0%	0	0%	0	0%	2	8%	1	4%	24	41	59%	47	43%
Location 16	3	10%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	8	28%	1	3%	17	59%	0	0%	0	0%	0	0%	0	0%	0	0%	29	86	34%	39	33%
Location 17	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	5%	16	84%	1	5%	0	0%	0	0%	0	0%	1	5%	19	36	53%	50	32%
Location 18	0	0%	1	4%	1	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	4%	10	37%	14	52%	0	0%	0	0%	0	0%	0	0%	27	31	87%	25	61%
TOTAL	22	4%	33	6%	31	6%	11	2%	6	1%	1	0%	3	1%	2	0%	53	10%	13	2%	5	1%	299	54%	17	3%	4	1%	6	1%	25	5%	24	4%	555	1,683	33%	801	-

DESMAN Associates

DESMAN

A S S O C I A T E S

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The highest percentage of Rice affiliates, in comparison to the other two areas analyzed, was observed parking in Area C (10%), at Locations 13, 14, 15 and 17. There were a total of 18 Rice affiliate vehicles identified. The unrestricted parking in Location 13 is heavily utilized by a variety of non-residents or people that have business with residents. The on-street parking at Location 14 is primarily utilized residents and parents picking-up/dropping-off children at the elementary school. At Location 15, there was one Rice affiliate observed utilizing on-street parking.