

APPENDIX A

COMPLETE INVENTORY OF SURVEY STREET SPACES

Appendix A: Complete Inventory of Survey Street Spaces

Figure A-1 Complete Inventory of Surveyed Street Spaces

Street	Cross Street/ Cross Street	Side	Time Limit	Spaces	Week Day	Week Night	Fri Night
1st St.	Ann/Miller	W	10	6	67%	50%	83%
1st St.	Kingsley/Miller	E	10	7	14%	0%	0%
1st St.	Kingsley/Miller	W	10	10	10%	10%	0%
4th Ave	Ann/Huron	E	2	8	75%	100%	113%
4th Ave	Ann/Huron	W	0.5	2	50%	0%	0%
4th Ave	Catherine/Ann	E	2	8	63%	75%	88%
4th Ave	Catherine/Ann	W	2	9	67%	78%	100%
4th Ave	Catherine/Kingsley	E	3	8	100%	113%	100%
4th Ave	Catherine/Kingsley	W	3	1	0%	100%	100%
4th Ave	Catherine/Kingsley	W	2	4	100%	100%	75%
4th Ave	Catherine/Kingsley	W	HC	2	0%	0%	0%
5th Ave	Detroit/Kingsley	E	2	5	80%	60%	100%
5th Ave	Detroit/Kingsley	W	2	4	75%	75%	100%
Alley	Washington/Liberty	E	3	7	100%	143%	86%
Ann	1st/Ashley	N	2	6	67%	100%	100%
Ann	1st/Ashley	S	2	1	0%	100%	100%
Ann	4th/5th	N	1	9	44%	56%	67%
Ann	4th/5th	S	1	2	100%	0%	100%
Ann	5th/Division	N	2	15	87%	33%	20%
Ann	5th/Division	S	2	13	92%	54%	46%
Ann	Main/4th	N	1	6	83%	83%	117%
Ann	Main/4th	S	5	3	100%	100%	100%
Ann	Main/4th	S	HC	2	50%	0%	0%
Ashley	Huron/Ann	W	1	3	0%	100%	167%
Ashley	Miller/Kingsley	E	10	16	38%	50%	63%
Church	S. University/Willard	E	2	1	100%	600%	600%
Church	Willard/Hill	E	4	18	100%	100%	94%
Detroit	5th/King	N	1	11	73%	100%	100%
Detroit	Catherine/5th	W	2	20	100%	90%	100%
E. University	S. University/Willard	E	1	8	88%	125%	88%
E. University	S. University/Willard	E	0.5	2	100%	50%	100%
E. University	S. University/Willard	W	1	9	89%	133%	122%
E. University	Willard/Hill	E	4	25	96%	100%	100%

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Street	Cross Street/ Cross Street	Side	Time Limit	Spaces	Week Day	Week Night	Fri Night
E. University	Willard/Hill	W	4	16	69%	113%	100%
Fletcher	Washington/N. University	E	2	7	100%	157%	157%
Fletcher	Washington/N. University	E	HC	4	50%	100%	100%
Fletcher	Washington/N. University	W	2	13	92%	115%	131%
Forest	Hill/S. University	E	2	7	100%	100%	114%
Forest	Hill/S. University	E	0.5	3	33%	133%	167%
Forest	Hill/S. University	W	2	2	100%	250%	200%
Jefferson	Division/Thompson	N	2	8	25%	88%	88%
Jefferson	Thompson/Maynard	N	2	9	67%	100%	100%
Kingsley	5th/4th	S	2	6	100%	83%	100%
Kingsley	Detroit/5th	S	2	2	100%	100%	100%
Liberty	4th/5th	N	0.25	2	50%	100%	100%
Liberty	4th/5th	N	2	2	50%	150%	100%
Liberty	5th/Division	N	2	7	100%	114%	114%
Liberty	5th/Division	S	2	2	100%	200%	150%
Liberty	5th/Division	S	HC	1	0%	0%	0%
Liberty	Ashley/1st	N	1	7	0%	100%	100%
Liberty	Division/Thompson	S	1	4	75%	100%	100%
Liberty	Main/4th	N	2	4	75%	175%	225%
Liberty	Main/Ashley	N	2	7	86%	114%	114%
Liberty	Main/Ashley	S	2	3	100%	133%	133%
Liberty	Maynard/State	N	1	6	50%	100%	100%
Liberty	Maynard/State	S	1	5	100%	140%	140%
Liberty	Thompson/Maynard	N	1	8	38%	113%	113%
Liberty	Thompson/Maynard	S	1	8	50%	125%	125%
Main	Ann/Miller	E	2	10	70%	90%	100%
Main	Ann/Miller	W	2	9	44%	89%	100%
North University	Thayer/State	N	HC	1	100%	100%	100%
North University	Thayer/State	N	0.5	7	86%	129%	129%
S. 1st	W. Huron/W. Washington	W	1	6	67%	100%	117%
S. 1st	W. Washington/W. Liberty	W	1	4	0%	100%	175%
S. 4th	Huron/ Washington	E	2	4	100%	150%	150%
S. 4th	Huron/ Washington	W	2	5	80%	140%	120%
S. 4th	Liberty/William	W	2	11	73%	109%	118%
S. 4th	Washington/Liberty	E	2	7	71%	129%	143%
S. 4th	Washington/Liberty	W	2	7	86%	129%	157%
S. 5th	Huron/ Washington	E	HC	2	0%	0%	0%
S. 5th	Huron/ Washington	W	0.5	4	75%	50%	100%
S. Ashley	Huron/ Washington	W	1	4	75%	100%	100%
S. Ashley	Liberty/William	E	1	15	53%	100%	107%
S. Ashley	Liberty/William	W	1	12	42%	133%	150%
S. Ashley	Washington/Liberty	E	1	6	50%	100%	133%
S. Ashley	Washington/Liberty	W	1	6	100%	100%	100%
S. Ashley	William/RR Tracks	E	12	14	36%	100%	121%

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Street	Cross Street/ Cross Street	Side	Time Limit	Spaces	Week Day	Week Night	Fri Night
S. Ashley	William/RR Tracks	W	2	14	93%	114%	107%
S. Ashley	William/RR Tracks	W	10	3	67%	100%	100%
S. Division	Jefferson/Madison/Packard	E	4	10	60%	30%	60%
S. Division	Jefferson/Madison/Packard	E	1	5	60%	60%	60%
S. Division	Liberty/William	E	4	12	25%	108%	108%
S. Division	William/Jefferson	E	4	10	60%	100%	100%
S. Main	Huron/ Washington	E	2	4	75%	100%	100%
S. Main	Huron/ Washington	W	2	4	50%	100%	100%
S. Main	Liberty/William	E	2	9	67%	89%	111%
S. Main	Liberty/William	W	2	9	89%	100%	111%
S. Main	Washington/Liberty	E	2	4	100%	100%	100%
S. Main	Washington/Liberty	W	HC	1	0%	100%	0%
S. Main	Washington/Liberty	W	2	3	133%	100%	133%
S. Maynard	Liberty/William	E	1	6	33%	133%	117%
S. Maynard	Liberty/William	W	1	5	100%	180%	220%
S. Maynard	William/Jefferson	E	2	7	86%	114%	100%
S. Maynard	William/Jefferson	E	1	3	100%	100%	100%
S. Maynard	William/Jefferson	W	2	19	63%	116%	111%
S. State	Liberty/N. University	W	1	5	100%	100%	100%
S. State	Liberty/N. University	W	HC	1	100%	0%	100%
S. State	N. University/William	W	1	3	67%	167%	167%
S. State	Washington/Liberty	E	1	4	50%	200%	175%
S. State	Washington/Liberty	W	1	9	100%	100%	100%
S. State	William/ S. University	E	2	31	106%	103%	97%
S. State	William/ S. University	E	HC	1	100%	100%	0%
S. State	William/ S. University	W	2	27	89%	89%	96%
S. Thayer	Washington/N. University	W	2	5	100%	120%	120%
S. Thayer	Washington/N. University	W	0.5	3	100%	133%	100%
S. Thompson	Jefferson/Madison	E	2	18	17%	94%	94%
S. Thompson	Jefferson/Madison	W	2	18	17%	78%	72%
S. Thompson	Liberty/William	E	2	11	64%	100%	100%
S. Thompson	Liberty/William	E	HC	4	0%	25%	50%
S. Thompson	Liberty/William	W	2	17	59%	88%	100%
S. Thompson	William/Jefferson	E	2	17	29%	76%	94%
S. Thompson	William/Jefferson	W	2	19	42%	95%	100%
S. University	Church/Forest	N	1	8	63%	100%	100%
S. University	Church/Forest	N	HC	1	0%	0%	100%
S. University	Church/Forest	S	1	7	71%	100%	114%
S. University	Church/Forest	S	HC	1	100%	0%	0%
S. University	E. University/Church	N	1	6	67%	100%	100%
S. University	E. University/Church	S	1	6	67%	83%	100%
S. University	Forest/Washtenaw	N	1	9	67%	100%	100%
S. University	Forest/Washtenaw	S	1	10	50%	110%	70%
Washington	4th/5th	N	2	5	100%	100%	100%
Washington	4th/5th	S	2	8	100%	100%	100%

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Street	Cross Street/ Cross Street	Side	Time Limit	Spaces	Week Day	Week Night	Fri Night
Washington	5th/Division	N	HC	2	0%	0%	100%
Washington	5th/Division	N	1	5	40%	140%	140%
Washington	5th/Division	S	1	6	83%	100%	100%
Washington	Alley/State	N	2	14	86%	100%	100%
Washington	Alley/State	S	0.5	3	0%	100%	100%
Washington	Alley/State	S	2	7	100%	100%	114%
Washington	Division/Alley	N	0.5	3	0%	100%	100%
Washington	Division/Alley	N	2	3	**	**	**
Washington	Division/Alley	S	0.5	3	0%	100%	100%
Washington	Main/4th	N	2	4	100%	100%	*
Washington	Main/4th	S	2	8	100%	125%	50%
Washington	Main/Ashley	N	2	8	100%	100%	100%
Washington	Main/Ashley	S	2	4	75%	150%	175%
Washington	State/Thayer	S	2	3	**	**	**
Washington	Thayer/Fletcher	N	HC	1	100%	100%	100%
Washington	Thayer/Fletcher	N	2	15	93%	113%	113%
Washington	Thayer/Fletcher	S	HC	1	0%	100%	100%
Washington	Thayer/Fletcher	S	2	20	90%	95%	85%
William	5th/4th	N	2	6	0%	133%	133%
William	5th/Division	N	2	10	60%	90%	90%
William	5th/Division	N	HC	1	0%	0%	100%
William	5th/Division	S	2	7	71%	114%	86%
William	State/Maynard	N	0.5	3	33%	100%	100%
William	State/Maynard	N	0.25	1	100%	500%	300%
William	State/Maynard	S	2	5	100%	100%	100%
William	State/Maynard	S	HC	1	0%	100%	100%
William	Thompson/Maynard	N	1	4	25%	100%	50%
William	Thompson/Maynard	S	0.5	5	40%	160%	140%
All				1063	68%	98%	100%

*Octoberfest - Street Closed

* Construction - Spaces Blocked

APPENDIX B

UTILIZATION AT MONITORED FACILITIES

Appendix B: Utilization at Monitored Facilities

The DDA has invested in electronic monitoring equipment that continuously tracks utilization at each of its garages and its two largest surface lots. This technological investment allows for an hour-by-hour analysis of utilization at these facilities. Such an analysis can more closely identify utilization patterns throughout the day at each facility.

In comparison to the analysis of single count surveys, where counts are conducted during a timeframe that is assumed to contain a peak utilization hour, hour-by-hour data will identify exactly the peak utilization hours on any given day at each facility. This Appendix provides a look at the detailed analysis possible with this data.

Figure B-1 and Figure B-2 summarize some of the key utilization patterns at each of these facilities. Data for these facilities were analyzed for the following dates:

- Weekdays – September 13th and 19th; and
- Weekends – September 15th and 29th.

Figure B-1 Weekday and Weeknight Utilization - Monitored Parking Locations

Weekdays (8AM - 9PM)	4th & Washington	Maynard Street	Forest Garage	4th & William	Ann & Ashley	South 5th Av.	1st & Huron
Spaces	273	770	558	775	811	185	162
Peak Occupancy	84%	81%	100%	88%	96%	95%	99%
Peak Hour	1PM	1PM	1PM	2PM	2PM	1PM	7PM
Avg. Daytime Occupancy	65%	58%	71%	71%	77%	58%	73%
Avg. Evening Occupancy	49%	36%	21%	35%	14%	44%	87%
85% Occupancy by	-	-	12 PM	-	10 AM	1 PM	12 PM
Hours at or over 90% Occupancy	None	None	1 PM	None	2 PM	1 PM 2 PM	1 PM 7 PM 8 PM

Source: Project Team, Field Surveys, September 2006

Figure B-2 Weekend Evening - Monitored Parking Locations

Weekend Evenings (6 PM - 12 AM)	4th & Washington	Maynard Street	Forest Garage	4th & William	Ann & Ashley	South 5th Av.	1st & Huron
Spaces	273	770	558	775	811	185	162
Average Occupancy (%)	67%	44%	22%	45%	44%	43%	96%
Peak Occupancy (%)	92%	60%	29%	70%	62%	71%	100%
Peak Hour	8 PM	8 PM	6 PM	8 PM	12 AM	8 PM	6,8 PM
Hours at or over 90% Occupancy	None	None	None	None	None	None	6 PM 7 PM 8 PM 9 PM 10 PM 11 PM

Utilization patterns during the workweek are fairly consistent among these locations. Occupancies rise sharply between 8:00AM and 9:00AM, and then rise steadily throughout the morning, before peaking around midday. At most locations, the peak hour is either 1:00PM or 2:00PM. Five facilities have utilization rates which peak in the low- to mid-90s, while the other two facilities peak in the low- to mid-80s.

Utilization during evenings is much more varied. Below are summaries of utilization patterns at each of these facilities.

Fourth and Washington – This 273-space garage is one of only two large facilities that reaches weekly occupancy peaks on Friday nights. On a typical Friday night, about 92 percent of its spaces are full at 8:00PM. This facility also has the second highest average occupancy on these nights among large facilities, at about 67 percent.

Forest Garage – This 850-space garage is the largest DDA facility, and the only one located in the South Campus area. Average weekday daytime occupancy at this facility is 68 percent. Peak occupancy occurs around 1:00 PM, with just over 90 percent of spaces filled. Occupancy declines steadily after 5:00 PM, falling to just over 15 percent by 9:00 PM.

Fourth and William – This is one of the more consistently used structures in the DDA system, with utilization rates peaking near 90 percent on weekdays, and averaging over 70 percent throughout the day. This garage is also one of the most popular structures during weekend nights, with Friday night occupancy peaking around 70 percent. A comparison of weekday evening to weekend evening peaks (35% vs. 70%), however, indicates that evening parking demand at this facility generally “spills over” from demand for on-street spaces and surface lots around Main Street destinations, and that this facility is used as a sort of reserve parking supply for many Main Street patrons.

Ann and Ashley – Demand at the 825 space garage at Ann Street and Ashley Street drops the sharpest of any parking location between weekday and evening parking – from peak occupancies of over 95 percent (and a permit wait list of over 300) to evening occupancy that averages less than 15 percent. This facility also fills up faster than any other DDA facility, with about 75 percent of spaces filled by 9:00AM. These two characteristics indicate that this facility relies upon commuting customers to a much greater extent than the other facilities.

On Friday nights, however, this facility is much more utilized than on typical weekday evenings, with occupancy averaging 44 percent, and peaking around Midnight at 62 percent. The proximity of this facility to the 1st & Huron lot, and that lot's extremely high average occupancy on Friday nights, makes it likely that demand from 1st & Huron is spilling over into the Ann & Ashley garage on these nights.

South Fifth Avenue/ Library lot – This facility appears to be the most dependent upon University-related demand among the large facilities. Weekday occupancy averages just 58 percent. Yet, on a typical weekday, utilization will be at or above 90 percent for two hours around midday. Evening occupancies are higher than other nearby facilities, likely due to a preference for lots, as the three closest facilities are all garages.

First and Huron lot – This 162-space lot is the most consistently utilized among the large facilities managed by the DDA. Throughout the week, average utilization never drops below 70 percent. It is also the only large facility to consistently peak at full utilization at any time period. On a typical Friday, this facility will be at or above 90 percent utilization for 8 of the 16 hours between 8:00AM and Midnight. No other facility averages more than two hours at this utilization level on any day.

This equipment also allows for a long view examination of usage patterns, which can provide information on how and when typical daily patterns are disrupted. An attempt can then be made to find correlating activities and events, such as sporting or cultural events, or an alternative transportation campaign, that might be the catalyst for the change in behavior.

A long view look at parking utilization can provide a more precise estimation of average use patterns, compared to the "snapshot" effect of a one-time survey. Figure 68 below provide a summary of utilization at the DDA facilities with automatic tracking, based on data from each day in the months of September, October, and November of 2006.

Figure B-3 Average Daily Peak Utilization

Location	Weekday	Weekday Evening	Weekend Day	Weekend Evening
4th & Washington	89.1%	58.4%	56.9%	86.6%
Maynard Street	87.2%	49.4%	78.9%	69.1%
Forest Garage	90.8%	38.5%	44.7%	34.1%
4th & William	83.5%	41.1%	42.8%	65.7%
Ann & Ashley	87.4%	23.9%	60.3%	66.5%
South 5th Av.	91.0%	54.6%	62.2%	62.7%
1st & Huron	97.2%	96.4%	93.4%	100.1%

The figures for weekday and weekday evening utilization in the above table show results similar to those from the surveys detailed in the body of this report, as well as Figures B-1 and B-2 above. Weekend evening utilization, however, is much higher at some locations than was found during our surveys. This reflects the impact of accounting for use on a greater sum of days, as these figures likely indicate the impact of University of Michigan football games, and perhaps a few other large events, on the overall utilization average at these locations. For a one-time data collection and survey, such days are typically avoided in order to better present “typical” conditions. It is valuable, however, given the opportunity, to have a look at the broader “average” condition, taking into account all the non-typical conditions that occur from time to time.

Figure B-4 below, provides a more detailed look at some of the extreme demand peaks that occur in a typical Fall quarter in Downtown.

Figure B-4 Quarterly Peak Utilization

Location	Weekday	Weekday Evening	Weekend Day	Weekend Evening
4th & Washington	105.9%	95.6%	89.7%	107.3%
Maynard Street	99.9%	97.0%	99.1%	99.1%
Forest Garage	102.8%	48.4%	89.3%	85.5%
4th & William	99.6%	82.2%	88.4%	101.2%
Ann & Ashley	98.9%	38.8%	87.7%	95.1%
South 5th Av.	100.0%	101.1%	87.6%	98.9%
1st & Huron	100.6%	100.6%	100.0%	104.3%

Clearly each of these facilities at least occasionally experiences occupancy nearing capacity during the course of the fall quarter. With the exception of Forest Garage, each marked a level of Weekend Evening utilization over 95 percent at least once during this time. Figure B-5 below provides a closer look at the frequency with which these facilities reached high occupancy rates during the fall quarter.

Figure B-5 Frequency of High Utilization

Month	Total Hours (7AM - Midnight, Monday - Saturday)	Percent of Time Spent above 85 Percent Utilization							
		4th & Washington	Maynard	Forest	4th & William	Ann & Ashley	Library Lot	1st & Huron	Average
September	442	9.7%	12.9%	8.6%	10.2%	19.9%	10.2%	39.1%	15.8%
October	442	16.5%	29.6%	15.2%	27.1%	20.6%	15.4%	35.3%	22.8%
November	442	22.2%	20.4%	16.1%	16.5%	21.7%	8.8%	37.3%	20.4%
Average	442	16.1%	21.0%	13.3%	17.9%	20.7%	11.5%	37.3%	19.7%

Source: Project Team, Field Surveys, September 2006

As indicated above, just one facility – 1st & Huron, experienced occupancies above 85 percent more than one-third of the time during the fall quarter. However, each facility was over this occupancy level at least 10 percent of this time, on average.

High occupancy rates are the least common in the month of September, indicating that the full impact of students may not have been evident at the beginning of the month. October saw the most hours spent above 85 percent occupancy. During this month the University’s football team played at home three times against in-conference opponents, compared to just one home game played in November. The impact of the drop-off in football-related parking demand in November was likely offset by the drop in temperatures typical of this last month before winter. With clement weather becoming less frequent, there is likely a significant drop in non-motorized commuting during this month most years, driving demand for parking spaces higher.

Leaving aside the month to month variations indicated at the 4th Avenue garages, where renovation at the William garage sent a variable number of monthly parkers over to the Washington garage each month, high occupancy patterns vary considerably among many of these facilities. Both the Maynard Garage and the Library Lot experienced high occupancies much more frequently in October than in either of the other months, while the Forest Garage had a relatively slow September before picking up in October and November. The Ann & Ashley garage and the 1st & Huron lot remained comparatively consistent, with high occupancy patterns varying little from month to month.

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APPENDIX C

SPECIAL EVENTS

Appendix C: Special Events

A significant number of special events take place each year in and around Downtown which dramatically change parking patterns. While most downtown districts host special events, they occur with particular frequency in Downtown Ann Arbor. Such events include:

- UM Commencement;
- Store promotions;
- Conferences;
- Celebrations and Festivals;
- Dedication ceremonies; and
- University sporting events.

The timing of these events typically coincides with periods of low off-street occupancies (weekends and evenings), providing the opportunity for the parking system to better-absorb these exceptional demand peaks. However, many of these events create localized parking shortages at one or multiple off-street locations.

These events often create a lasting impression of a district, especially among new and infrequent visitors. A bad experience with parking can easily discourage subsequent visits. The capacity to accommodate each of these event-driven peaks at each parking location, however, should not be the measure of effectiveness for Downtown's parking supply.

While these events may be frequent, they represent only a few dozen days each year and typically for only a few hours during those days. Building to accommodate each parking crunch throughout the year would bring a poor return on investment, leave Downtown cluttered with empty parking spaces most of the year, and absorb valuable Downtown space.

A number of strategies are available to manage both the intensity and location of these peaks. Strategies to address parking issues during events include:

- Promoting transit;
- Expanding transit options with event-specific shuttles;
- Promoting walking, biking, and transit for commuters when events coincide with the work day;
- Providing shuttle services between events and large, underused facilities; and
- Implement special event-focused Transportation Demand Management techniques, including selling event tickets with assigned parking locations.

It is also recommended that the frequency and intensity of special event demand be considered when exploring options for parking expansion. While the priority for evaluating locations for supply expansion should be accommodating commuter demand, the capacity to ease parking demand during these events should be weighed as an additional factor.

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APPENDIX D

ON-GOING CONDITIONS REVIEW PROGRAM RECOMMENDATIONS FOR THE DDA

Appendix D: On-Going Conditions Review Program Recommendations for the DDA

The following are recommended data collection and survey campaigns for the DDA to further manage its parking system with timely and relevant data. The categories of data outlined below are within the capabilities of the DDA's current parking management system. Implementation therefore would require only regular scheduling and collection with no capital improvements.

McGann System Facilities

The capacity to track occupancy at eight of the DDA's off-street facilities provides a tremendous potential to track and analyze a number of relationship between parking demand and outside forces. Below is a list of recommended analysis activities for these parking locations.

First Steps

For new facilities: Extract hourly occupancies for one month at each facility. Repeat quarterly to calibrate. Extract daily length of stay data for one month at each facility. Repeat quarterly to calibrate.

For facilities with a year's worth of data: Extract hourly occupancy data for one year Repeat at the end of each year. Extract daily length of stay data for one year. Repeat at the end of each year.

This level of data collection can provide a fine-grain image of how each facility is used, by whom, and at what times, providing a more detailed assessment of the value being provided by the parking system.

Hourly occupancy data for instance can indicate parking facilities within which Limited Use permits hours could be extended. Additionally, day of week and monthly occupancy variations will help inform the timing of non-auto action days and promotional campaigns. Annual averages can be used to track trends and the long-range effectiveness of demand management efforts (a key to this will be to also track employment levels in order to track yearly employee/ parked-vehicle rates).

Analysis

Basic Use Patterns –

For each facility, analyze the following utilization characteristics:

- Occupancy – by hour, day of week, calendar month, year;
- Average occupancy – between 8 AM and 5 PM, between 6 PM and 9 PM;
- Peak occupancy – Daily;
- Time of day when occupancy is at 90 percent or higher; and
- Average length of stay – by day of week, calendar month, and year.

The same information should also be analyzed by sub-area (for the four main Downtown commercial areas) and for the whole system as well.

Alternative Mode Promotions –

Occupancy and turnover across the system should be specifically analyzed for go!pass and Get Downtown promotion days that emphasize commuter use of auto alternatives. Comparisons of occupancy and length of stay data among these days and between these days and typical workdays will provide strong indicators for the impact of each campaign.

Occupancy and Gas Price –

Assign an intern, or a University student volunteer, to track the price of gas each data. Merge this data with daily occupancy trends to track the ongoing relationship between fuel costs and parking demand.

Metered Locations

Track Utilization by Time-Limit –

Employ interns or University volunteers twice annually to survey occupancy at short-term parking meters on a Tuesday, Wednesday, or Thursday (avoid holidays and other unusual circumstances) around midday.

Tracking utilization at some of the most valuable DDA parking spaces is vital to maintaining the effectiveness of the time-limits that regulate their use. While time limits are crucial to providing short-term, “front-door” parking for Downtown’s many commercial businesses, if time-limits prevent consistent utilization of these spaces they should be altered. Similarly, if these spaces are always full, time-limits may be too high to generate proper turnover.

Regular surveys will allow the DDA to keep time-limits in sync with surrounding land uses and parking demand.

Assess Enforcement of Time Limits –

Employ interns or University volunteers twice annually to survey heavily utilized blocks of metered parking to assess how effectively time limits are maintained, and how frequently violations are cited. Such surveys can highlight areas in which concentrated enforcement might significantly increase short-term parking opportunities.

Surveys

Twice-Annual Windshield Surveys –

Employ interns or University volunteers twice annually to place windshield surveys on vehicles parked in garages on Friday nights after 7 PM. The postcard “mail back” should ask two basic questions:

- Where did you first try to find parking?
 - A. Here
 - B. On-Street (please describe location) -
 - C. Other garage/ lot (please describe location) –

- What is the most important factor in your parking location preference?
 - A. Price
 - B. Proximity to destination
 - C. Safety/ Security
 - D. Other –

Other questions can be added based on ongoing circumstances, but these two alone would provide information that can dramatically improve meter pricing in the evenings along key streets. Streets identified in the answers to the first question are a measure of latent parking demand at these streets, allowing for a good gauge of what the hourly rate would need to be in order to reduce search traffic on these blocks, and reduce parker frustration.

Occasional Windshield Surveys –

Following any key parking policy changes, a more specific windshield survey should be placed on parked vehicles. This postcard “mail back” survey should identify the recent change(s), their intended effect/s, and when they took effect. The following questions should then be asked:

- Have you noticed this change?
- What do you think of the change?

- Has parking been easier or harder to find, or about the same, since this change took effect?
- Do you have any other suggestions for improving the effectiveness of parking in Downtown?

If this consistently follows changes, customers will feel that they and their experiences are being considered in relation to parking policy.

APPENDIX E

PARKER SURVEY

Ann Arbor Downtown Parking Study

The purpose of this survey is to determine how well the current supply of public parking is serving the needs of Downtown Ann Arbor's daily visitors, residents, and employees. Please take a moment and complete the survey. The information you provide will help Ann Arbor continue to be a great place to live, work, and visit.

1. What primary activity brought you to downtown Ann Arbor today? (Circle all that apply)
 - A. Work/Meetings
 - B. Shopping/Banking/Errands
 - C. Visiting Friends/ Relatives
 - D. Arts/ Movie/Cultural Event
 - E. School
 - F. Recreation
 - G. Post Office/City Hall/Washtenaw County
 - H. Public Library

2. What primary activity brings you to Ann Arbor most frequently? (Circle one)
 - A. Work/Meetings
 - B. Shopping/Banking/Errands
 - C. Visiting Friends/ Relatives
 - D. Arts/ Movie/Cultural Event
 - E. School
 - F. Recreation
 - G. Post Office/City Hall/Washtenaw County
 - H. Public Library

3. Is the cost of your parking today paid for, in part or in full, by anyone else? (Circle all that apply)
 - A. I pay all costs
 - B. No cost, it's free
 - C. Employer pays full cost/ partial cost (if partial cost, how much? _____)
 - D. Monthly permit is included in office lease
 - E. Parking has been validated by a downtown business
 - F. Other (please explain): _____

4. How long do you expect to park at this location today? (Approximate number of minutes\hours)_____

5. Do you expect to park at any other downtown location before leaving Downtown? Yes/No (circle)
If so, where? _____

6. How many times do you travel using any mode to Downtown in a typical week? _____

7. How often do you drive/ park Downtown in a typical week? _____

8. Did you drive alone today or did anyone ride with you? (circle one)
 - A. Drove alone
 - B. Drove with other(s). How many people drove in your vehicle today (including yourself)? _____

9. On most trips to Downtown Ann Arbor, do you drive alone or does anyone ride with you? (circle one)
 - A. Drive alone
 - B. Drive with other(s). How many people drove in your vehicle today (including yourself)? _____

10. What other means have you used in the past to get downtown? (circle all that apply)
 - A. Transit
 - B. Taxi
 - C. Walk
 - D. Bicycle
 - E. Other (please specify) _____

11. How many times each week do you use another means for getting Downtown, other than an automobile?
 - A. Transit: _____
 - B. Taxi: _____
 - C. Walk: _____
 - D. Bicycle: _____
 - E. Other (please specify mode and frequency) _____

12. How long did it take you to find a parking space today? (circle one)
 - A. 0-5 minutes
 - B. 6-10 minutes
 - C. 11-15 minutes
 - D. More than 15 minutes

13. Do you usually find a parking space in less, more, or the same amount of time? (circle one)
 - A. Less time
 - B. More Time
 - C. Same Amount of Time

Ann Arbor Downtown Parking Study

14. How would you describe the pricing of the parking space you used today? (circle one)
A. Too High C. Too Low
B. Fair D. No Opinion
15. Do you typically pay: (circle one)?
A. More than you paid today for the same length of parking stay
B. The same
C. Less
16. Do you always park at this location? Yes/No (circle one)
17. Do other parking options exist nearby? Yes/ No (circle one)
18. If other parking options, why did you park here today? (circle one)
A. No spaces today, or typically fewer spaces available, at other locations D. This location is more secure/ safer
B. Price is better here E. Other (please specify) _____
C. This is closer to my destination
19. What is the most important consideration for you in choosing where to park in Downtown?
A. Location D. Security/ Safety
B. Price E. Other (please specify) _____
C. Ease of Finding a Space
20. What means of transportation do you use most often to get Downtown? (circle one)
A. Driving/ parking C. Walking
B. Transit D. Biking
21. For what reason/s do you prefer this mode? (circle all that apply)
A. Convenience G. Environmental Concerns
B. Cost H. Lack of Bike Parking/ Showers at Destination
C. Distance I. Safety/ Health Concerns
D. Limited Mobility Access J. Other (please describe): _____
E. Travel Time
F. Get Exercise
22. What mode of travel, other than your current primary mode, is most attractive to you for making trips to Downtown? (circle one)
Driving/ parking C. Biking
A. Transit D. None/Won't ever change current mode
B. Walking
23. What is the primary reason for not using this mode more often? (circle one)
A. Convenience F. Safety/ Health Concerns
B. Cost G. Lack of Bike Parking/ Showers at Destination
C. Distance H. Other (please describe): _____
D. Limited-Mobility Access
E. Travel Time
24. How far did you drive to come Downtown today? (in miles) _____
25. Please tell us anything else you'd like us to know about parking in Downtown Ann Arbor:

Thank you for your input!

APPENDIX F

PARKER INTERVIEWS – COMPLETE DATA

Ann Arbor Downtown Parking Study: Parker Interviews

Location: 4th & Washington	AM		Midday 20 / Year	Evening Once / Year	Evening 2
	1	5			
1. How many days each week do you travel downtown? What is your purpose for coming downtown today (work, etc.)?	Dining, shopping	Work	Work	Travel	Entertainment
3. How often do you travel to downtown for work, versus other destiN/Ations/ purposes? Did you travel alone today, or with others? (How many others?)	Never for work Alone	Always for work Alone	Always for work Alone	N/A 1 Other	Never for work 1 Other
5. How often do you make the trip alone, versus with others?	Usually with others	Always alone	Always alone	N/A	Always others
6. How often do you make the trip by car, versus other means of travel?	Always by car.	Always by car.	Always by car	Always by car	Always by car
7. If you ever use different means of travel for Downtown trips: • What other mode do you use? • What affects your choice? • What is your preferred means? • What keeps you from using this means more often?	N/A	N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A
8. If you usually drive: • How interested are you in using other forms of transportation to get downtown? • What other forms of transportation are most attractive to you?	Not Very None	Somewhat Bus	Not very None	Not very N/A	Very Bus
9. What is the most significant barrier to your increased transportation to Downtown? How long have you been traveling to Downtown? Would you say that you drive more, less, or about the same now as you did in the past?	N/A 4 years Same	Don't know system Few Months More	N/A 30 Years Same	N/A 20 years Same	No longer working 6 years More
11. If any change – What is the most significant factor affecting this change? How long did it take you to find a spot today? How close to your destiN/Ation did you park? Do you always park in the same place or do you search? If you search, what areas?	N/A Immediately 2 blocks Varies	Was in Detroit before. Rode buses Immediately Across the street Always park in same area.	N/A Immediately 50 Feet Always park in same area.	N/A Immediately 2 Blocks Varies	Travel patterns 10 Minutes 52 Feet Varies
15. What's the longest it's ever taken you to find a spot? 16. Have you ever not been able to find parking? 17. How much do you pay for parking (each day)? When you leave your parking space, will you drive somewhere else downtown or leave the area?	Never more than 10 minutes No \$7.00 Leave	Never long No Employer Pass Leave	10 minutes No Paid Leave	10 minutes No \$5 Leave	15 minutes No \$4 Leave
19. Comments	Cost is OK for Ann Arbor but generally high.				Used go/ pass everyday when working

Ann Arbor Downtown Parking Study: Parker Interviews

Location: Maynard Garage		AM		Midday		PM	
1. How many days each week do you travel downtown?	5	5	5	Once per month.	6	Once every 2 weeks.	
2. What is your purpose for coming downtown today (work, etc.)?	School	School	School	Lunch and shopping	School, restaurants	Shop	
3. How often do you travel to downtown for work, versus other destinations/ purposes?	Always for school.	Always for school.	Always for school.	Never for work, occasionally to shop.	Never for work.	Never for work.	
4. Did you travel alone today, or with others? (How many others?)	Alone	Alone	Alone	Total of 3 in car.	2	2	
5. How often do you make the trip alone, versus with others?	Always alone.	Always alone.	Always alone.	Never alone, always with family or friends.	Varies, but mostly alone.	Always with someone.	
6. How often do you make the trip by car, versus other means of travel?	Always by car.	Always by car.	Always by car.	Always by car.	Hardly ever by car.	Always by car.	
7. If you ever use alternative means of travel for downtown:							
• What other mode do you use?	N/A	N/A	N/A	N/A	Walk and bus.	N/A	
• What affects your choice?					Number of destinations, availability of a car.		
• What is your preferred means?					Bus		
• What keeps you from using this means more often?					N/A		
8. If you usually drive:							
• How interested are you in using other forms of transportation to get downtown?	Not at all	Very much	Very much	Not at all		Not very.	
• What other forms of transportation are most attractive to you?	Bus	Bus	Bus	None	N/A	Bus	
• What is the most significant barrier to your increased use of this mode?	Routes don't run to Hartford	Bus system (routes and costs) are confusing	Bus system (routes and costs) are confusing	N/A		Doesn't go to Clinton.	
9. How long have you been traveling to Downtown?	9 months	1 year	1 year	10 years	2 months	1 year.	
10. Would you say that you drive more, less, or about the same now as you did in the past?	More	Same	Same	Same	Same	Same.	
11. If any change – What is the most significant factor affecting this change?	Class schedule	N/A	N/A	N/A	N/A	N/A	
12. How long did it take you to find a spot today?	Less than 5 minutes	5 minutes	5 minutes	10 minutes	2 minutes	3 minutes	
13. How close to your destination did you park?	3 blocks	3 blocks	3 blocks	4 blocks	3 blocks	Within the general area (no specific destination)	
14. Do you always park in the same place or do you search? If you search, what areas?	Always park in the Maynard Garage, usually level 5	Always park in the Maynard Garage, levels vary each day	Always park in the Maynard Garage, levels vary each day	Varies based on which restaurant/stores they want to go to	Always in Maynard Garage.	Always in Maynard Garage.	
15. What's the longest it's ever taken you to find a spot?	Rarely more than 5 minutes	10 minutes	10 minutes	10 minutes	10 minutes.		
16. Have you ever not been able to find parking?	Only during Art Fair	No	No	No	No.	No.	
17. How much do you pay for parking (each day)?	\$6.80	\$2-\$5	\$2-\$5	\$5	\$4	\$2.50	
18. When you leave your parking space, will you drive somewhere else downtown or leave the area?	If staying downtown to eat or shop, won't use car.	Leave	Leave	Leave	Leave.	Leave.	
19. Comments	Parking rates should be cheaper for students.			It's very hard to find ADA parking on the street or near an elevator in the garage.			

Ann Arbor Downtown Parking Study: Parker Interviews

Location: 4th & William	AM		Midday		Evening	
	5	3	5	1	6	6
1. How many days each week do you travel downtown? What is your purpose for coming downtown today (work, etc.)?	Work	Work	Work	Dining	Work	Work
2. How often do you travel to downtown for work, versus other destinations/ purposes?	Always for work	Sometimes for stores, restaurants	Sometimes for stores, restaurants	Never for work	Sometimes stores/ dining	Sometimes stores/ dining
3. Did you travel alone today, or with others? (How many others?)	Alone	Alone	Alone	1 Other	Alone	Alone
4. How often do you make the trip alone, versus with others?	Always alone	Almost always alone	Half the time alone, otherwise with friends	Always by car.	Always by car.	Half the time alone
5. How often do you make the trip by car, versus other means of travel?	Always by car.	Always by car.	Always by car.	Always by car.	Usually walking	Usually walking
6. If you ever use different means of travel for Downtown trips:						
7. What other mode do you use?	N/A	N/A	N/A	N/A	Walk	Walk
8. What affects your choice?					Weather	Weather
9. What is your preferred means?					Walk	Walk
10. What keeps you from using this means more often?					Weather	Weather
11. If you usually drive:						
12. How interested are you in using other forms of transportation to get downtown?	Not at all	Not at all	Not at all	Not at all	Not very	Not very
13. What other forms of transportation are most attractive to you?	None	None	None	None	None	None
14. What is the most significant barrier to your increased use?	Distance	Distance	Distance	N/A	N/A	N/A
15. How long have you been traveling to Downtown?	2 Years	2 years	1 Years	5 years	38 years	38 years
16. Would you say that you drive more, less, or about the same now as you did in the past?	Same	Same	Same	Same	Less	Less
17. If any change – What is the most significant factor affecting this change?	N/A	N/A	N/A	N/A	Kids take car	Kids take car
18. How long did it take you to find a spot today?	Immediately	Immediately	Immediately	20 minutes	Immediately	Immediately
19. How close to your destination did you park?	2 Blocks	2 Blocks	100 feet	4 Blocks	Directly behind it	Directly behind it
20. Do you always park in the same place or do you search? If you search, what areas?	Always park in same area.	Always park in same area.	Always park in same area.	Search for on Street	Always park in same area.	Always park in same area.
21. What's the longest it's ever taken you to find a spot?	5 minutes	Never long	5 Minutes	30 Minutes	5 Minutes	5 Minutes
22. Have you ever not been able to find parking?	During Art Fair	No	No	Yes	No	No
23. How much do you pay for parking (each day)?	Pass	Pass	Pass	\$4.00	Pass	Pass
24. When you leave your parking space, will you drive somewhere else downtown or leave the area?	Leave	Leave	Leave	Leave	Leave	Leave
25. Comments	Does run some errands on foot while parked.	Could park closer, but likes the short walk	Errands on foot while parked.	Need more parking		

Ann Arbor Downtown Parking Study: Parker Interviews

Location: Liberty Square Garage	AM			Midday		PM	
	7	5	5	5	2	5	
1. How many days each week do you travel downtown?	Work	Work	Work	Work and School	Dinner		Back to Work
2. What is your purpose for coming downtown today (work, etc.)?	Live and work in downtown, so every day is for both	Always for work.	Always for work.	She comes everyday for school, her husband every day for work	Never for work.		Always for work
3. How often do you travel to downtown for work, versus other destinations/ purposes?	Alone	Alone	Alone	With husband (total of 2)	Alone		Alone
4. Did you travel alone today, or with others? (How many others?)	Always alone.	Always alone.	Always alone.	Always with husband.	Half with someone, half alone.		Always alone.
5. How often do you make the trip alone, versus with others?	85% by motorcycle.	Always by car.	Always by car.	Always by car.	Always by car.		Always by car.
6. How often do you make the trip by car, versus other means of travel?							
7. If you ever use different means of travel for Downtown trips:							
• What other mode do you use?	Bus						
• What affects your choice?	Weather and if he's on a schedule						
• What is your preferred means?	Motorcycle						
• What keeps you from using this means more often?	Likes a change now and then.						
8. If you usually drive:							
• How interested are you in using other forms of transportation to get downtown?	Somewhat	Not at all	Not at all	Not very	Somewhat		Somewhat
• What other forms of transportation are most attractive to you?	Bus	None	None	Bus	Bike		Rail
• What is the most significant barrier to your increased use of this mode?	Hard to rely on it being on time.	N/A	N/A	Bus does not run to South Eyan	Safety/security of bike when locked up.		Doesn't connect to Ypsilanti
9. How long have you been traveling to Downtown?	25 years	6 months	5 years	5 years	15 years		1 year
10. Would you say that you drive more, less, or about the same now as you did in the past?	More	More	More	Same	Same		Same
11. If any change – What is the most significant factor affecting this change?	Now that he has a motorcycle he drives more (used to ride the bus more).	Living further away	Used to take the bus occasionally when he shared a car with his father. Now that he has his own car he always drives.	N/A	N/A		N/A
12. How long did it take you to find a spot today?	2 minutes	less than 5 minutes	2 minutes	1 minute	1 minute		1 minute
13. How close to your destination did you park?	1 block	1 block	1 block	1 block	2 blocks		1 block
14. Do you always park in the same place or do you search? If you search, what areas?	Always park in the Liberty Square Garage, usually level 2	Always park in the Liberty Square Garage, Level 5	Always park in the Liberty Square Garage, Level 6	Always park in the Liberty Square Garage, Level 6	Varies. Sometimes here, sometimes Washington & Fourth or William and Main.		Yes
15. What's the longest it's ever taken you to find a spot?	2 hours	30 minutes during lunch hours.	25 minutes when he left for lunch	10 minutes	15 minutes		10 minutes (to get up to the 7th Floor)
16. Have you ever not been able to find parking?	No	When the lot was being worked on, she parked at her office..	No	Aside from Art Fair, no longer than 10 minutes at any time of day	No		No
17. How much do you pay for parking (each day)?	\$0 (free for motorcycles)	\$0 (paid for by employer)	\$20 per month, deducted from his paycheck	\$5	\$2		\$0 *paid for by employer)
18. When you leave your parking space, will you drive somewhere else downtown or leave the area?	Drive home to another area of downtown	Leave	Leave	May drive to Kerrtytown, Main Street, or North Campus	Leave		Leave.
19. Comments							

Ann Arbor Downtown Parking Study: Parker Interviews

Location: Kerrytown/ Farmers Market Lots	AM			Midday			PM		
	5	7			5	2	2		
1. How many days each week do you travel downtown?	5	7	Rarely		5	2			
2. What is your purpose for coming downtown today (work, etc.)?	Work	Work	Coffee		Work	Dinner and shopping			Dinner
3. How often do you travel to downtown for work, versus other destinations/ purposes?	Always for work.	Mostly work, but frequently errands, dining	Only for fun		Mostly for work, but occasionally to shop or run errands	Never for work, always for other errands			Never for work.
4. Did you travel alone today, or with others? (How many others?)	Alone	Alone	Together (2)		2	2			2
5. How often do you make the trip alone, versus with others?	Always alone.	Usually alone	Usually together		Usually together.	Usually alone			Always with someone.
6. How often do you make the trip by car, versus other means of travel?	Always by car.	Most of the time by car	Always by car.		Nearly always by car.	Always by car.			Usually walk.
7. Downtown trips:									
• What other mode do you use?		Walk			Walk; sometimes bus around town.				Sometimes drive.
• What affects your choice?		Distance	N/A		Weather and mood.	N/A			after-work errands
• What is your preferred means?		Driving			Driving				Walk.
• What keeps you from using this means more often?		Distance			N/A				if more errands to do after.
8. If you usually drive:									
• How interested are you in using other forms of transportation to get downtown?	Not at all	Not very	Not at all		Not very	Not very.			
• What other forms of transportation are most attractive to you?	None	Walking	None		Bus	Bike.			N/A
• What is the most significant barrier to your increased use of this mode?	N/A	Distance	N/A		Need more reliable schedules, longer hours, clearer route descriptions.	Roadways are too busy and cars drive too dangerously to bike safely.			
9. How long have you been traveling to Downtown?	3 years	20 Years	3 years		20 years	42 years.			3 years
10. Would you say that you drive more, less, or about the same now as you did in the past?	Same	Same	Same		Same	More.			Same.
11. If any change – What is the most significant factor affecting this change?	N/A	N/A	N/A		N/A	Growing up has led to more driving.			N/A
12. How long did it take you to find a spot today?	Immediately	Immediately	Immediately		Immediately	11 seconds.			10 seconds
13. How close to your destination did you park?	100 feet	Directly	100 feet		100 yards	1/2 block			1 block
14. Do you always park in the same place or do you search? If you search, what areas?	Always park in same area.	Always park in same area	Always park in same area.		Always park in same area.	Always park in same area.			Always park in same area.
15. What's the longest it's ever taken you to find a spot?	Never more than 10 minutes	5 Minutes	If more than 5 minutes, they give up		10 minutes	5 minutes			So long, he left.
16. Have you ever not been able to find parking?	No	No	In the afternoon, right after lunch.		Yes, but in DOWNTOWN, not Kerrytown.	No.			Yes.
17. How much do you pay for parking (each day)?	\$8-\$9	\$5.00	\$1		\$4	\$0 (after 6PM)			0 (after 6PM)
18. When you leave your parking space, will you drive somewhere else downtown or leave the area?	Leave	Somewhere else	Leave		Leave	Leave			Continue on to a play in town.
19. Comments		Meter enforcement too aggressive. Hurts business.	Dynamometer at Farmer's Market lot is terrible. Can't add time.		Farmers' Market meter is very confusing, even after using it for years.				

APPENDIX G

PRIVATE PARKING – COMPLETE DATA

Appendix G: Private Parking - Complete Data

Figure G-1 Downtown Ann Arbor Private Parking Inventory

Address	Name	Spaces	Avg. Occupancy*	Avg. Utilization
721 E Huron	Street Art Fair & Center for Groups	3	1	17%
100 N State	Hobbs + Black	13	7	54%
721 E Huron	Cantebury House	5	1	20%
715/717 E Huron	Michigan Integrated Medicine etc	3	1	17%
105 S State	UM Frieze Building	23	6	26%
224 S Thayer	Bell Tower Valet Parking	11	8	68%
Central Campus - Diag Block - multiple buildings		63	39	62%
607/609 S Forest	Student Bike & Champion Party Store	3	2	67%
601 S Forest	Village Corner	4	2	50%
616 Church	Ann Arbor Realty	4	2	38%
612 Church	Old Town Realty	4	3	63%
610 Church	Prime Student Housing	8	5	56%
UM Central Campus - multiple buildings		13	8	62%
1236 Washtenaw Ct	Christian Reformed Campus Chapel	3	0	0%
1224 Washtenaw Ct	Carriage House Apartment Building	25	20	78%
1335 S University	Campus Rentals w/ Apts Above	7	6	79%
401 E Huron	Papa John's	5	5	90%
413 E Huron	Office of Student Publications	41	14	33%
505 E Huron	Sloan Plaza	72	45	63%
513 E Huron	The Dahlmann Campus Inn	119	75	63%
402 E Huron	Firestone Tire	8	6	69%
425 E Washington	Ann Arbor Professional Building	62	25	40%
412 E Huron	Unspecified	4	2	38%
120 S State	First United Methodist Church	44	10	23%
512 E Huron	First Baptist Church	29	13	45%
401 E Liberty	McKinley Town Center (non-garage)	62	22	35%
212 S Division	Unspecified	22	15	66%
300 E Washington	Garris Law Building	8	5	63%
315 E Liberty	Vahans	12	12	96%
321 E Liberty	Residential - Spaces rented during day	14	10	71%
325 E Liberty	Unspecified	4	3	75%
327 E Liberty	Unspecified	23	16	70%
337 E Liberty	Instant Furniture Rental	3	2	67%

Ann Arbor Downtown Parking Study • Phase 1 Final Report

DOWNTOWN DEVELOPMENT AUTHORITY

Address	Name	Spaces	Avg. Occupancy*	Avg. Utilization
314 E Washington	Comerica Bank	15	6	37%
340 E Huron	Ann Arbor News	41	21	50%
125 S Fifth	Bank of Ann Arbor	35	12	33%
341 E Huron	Issa Properties	13	11	85%
100 N Fifth	City Hall	61	51	84%
331 E Huron	Tios	6	3	50%
335 E Huron	Campus Management	8	5	56%
336 E Ann	Ann Arbor News employee parking	46	31	66%
220 N Fifth	Gardner Communications	6	2	33%
303 E Ann	City Hall Lot D	10	6	60%
305 E Ann	Unspecified	9	6	67%
300 N Fifth	The Brauer Building	21	11	52%
314 Detroit St	Mysore Woodlands	6	6	100%
312 Detroit St	Kitch Drutchas, Ann Arbor Observer	16	12	75%
303 N Fifth	GSI	2	1	50%
300 Detroit St	Argieros	1	1	50%
215 N Fifth	Bessenberg Bindery	3	3	83%
226 N Fourth	Unspecified	3	1	33%
223 E Ann	The Armory Condos	12	8	67%
201 E Huron	Maria's Alterations & Rosey's etc	5	4	80%
211 E Huron	Hands-On Museum	6	4	67%
213 E Liberty	Liberty Plaza shops, Afternoon Delight	22	16	70%
112 E Huron	National City Bank	17	10	56%
101 E Huron	Washtenaw County Building	143	112	78%
219 N Fourth	Washtenaw County employee parking	47	25	52%
201 N Fourth	Bellanina Spa	3	4	117%
401 N Fourth	Unspecified	28	20	71%
409 N Fourth	Burkhart Enterprises	6	3	50%
415 N Fourth	Kerrytown Concert House	11	2	18%
402 N Main	Unspecified	28	21	73%
308 N Main	Eureka Cleaners	23	14	61%
300 N Main	Amoco gas station	5	3	60%
323 Braun Ct	Unspecified	5	2	30%
414 N Ashley	Unspecified	18	6	33%
301 N Main	Dobson-McOmber	5	4	80%
307 N Main	Rapid Refill Ink	3	1	33%
311 N Main	Ann Arbor Credit Bureau	3	3	100%
315 N Main	Wolverine Technical Staffing	8	6	69%
401 N Main	Vintage Financial Services	7	2	29%

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DOWNTOWN DEVELOPMENT AUTHORITY

Address	Name	Spaces	Avg. Occupancy*	Avg. Utilization
405 N Main	Davis & Kuhnke	6	1	17%
407 N Main	Unspecified	11	6	55%
415 N Main	The Thomas Earl House	11	3	23%
318 N Ashley	JJR	30	17	55%
404 N Ashley	Unspecified	18	8	42%
110 Miller	Unspecified	5	2	40%
425 N Main	Unspecified	5	1	10%
427 N Main	Edf Ventures	5	1	20%
201 N Main	Liquor Store	6	8	125%
120 W Huron	Employee parking	26	18	67%
111 N Main	Liberty Title	3	3	100%
116 W Huron	Bus Depot	2	2	75%
209 W Huron	Unspecified	34	15	44%
226 W Liberty	PMA	9	7	78%
200 S Ashley	Unspecified	4	3	63%
W Liberty St	Downtown Home & Garden	4	2	50%
202 S Ashley	Downtown Home & Garden	6	2	33%
123 N Ashley	Ashley Square building	39	21	54%
220 Miller	Unspecified	18	15	83%
210 Miller	Unspecified	5	4	80%
202 Miller	ArtSpoken	6	4	67%
319 N Ashley	Peach Tree Montessori staff parking	3	3	100%
400 N First	Unspecified	17	10	59%
314 N First	Unspecified	50	9	18%
318 W Liberty	Liberty Car Wash	4	2	38%
326 W Liberty	Daniel's On Liberty	21	5	24%
210 S First	Gotham City	3	3	83%
401 W Huron St	Illi's Auto Service	15	6	40%
120 S First	Unspecified	18	7	39%
311 W Huron	Unspecified	37	9	24%
400 W Washington	YMCA	58	42	72%
438 W Huron	Enterprise	20	11	55%
420 W Huron	Ann Arbor School of Yoga	3	0	0%
390 W Huron	Yoga, Hair & Nails	87	84	97%
308 W Huron	Unspecified	5	6	120%
300 W Huron	Relax Center	8	3	38%
111 N First	Therapy Center	2	2	100%
205 N First	CPA & tax planning	6	3	50%
303 Miller	Quality Pet Grooming	1	0	0%

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DOWNTOWN DEVELOPMENT AUTHORITY

Address	Name	Spaces	Avg. Occupancy*	Avg. Utilization
391 Miller	Maynard Battery	15	10	67%
421 Miller	Interstate Battery	12	8	67%
222 Chapin	New Hope Baptist Church	53	7	13%
310 W Ann	Ross Beakes Collision	50	37	74%
117 N First	Phoenix West building	72	60	83%
310 Miller	First & Miller Office Complex	115	57	50%
325 W Liberty	Marathon Service Center	7	8	114%
406 E Liberty	Serendipity & Versailles	5	5	100%
328 Thompson	Professional Building - staff	2	1	25%
312 Thompson	Scruples Hair - staff	2	3	125%
317 S Division	Mail Shoppe	4	3	63%
345 S Division	Westerman & Assoc	5	5	100%
306 E Liberty	Christian Science Reading Room	1	1	100%
319 E William	Library - staff parking	28	19	66%
S Division	Unspecified	21	16	76%
333 E William	UM Credit Union	36	11	29%
200 E Liberty	Post Office	104	64	62%
S Fourth	Postal Service Parking	28	26	91%
207 W Liberty	Regroup	19	11	58%
300 S Ashley	Unspecified	3	3	83%
221 W Liberty	Three Oaks	5	5	90%
213 W Liberty	Unspecified	21	15	71%
305 S First	Unspecified	2	2	75%
322 S Ashley	Hair Salon	3	2	67%
332 S Ashley	Red Shoes	3	2	50%
441 S First	Apartment Building	14	9	61%
116 W Jefferson	Unspecified	2	2	100%
444 S Main	Stevenson Keppleman	4	9	213%
440 S Main	Darvas Roberts Assoc.	8	3	38%
402 S Main	BP Gas Station	5	4	70%
450 S Main	Inke's Skin Care	8	4	44%
118 W Jefferson	Family Therapy Assoc.	3	4	117%
125 W William	Anderson Paint	19	6	32%
548 S Main	Community Chiropractor	3	1	17%
544 S Main	Brinks, Hefer, Gilson & Lione	34	16	46%
510 S Main	Laky's Salon	13	8	58%
504 S Main	Tom Thompson Flowers	20	11	53%
502 S Main	Blaske & Blaske	6	5	83%
507 S Ashley	Ashley Auto Transmission	3	5	167%

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DOWNTOWN DEVELOPMENT AUTHORITY

Address	Name	Spaces	Avg. Occupancy*	Avg. Utilization
511 S Ashley	Unspecified	6	11	175%
529 S Ashley	Shipman	4	0	0%
618 S Main	Fox Tent & Awning, Delux Drapery	54	23	42%
606 S Main	Ivory Photo	2	1	50%
600 S Main	Cingular Wireless	14	8	57%
611 S Ashley	Affordable Vet Service	3	0	0%
608 E William	First Congregational Church	9	8	89%
500 E William	TCF Bank Training Center	24	17	71%
414 E William	Seoul Komer	4	4	88%
340 E William	Raja Rani	10	5	45%
332 E William	Apartment Complex	6	5	75%
403 S Fourth	FJ Muehlig Funeral Home	46	25	54%
425 S Main	Edison Center	39	38	96%
114 E William	Beer Depot	5	2	40%
545 S Main	Fingerle Lumber	4	1	25%
109 E Madison	UM Plant Building Services	22	12	55%
106 Packard	Baker Commons	35	15	41%
517 S Main	Ideal Auto Body	8	6	75%
563 S Main	Japanese Auto shop	5	9	170%
523 S Main	Leopold Bros	15	9	60%
601 S Main	Clark gas station	6	4	58%
637 S Main	Neutral Zone, Ninety Degree etc	25	16	62%
615 S Main	South Main Market	56	29	52%
633 S Main	Car Wash	2	1	25%
TOTAL		3,204	1,880	59%

* Average is based on two counts, each conducted on a weekday between 10:00 AM and 5:00 PM

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APPENDIX H

ADA-RESERVED PARKING SPACES

Appendix H: ADA-Reserved Parking Spaces

Figure H-1 ADA-Reserved Parking Spaces

Facility Type	Facility	Spaces
Structures	4 th & Washington	7
	Maynard	14
	Forest	20
	1 st & Washington	4
	4 th & William	15
	Liberty Square	12
	Ann & Ashley	17
Attended Lots	S. 5 th Ave/Library Lot	8
	S. Ashley/Kline Lot	6
	First & Huron	6
	Fifth & Huron	3
	Fingerle Lot	0
	First & William	3
Metered Lots	Main & William	1
	Farmers Market	3
	City Hall	2
	Kerrytown	1
	4 th & Catherine	3
	Community High School	4
	Main & Ann	2
On-Street	Street Meters	27
All	All	158

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APPENDIX I

PROJECT ADVISORY COMMITTEE NOTES –
MEETINGS#1 AND 2

Appendix I: Project Advisory Committee Notes - Meetings #1 and #2

PAC Kickoff Meeting

Following are our collected notes from the Project Kickoff/ Project Advisory Committee meeting held at the DDA offices on Wednesday September 13th, 2006. See Figure 71 for a list of attendees.

Attendees

Figure I-1 PAC Kickoff Meeting Attendance

Name	Affiliation
Susan Pollay	DDA
Eli Cooper	City of Ann Arbor
Wendy Rampson	City of Ann Arbor
Jennifer Hall	DDA Board
Leah Gunn	DDA Board
Roger F Hewitt	DDA Board
David Miller	University of Michigan
Sandi Smith	DDA Board
Lindsay-Jean Hard	DDA
Joan Lyke	DDA
David Fields	Nelson\Nygaard
Thomas Brown	Nelson\Nygaard

Welcome

Susan Pollay (DDA) initiated the meeting with a round of introductions. She then provided a brief summary of the purpose of the project and the role of the consultant. In sum: the City’s transportation approach, since 1985, has been one defined by Demand Management. The current study, by moving toward the development of a comprehensive parking policy for Downtown, will continue and update this approach. Ms. Pollay also mentioned that the study would coincide with an update of the City’s Transportation Plan that was being conducted by another consultant team.

Susan then introduced the consultants for a review of agenda items.

Agenda Items

- a. **Project Goals and Objectives** – Project Goals and Objectives, as presented in the Agenda (attached) were accepted.
- b. **Scope** – Project scope, boundaries, or schedule, as defined in the Nelson\Nygaard proposal, were accepted as final.
- c. **Review of Available Information** –
 - i. David Miller suggested that, if needed, the University would permit data collection within its parking facilities.
 - ii. Wendy Rampson (City) suggested that she could provide a copy of the Northeast Area Transportation Plan. (This has since been provided)
 - iii. A memo from the Planning Commission to the DDA was mentioned. Sandi Smith (DDA) said that she would try to send a copy to the consultants.

Comments and Discussion

Roger Hewitt (DDA Board) noted that this study is intended to dovetail with the City's Transportation Plan update. The City is anticipating perhaps the biggest transformation in 30 years, as planned and projected development levels would transform Ann Arbor from town to city.

Eli Cooper (City) stated that the relationship between parking supply and mode choice is well understood by the City, and that the history of demand management downtown has been critical to maintaining auto commute share to levels seen in the 1970's.

Leah Gunn (DDA Board) noted that car ownership among students seems to be increasing.

Jennifer Hall (DDA Board) asked if the consultant team would be surveying employer attitudes toward providing free parking to employees, noting that many of Downtown's largest employers, including the City and Washtenaw County, subsidize parking costs for their employees.

David Fields (Nelson\Nygaard) responded that such provisions/ subsidies would be surveyed through the project's windshield surveys and customer interviews, but that, presently, there is no task for interviewing employers in the project's scope. It was suggested, however, that this was something that could be added to the project, should the City and the DDA desire such information.

General comments were offered in concern about getting accurate information on actual go!pass use, as opposed to pass distribution. There was concern that without addressing

additional barriers to transit use, strategies that increased program participation, or pass distribution, might not translate into increased transit commuting.

A general discussion began about public involvement in Downtown parking issues and DDA parking development. It was agreed that parking, and development in general, is a contentious issue among Downtown stakeholders. And that while sometimes the issue of parking provides an indirect route to opposing a development project, many citizens are divided over the issue of parking itself - with many feeling strongly that more parking is needed to support economic expansion, and others feeling equally strongly that adding more parking would have a negative impact on the district overall.

This led to a discussion of how public outreach should be handled for the current study (see below).

Public Outreach

Who should be invited? – It was agreed that there would be two forms of public meetings, with distinct target audiences for each (both to be held midway through the project, when data analysis is complete). Members of the PAC felt that a large general meeting would not attract interest and attendance among local real estate professionals, and that their input was vital to the project.

It was therefore agreed that:

- An invitation-based lunch and discussion would be held with local real estate agents and developers; and
- An open public meeting would be held on the same date to solicit input from the wider community.

Action Item: Nelson\Nygaard to provide an outline of the two public outreach meetings to the DDA.

Conclusion

At the conclusion of the meeting, Susan Pollay thanked everyone for their attendance. The Consultant Team also expressed their gratitude for the input during the meeting.

PAC Follow-up Meeting

Figure I-2 Attendees

Name	Affiliation
Susan Pollay	DDA
Eli Cooper	City of Ann Arbor
Wendy Rampson	City of Ann Arbor
Jennifer Hall	DDA Board
Roger F Hewitt	DDA Board
John Splitt	DDA Board
David Miller	University of Michigan
Sandi Smith	DDA
Joe Morehouse	DDA
Frank Nagy	Republic Parking
Tony Bisesi	Republic Parking

Discussion

Susan Pollay (DDA) initiated the meeting with a brief description of the previous night’s Public Workshop. She stated that the even had been a great success, with attendance of around 50, and a very productive dialogue for most of the night. She stated that the press had been there, a reporter from the Ann Arbor News, and that a parking operator from Kalamazoo had sent representatives to the meeting to find out what Ann Arbor was doing that could be useful in their own efforts to manage public parking.

Susan summed up Phase I as an exciting first step toward developing a formal parking policy for the City.

Roger Hewitt then gave a brief summary of the work expected for Phase II. This work is to include Policy Recommendations focusing on three areas:

- Planning – Development projects;
- Operational Issues – Time limits, enforcement, wayfinding, etc.; and
- Commuting – Parking demand and alternative transportation options.