

CHAMPAIGN COUNTY REGIONAL PLANNING COMMISSION

The Urbana Free Library Parking and Transportation Study

Final Report

7/18/2013

Champaign Urbana Urbanized Area Transportation Study (CUUATS)

TABLE OF CONTENTS

TABLE OF CONTENTS..... 1

LIST OF FIGURES..... 3

LIST OF TABLES..... 4

1.0 Introduction 5

 1.1 Report Organization..... 5

 1.2 Study Area..... 5

2.0 Literature Review 7

 2.1 TUFL Parking Survey, TUFL, 2005..... 7

 2.2 Downtown Parking Study, Rich and Associates, Inc., October 2008 7

 2.3 TUFL Patron Survey, Center for Informatics Research in Science and Scholarship (CIRSS),
University of Illinois, February 2009 8

 2.4 TUFL Cardholder Survey, 2010-2011 9

3.0 Survey among Library Patrons 10

 3.1 Survey Design..... 10

 3.2 Main Findings..... 10

 3.3 Survey Findings 12

 3.3.1 Primary Travel Mode..... 12

 3.3.2 Patron Parking..... 12

 3.3.3 Important Issues Identified by Library Patrons..... 13

 3.3.4 Trip Chaining 14

 3.3.5 Difficulty in Finding Parking for Library Patrons 14

 3.3.6 Duration of Library Visit 16

 3.3.7 Needs for Additional Parking 16

 3.3.8 Survey Respondents’ Age Distribution..... 17

 3.3.9 Patrons’ Comments..... 18

4.0 Existing Conditions Analysis..... 21

 4.1 Parking Facilities..... 21

 4.2 Issues with Existing Parking Facilities..... 22

 4.3 Vehicular Flow at the Main Parking Lot 24

 4.4 Parking Demand..... 25

4.5	Traffic Circulation around TUFL	26
4.6	Traffic Crashes.....	28
4.7	Pedestrian and Bicycle Facilities	28
4.8	Drive thru Book Drop off Location.....	31
5.0	Findings and Recommendations.....	32
5.1	Findings	32
5.2	Recommendations	34
5.2.1	Parking and Book Drop off.....	34
5.2.2	Pedestrian and Bicycle Facilities	36
	REFERENCES.....	37
	APPENDIX A.....	38
	APPENDIX B.....	43

LIST OF FIGURES

Figure 1: Study Area.....	6
Figure 2: Patrons’ Travel Modes	12
Figure 3: Patrons’ Parking Locations.....	13
Figure 4: Patron Levels of Importance on Issues	13
Figure 5: Difficulty in Finding Parking	14
Figure 6: Impact of Parking Availability on Patrons’ Trip Decisions.....	15
Figure 7: Possible Future Parking Lots	16
Figure 8: Preferred Parking Lots	17
Figure 9: Age Distribution of Survey Respondents	17
Figure 10: TUFL Off-Street Parking Lots.....	21
Figure 11: Sign Showing Head-In Parking Instruction at TUFL Entrance.....	22
Figure 12: Sign Showing Information on Additional Parking on Book Drop off Box.....	23
Figure 13: Blocked Access for Vehicle.....	24
Figure 14: Weekday Main Parking Lot Entrance Hourly Inflow and Outflow	24
Figure 15: Weekend Main Parking Lot Entrance Hourly Inflow and Outflow.....	25
Figure 16: Types of Roadways and Intersections around TUFL	27
Figure 17: Pedestrian Activities at TUFL Main Parking Entrance off Green Street.....	28
Figure 18: Pedestrian Activities at the Race Street Entrance	29
Figure 19: Bicycle Parking Near Race Street	30
Figure 20: Bicycle Parking Near TUFL Main Entrance	30
Figure 21: TUFL Drop off Boxes.....	31
Figure 22: Proposed Parking Layout	35
Figure 23: Proposed Bicycle and Pedestrian Improvements	36

LIST OF TABLES

Table 1: Previous Projects Related to Transportation and Parking at TUFL 7

Table 2: Usage of Levels of Parking Stalls (Thursday, December 6, 2007) 8

Table 3: Downtown Urbana Destinations..... 14

Table 4: Patrons’ Behavior Due to Unavailability of Parking 15

Table 5: Typical Durations of Library Visits 16

Table 6: Example Comments on Needs for Free Parking..... 18

Table 7: Comments on Drive up Book Return 19

Table 8: Comments on Existing Parking Facilities 19

Table 9: Comments on Pedestrian Safety Issues 20

Table 10: Parking Demand and Supply Summary for TUFL 26

Table 11: Average Daily Traffic on Major Roadways near TUFL 26

Table 12: Crashes with Injuries near TUFL (2007 – 2011)..... 28

1.0 Introduction

The Urbana Free Library (TUFL) is the public library of the City of Urbana, Illinois. The Champaign County Regional Planning Commission (CCRPC) was retained by The Urbana Free Library (TUFL) to conduct a comprehensive study on:

- Travel mode analysis of the current library users
- Issues and opportunities related to travel to the library
- Parking demand, supply, and management analysis for the library users

The study was commissioned to collect information on issues and opportunities related to travel modes, parking supply, demand and management because of the library's expansion in 2005 to a Gross Floor Area (GFA) of 50,000 square feet and anticipated additional expansion in the future.

1.1 Report Organization

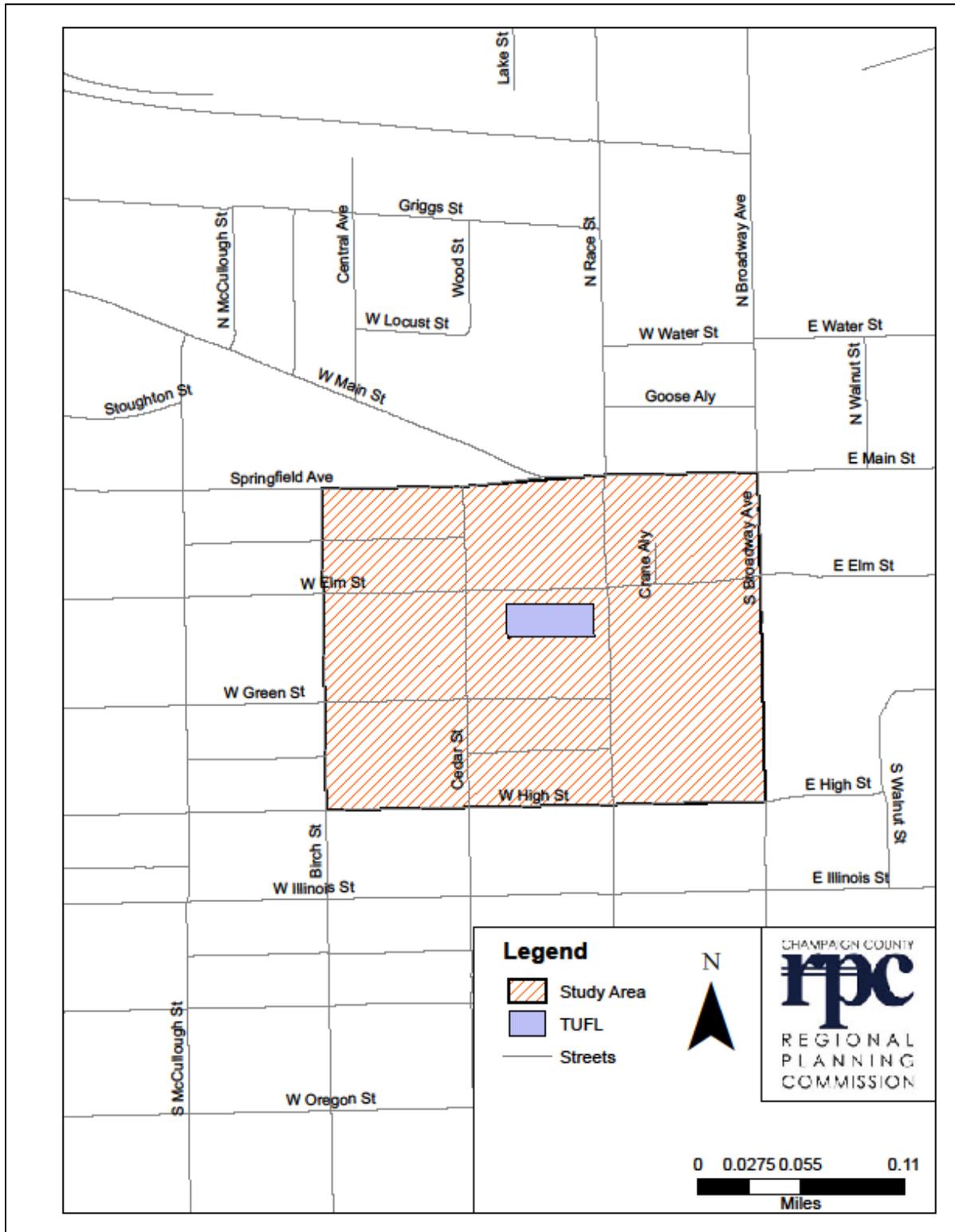
This report is organized as follows:

- Chapter One – Introduction
- Chapter Two – Literature Review – This chapter is a review of previous studies related to TUFL's expansion, parking supply and demand, and library users' surveys.
- Chapter Three – Library Users Survey – This chapter focuses on the findings of a survey designed for the library patrons. The purpose of the survey was to gather information on issues and preferences regarding traveling to and from TUFL.
- Chapter Four – Existing Conditions Analysis – This chapter discusses existing parking supply, demand, and management practices of TUFL. Traffic flow characteristics and pedestrian and bicycle facilities in the TUFL study area are also discussed.
- Chapter Five – Findings and Recommendations – This chapter documents important findings of the study and offers appropriate recommendations.

1.2 Study Area

Figure 1 shows the study area boundaries. As can be seen in Figure 1, study area boundaries extend one block from TUFL.

Figure 1: Study Area



2.0 Literature Review

The purpose of this review is to provide a general overview of previous studies which addressed transportation and parking issues for TUFL. Table 1 lists major previous projects related to transportation and parking issues for TUFL.

Table 1: Previous Projects Related to Transportation and Parking at TUFL

Project/Study Title	Completing Agency	Completion Year
TUFL Parking Survey	TUFL	2005
Downtown Parking Study	Rich and Associates, Inc.	2008
TUFL Patron Survey	CIRSS, University of Illinois	2009
TUFL Cardholder Survey	TUFL	2011

2.1 TUFL Parking Survey, TUFL, 2005

This survey was administered by TUFL and the survey mode was paper based. The survey form was distributed at the circulation desk. The survey had 10 questions and 185 patrons completed the survey. Major findings from the survey include the following:

- 85% of respondents drove to TUFL
- 87% of respondents who drove to TUFL parked at the TUFL metered lot
- 8% of respondents faced trouble finding a place to park
- 34% of respondents did not find library parking satisfactory
 - 56% of them thought there was not enough parking
 - 44% of them did not like the parking meters

2.2 Downtown Parking Study, Rich and Associates, Inc., October 2008

This study was sponsored by the City of Urbana for examining parking adequacy and identifying changes needed to improve parking conditions in the downtown. Major findings of the study include:

- City of Urbana has a surplus of parking for current (2008) demands but there are some areas with short term parking shortages.
- Within 10 years there would be a shortage of up to 1,300 parking stalls.

- TUFL was in Block 4 of the Downtown Urbana parking map. Peak occupancy at TUFL metered parking lot was 85% on a typical weekday between 1pm and 3pm.
- Total number of off-street parking stalls in Block 4 was 48 which included 40 public parking stalls, 2 handicapped parking stalls, and 6 private parking stalls.
- Table 2 shows usage levels of parking stalls at TUFL main parking lot off Green Street (total number of stalls: 48) on a typical weekday (Thursday, December 6, 2007).

Table 2: Usage of Levels of Parking Stalls (Thursday, December 6, 2007)

Time	# of Occupied Stalls	% Occupied
9AM-11AM	24	50
11AM-1PM	36	75
1PM-3PM	41	85

- Currently TUFL parking lots have a surplus of 25 parking stalls. This calculation was based on the assumption that for Block 4 there is no parking requirements and TUFL’s parking demand was assumed to be 50% of the demand of office buildings. Office buildings parking demand was 2.85 parking stalls per 1,000 square feet floor area.

2.3 TUFL Patron Survey, Center for Informatics Research in Science and Scholarship (CIRSS), University of Illinois, February 2009

This survey was designed by the University of Illinois Library Research Center (LRC) with help from TUFL for assessing library users’ opinions about current and future library services. The survey mode was paper survey and distributed via mail service. A total of 367 responses were received and the response rate was 31.6%.

Major findings from the survey related to TUFL parking and transportation include the following:

- 82% of respondents sometimes/often arrive at TUFL by car
- 82% of respondents’ typical length of library stay was an hour or less
- 11.7% of respondents often had difficulty in finding library parking
- 42% of respondents sometimes had difficulty in finding library parking
- 63% of respondents parked in a nearby lot when no library parking was available
- 28% of respondents kept circling the lot until a space opened up when no library parking was available

2.4 TUFL Cardholder Survey, 2010-2011

This survey mode was online and conducted by TUFL. This survey identified the following issues related to the parking and transportation at TUFL:

- Respondents preferred more free and spacious parking.
- Free parking is one of the attractions for the patrons who preferred going to the Champaign Public Library.

3.0 Survey among Library Patrons

This chapter provides a summary of the survey conducted among the library patrons designed to collect information on issues and opportunities related to travel modes; parking supply, demand, and management.

3.1 Survey Design

The survey was carefully designed by the CCRPC staff with the help of TUFL and the City of Urbana planning staff. The survey was self-administered and had 15 questions. The majority of the survey questions were closed questions (a list of acceptable responses were provided). Closed questions help respondents reliably answer the questions when response alternatives are given. There was one open ended question in the survey intended to allow respondents to voice individual concerns regarding parking at and transportation to the library. The survey questions can be found in Appendix A.

The survey sample frame included all adult and high school TUFL cardholders. The selected survey was administered online, as TUFL has a comprehensive list of email addresses of the library patrons that provided them with their card information. Moreover, the survey link was provided on TUFL website for cardholders who did not provide their email address, and TUFL offers free internet for its patrons.

An invitation for completing the survey was sent to 11,678 patrons of TUFL via email with a brief introductory message. Approximately 5% of the invitations were undelivered (bounced or unsubscribed). A minimum sample size for survey responses was calculated based on a 95% confidence level (which indicates level of reliability; 95% confidence level means one can be 95% certain) and a variance of 0.5. The minimum number of responses needed for analysis was 371. Responses were received from 1,759 TUFL patrons.

The first survey invitation was sent to TUFL patrons on Monday, April 22, 2013. A reminder was sent on Monday, April 29, 2013, and the online link for the survey was removed on Monday, May 6, 2013.

3.2 Main Findings

The main findings of the survey include the following:

- The majority of the respondents (**72%**) typically visit the library by using an automobile.
- Approximately 8% of respondents typically visit the library by walking, and 6% of the patrons visit the library by bicycling.
- **95%** of respondents who bike to TUFL park at the designated bicycle parking south of the library building.

- **88%** of respondents think having convenient drive up book return is either important or very important to them.
- **69%** of respondents think having free parking at the library is either important or very important to them.
- **42%** of respondents combined their visit to the library with other destinations in Downtown Urbana most notably to a bank, the food co-op, grocery stores (e.g. Schnucks), and Lincoln Square Village.
- **64%** of respondents typically face at least some difficulties in finding parking spots while visiting the library.
- Approximately 4% of respondents turn around and visit another library as a result of difficulties in finding parking spots at TUFL.
- **47%** of the respondents' decision to visit TUFL was influenced (at least sometimes) by the lack of adequate parking at TUFL.
- **95%** of respondents' typical visits to TUFL last two hours or less.
- **75%** of respondents think TUFL should have additional parking for its patrons.
- Approximately 31% of respondents chose Lot A as their preferred future parking lot for TUFL, followed by Lot D (23%) and Lot F (22%).
- The highest percentage (42%) of responses was from the 25 to 44 age group, followed by the 45 to 64 age group (34%).

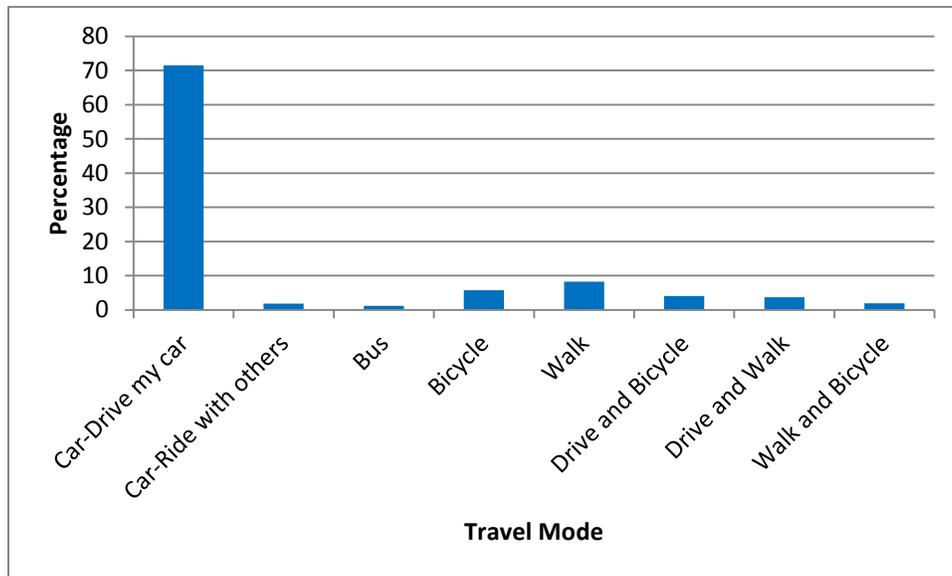
3.3 Survey Findings

This section summarizes the results from the survey. There were 15 questions in the survey. The following sections provide detailed analyses of the responses received from the library patrons.

3.3.1 Primary Travel Mode

The majority of the library patrons visit the library by using an automobile. As can be seen in Figure 2, approximately 72% of the respondents visit TUFL using their own cars. Approximately 8% of the respondents and 6% of the respondents visited TUFL by walking and biking respectively.

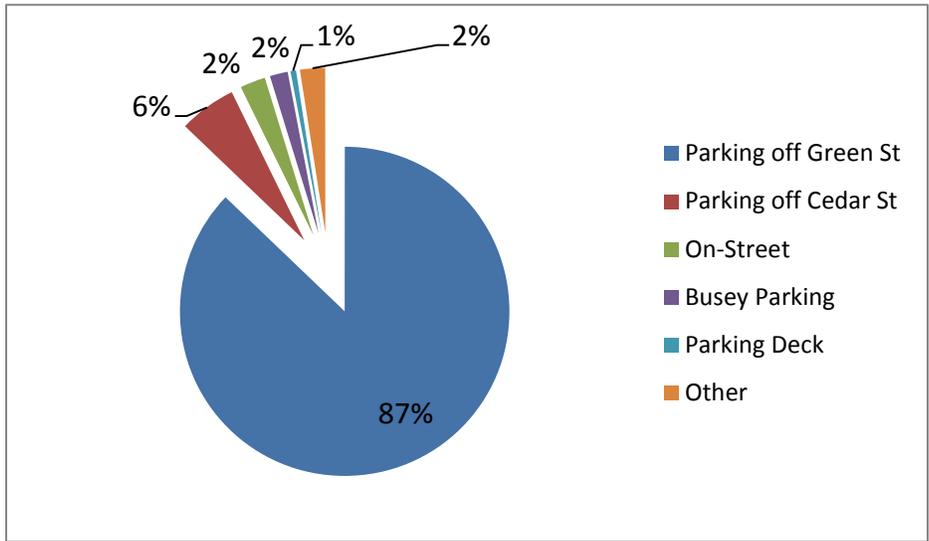
Figure 2: Patrons' Travel Modes



3.3.2 Patron Parking

87% of the library respondents who visit TUFL by driving their cars park at the library parking lot off Green Street. Figure 3 shows parking locations by percentage of the survey respondents.

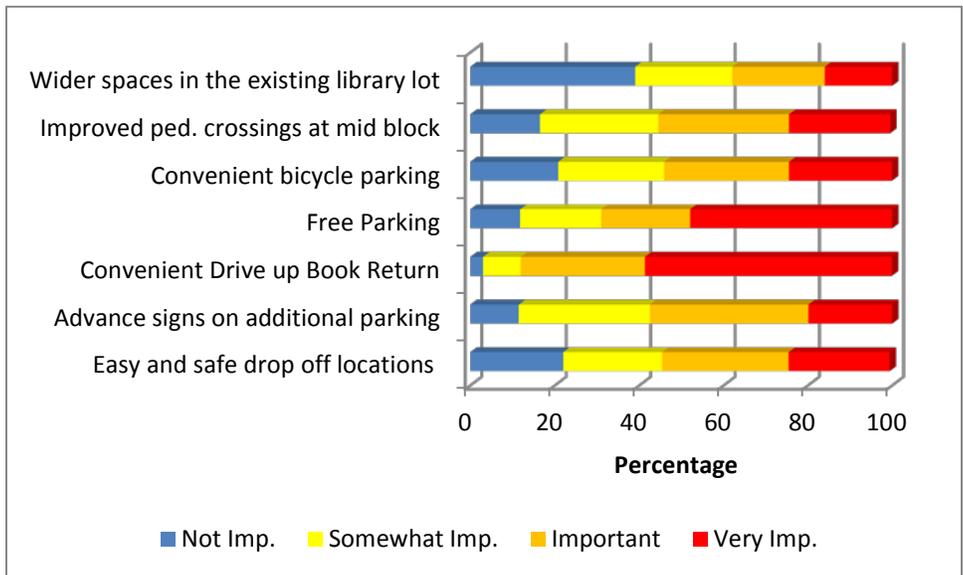
Figure 3: Patrons' Parking Locations



3.3.3 Important Issues Identified by Library Patrons

Question 4 of the survey was designed to garner patrons' priorities on issues related to vehicle and bicycle parking, book return, passenger drop off, and pedestrian safety. As can be seen in Figure 4, 88% of the respondents considered convenient drive up book return either as important or very important. Moreover, 69% of the respondents considered having free parking as either important or very important.

Figure 4: Patron Levels of Importance on Issues



3.3.4 Trip Chaining

Approximately 42% of the respondents combined their trips to the library with other destination(s) in Downtown Urbana. Table 3 shows major downtown destinations visited by the survey respondents combined with their trips to the library.

Table 3: Downtown Urbana Destinations

Downtown Destination	# of TUFL Patrons
Banks	102
Common Ground Food Co-Op	60
Lincoln Square	53
Schnucks	43
Grocery	29
Farmer's Market	19
Mirabelle	19
Strawberry Fields	13
Restaurants	12
Art Mart	10

3.3.5 Difficulty in Finding Parking for Library Patrons

Figure 5 shows the typical parking experience of the respondents at TUFL. As can be seen in Figure 5, approximately 64% of the respondents face at least some difficulties in finding parking spots while visiting the library.

Figure 5: Difficulty in Finding Parking

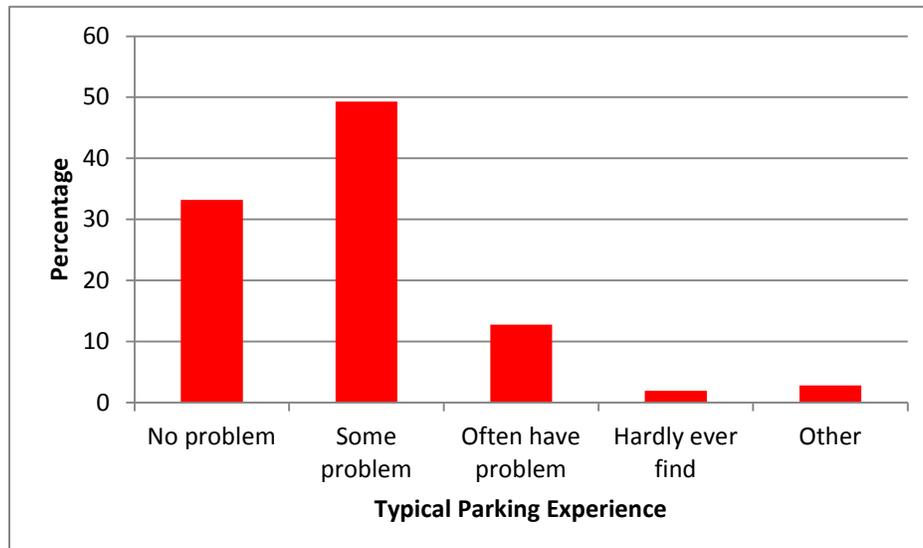


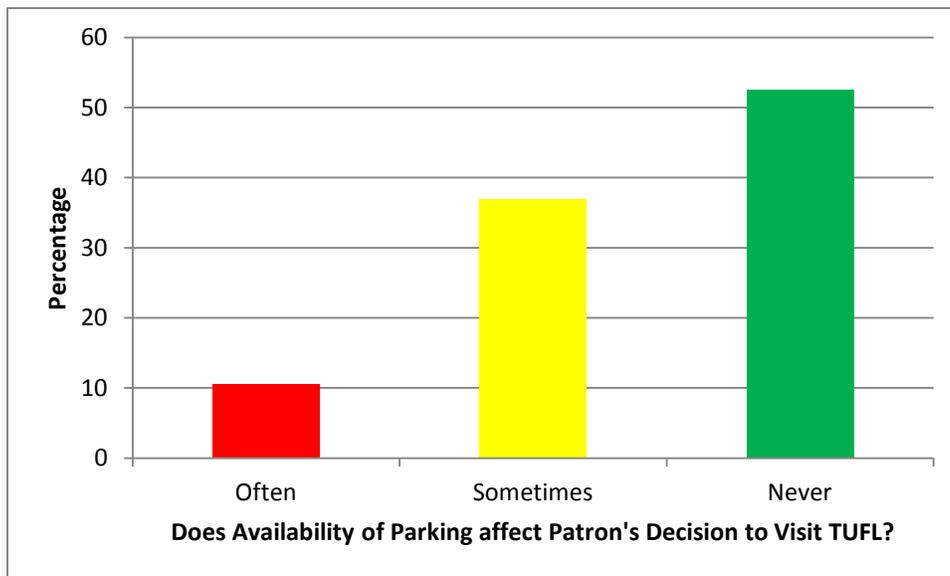
Table 4 shows typical respondent behaviors when a parking space was not available at TUFL parking lot. As can be seen in Table 4, approximately 4% of respondents decided to visit another library.

Table 4: Patrons’ Behavior Due to Unavailability of Parking

Patron Behavior	Percentage
Circle the parking lot until a space opens up	20.4
Park one or two blocks away	39.6
Park at nearby business parking	11
Leave and return later	16.8
Visit another library	3.8
Other	8.4

Figure 6 shows the impact of the availability of parking at TUFL on respondents while considering a visit to the library. Approximately 52.5% of respondents never considered availability of parking as a factor of influence for their visit to the library. However, 47% of respondents’ decision to visit TUFL was influenced (at least sometimes) by the availability of parking at TUFL.

Figure 6: Impact of Parking Availability on Patrons’ Trip Decisions



3.3.6 Duration of Library Visit

Table 5 shows the typical duration of a library visit for the library patrons. As can be seen in Table 5, most of patrons' (95%) typical visit to the library last less than 2 hours.

Table 5: Typical Durations of Library Visits

Duration of Visit	Percentage
30 minutes or less	39.7
30 minutes to 2 hours	55.2
2 to 4 hours	4.6
More than 4 hours	0.6

3.3.7 Needs for Additional Parking

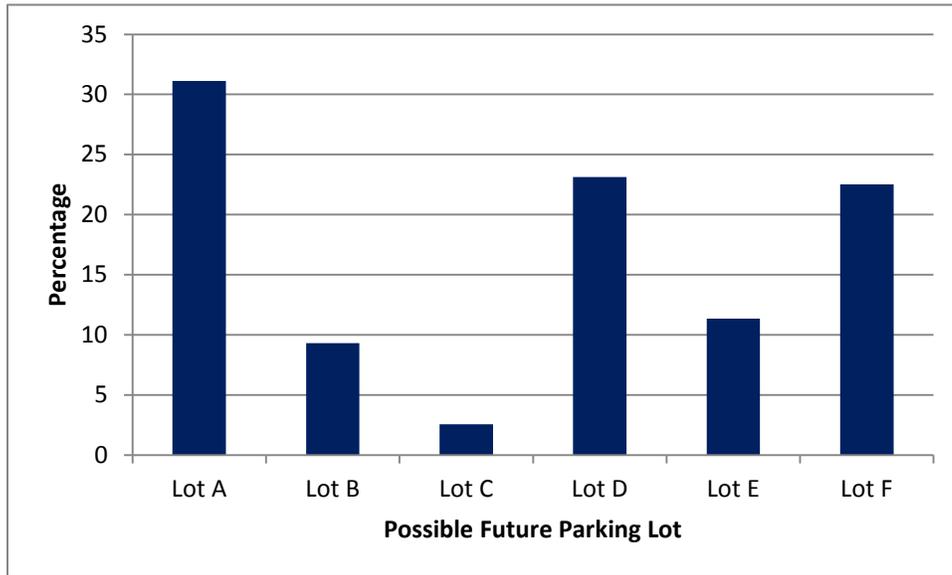
Approximately 70% of the respondents thought TUFL would need additional parking for its patrons. The survey provided some possible locations for TUFL patrons' parking. Figure 7 shows the locations included in the survey.

Figure 7: Possible Future Parking Lots



Figure 8 shows preferred parking locations selected by the survey respondents. As can be seen in Figure 8, parking lots closer to TUFL were more preferred by the respondents. Approximately 31% of respondents chose Lot A as their preferred future parking lot for TUFL, followed by Lot D (23%) and Lot F (22%). Lots B, D, and F are privately owned and Lot E is owned by the Cunningham Township.

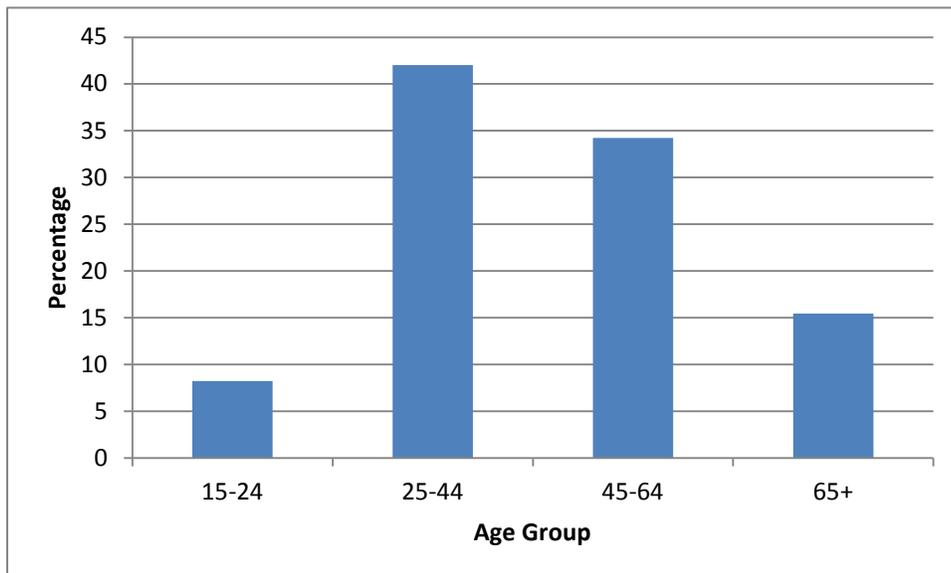
Figure 8: Preferred Parking Lots



3.3.8 Survey Respondents' Age Distribution

Figure 9 shows the age distribution of survey respondents. The highest percentage (42%) of responses was from the 25 to 44 age group, followed by the 45 to 64 age group (34%).

Figure 9: Age Distribution of Survey Respondents



3.3.9 Patrons' Comments

Question 12 of the survey was an open question where survey respondents were requested to provide comments on their concerns regarding parking and transportation to the library. Comments were provided by 442 respondents. Analysis of respondents' comments showed that the comments were mainly on the following issues:

- Needs for free parking
- Drive up book return
- Issues with existing parking facilities
- Signs and markings
- Pedestrian facilities and safety

The majority of the comments received from the survey respondents were related to parking. Table 6 shows examples of some comments received from the patrons regarding needs for free parking.

Table 6: Example Comments on Needs for Free Parking

Comments
Cancel paid parking. Champaign Library has free parking. Library is not a profit making business.
Champaign Library does not charge for park. How about y'll stop being parasites and quit leaching off of us.
It is very important to have free parking at the Urbana FREE library.
It really stinks to have to pay for parking. This is the one thing that keeps us from really getting involved at the library.
For me paying for parking is the most inconvenient aspect of the library. I frequently visit the Champaign library instead of Urbana for this reason.

Table 7 shows some comments from the survey respondents regarding issues with drive up book return.

Table 7: Comments on Drive up Book Return

Comments
Book drop off and people drop off are in the same location. Move drop off to north side of the library.
Currently the exterior drop boxes are very difficult to reach without causing damage to one's car. The boxes have the wrong height and poorly installed.
The book return bins are horribly designed. It is impossible to get close enough without having to open my car door.
The drop off bins in the parking lot are totally inadequate. The openings are too high.
The book drops are not designed for passenger cars but seem targeted for high-rise trucks and SUVs.

Table 8 shows some comments from the survey respondents regarding issues with existing parking facilities.

Table 8: Comments on Existing Parking Facilities

Comments
An additional handicapped space would be nice. The existing ones are frequently full.
Backing into parking space is much safer when exiting the lot. Please eliminate the "Pull in only" requirement.
Compact car posted signs not enforced.
Frequently people with minivans park in the compact car section.
I usually hold my breath watching patrons pulling in and out of spaces.

Table 9 shows some comments from the survey respondents regarding issues with pedestrian safety.

Table 9: Comments on Pedestrian Safety Issues

Comments
Crossing Green at Cedar on foot is challenging.
I feel like there should be a walkway alongside the driveway for book drop off.
I have a lot of concerns for pedestrians coming out of the library and walking across Race Street not [at] the Elm or Green Street corner.
North and westbound traffic on Race and Elm seem to often not notice pedestrians crossing.
Sidewalks in the area of the library need repair.