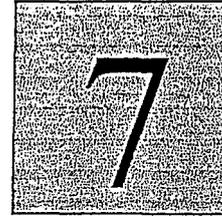


Parking Study

Transportation and Parking



INTRODUCTION

Identifying issues and concerns for downtown also must include those of transportation and parking. The safety and convenience of travel is critical for maintaining economic viability. Merchants want their customers to be able to get to their store or office in the most convenient manner possible, and customers desire a parking space close to the facility they intend to use. Therefore, it is necessary to study these issues to determine if the needs and desires of both merchants and customers are being satisfied.

Discussing the original character of American commercial districts provides a better understanding of the nature of transportation conditions. Most central business districts were established long before the invention of the automobile, and, therefore, they were designed primarily to accommodate pedestrians. The fundamental purpose remains the concentration of commercial and retail activities, but our method of transportation has changed dramatically. We now are a society highly dependent on automobiles, and our business districts must be altered to reflect this dependency. Today, America's "Main Streets" must be redesigned to accommodate all modes of transportation so that the auto and pedestrian can safely share this community space.

First, transportation issues are discussed to identify primary concerns and to make recommendations. Then, parking conditions are studied. Understanding the conditions and nature of parking facilities is important because of the role the automobile plays in our lives and its close connection to economic activity.

TRANSPORTATION ISSUES

An adequate circulation system ensures safe and efficient travel of automobiles and pedestrians. Two primary concerns affecting the local transportation pattern were identified at focus group meetings. First, heavy congestion is created by commercial truck traffic at the intersection of U.S. Highway 24 and Kansas Highway 63. Second, backing out of angled parking spaces onto U.S. 24 is a serious safety hazard.

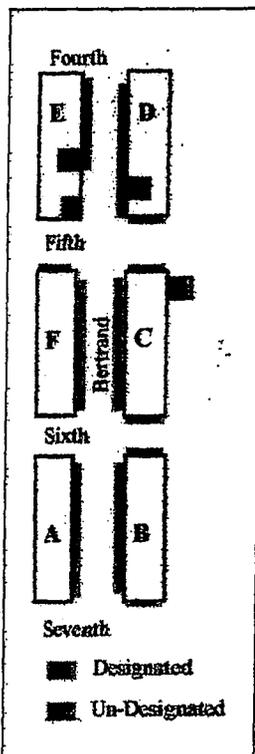
Chapter Sections:

- *Introduction*
- *Transportation Issues*
- *Parking Study*
- *Conclusions*
- *Recommendations*

Major transportation issues:

- *Heavy congestion created by commercial truck traffic at the intersection of U.S. 24 and K-63*
- *Backing out of angled parking spaces onto U.S. 24*

Backing onto U.S. 24 is made difficult because of narrow street width, the angle of parking spaces, speed-limit violations, and sight obstruction caused by other cars and trucks.



Map of the parking study area.

St. Marys falls short of the standard for adequate number of downtown parking spaces.

The Kansas Department of Transportation has jurisdiction over these roads, and it has no plans for improvement and does not anticipate rerouting either highway. However, traffic-calming devices placed at the intersection would help alleviate some congestion.

The second concern is a result of several factors: narrow street width, the angle of parking spaces, speed-limit violations, and sight obstruction caused by other cars and trucks. These conditions make it difficult for drivers of small and mid-sized cars to determine when it is safe to back onto U.S. 24. "Fender-benders" and other minor accidents are products of this unsafe condition.

PARKING STUDY

Study Area

The area studied is defined as those parking spaces along Bertrand Street (U.S. 24) between Fourth and Seventh streets. Also included are those spaces located within one-half block of Bertrand, including the grocery store and bank parking lots. The parking area immediately north of Railroad Park is not included in the parking study area.

Block A designates those spaces between Sixth and Seventh streets on the north side of Bertrand. Block B is between Sixth and Seventh streets south of Bertrand. Between Fifth and Sixth streets are Block C, south of Bertrand, and Block F, north of Bertrand. Blocks D and E are between Fourth and Fifth streets, south and north of Bertrand, respectively.

Existing Parking Conditions

Various elements help determine the adequacy of existing parking facilities. These are discussed in the following study, including existing parking availability, types of parking facilities, and disabled spaces.

Existing Parking Supply. A town with a population of 2,548 should have at least 85 downtown parking spaces per 1,000 residents. Therefore, St. Marys should have approximately 212 spaces. However, the number of spaces in the study area is 185. This suggests that St. Marys falls short of the adequate number of parking spaces according to the previously mentioned standard. The anticipated population growth, as discussed in the Population chapter, likely will increase the demand for additional parking facilities.

THE STUDIES

Table 7-1 shows the number of parking spaces available per block. Block C, the block between Fifth and Sixth streets and south of Bertrand, has the highest number of available spaces (53). It is important to note that the businesses in this block are heavy traffic generators, such as the grocery store, variety store, and restaurant. This block is likely to have a high rate of usage, as indicated by a high occupancy rate.

Table 7-1. *Parking spaces by block.*

Block	Spaces	Percent of All Spaces
A	16	8.65%
B	30	16.22%
C	53	28.65%
D	33	17.84%
E	21	11.34%
F	32	17.30%
Total	185	100.00%

Source: February 1997, *Parking Survey, KSU*

Types of Parking Spaces. The types parking facilities range from angled parking to parallel parking to parking lots. Most of the parking spaces downtown are angled parking, defined as any parking space that is not parallel to the curb or driving aisle. These spaces are located primarily on Bertrand and most are marked (designated) spaces. However, the eastern portion of Block D has informal (un-designated) angled parking, which is defined as parking facilities or spaces that are unmarked but recognized as legal. Informal parallel spaces are measured at 20 feet per space, and informal angled spaces are measured at 10 feet per space for the purposes of documenting available parking and recording occupancy rates.

Approximately 37 percent of all spaces in the study area are classified as informal. Most of these are unmarked parallel parking. For example, Block A, in front of Railroad Park, has unmarked parallel spaces. Refer to the study area map for the locations of non-designated spaces.

Other parking facilities include parking lots owned by private businesses. For example, the grocery store has 12 marked angled spaces and two parallel spaces in a lot behind the store; the bank in Block D has nine marked angled spaces; and the convenience store on Block E has four marked spaces and several additional informal spaces. The amount of available parking is determined by identifying the highest level of occupancy during the two days of the study and designating that as its capacity. This figure does not include parking directly in front of gas pumps.

Most downtown parking is in the form of angled parking spaces.

Approximately 37 percent of all spaces in the study area are classified as informal, or undesignated.

Another informal parking facility included in the study is located at the corner of Fifth Street and Bertrand. The land use is a small eating establishment with seasonal operations (closed during winter months). Due to the intensity of use on this lot, it was included in the study. Similar to the convenience lot, the number of available parking spaces was determined by identifying the highest occupancy during the two days of study.

The Americans with Disabilities Act (ADA) of 1990 encourages adequate designated parking for disabled persons. The suggested standard is at least one designated space per block, preferably located at street corners. However, to accurately assess the need of parking for the disabled, a more thorough local audit is required.

St. Marys has an adequate number (six) of designated spaces for the disabled in the study area. Appropriately, Block C, with the most traffic generators, has two marked disabled spaces. Both are located at the east end of the block and properly placed at the corner. Block D has two spaces, one on the street and one in the bank parking lot. Blocks B and F each have one disabled space. Block A does not have a marked disabled space, which does not pose a significant problem since there are no retail or commercial activities located on this block. Block E, consisting mostly of unmarked spaces, does not have a marked disabled space.

Parking Regulations. Enforcement of parking regulations is essential for the efficient use of downtown parking facilities. Parking in the business district is limited to two hours, and fines range from \$10 to \$50, depending on the type of violation. Only two areas, south of Bertrand on both sides of Fifth Street, have posted signs declaring the parking regulations. According to city officials, parking regulations generally are obeyed. However, parking regulations are not strongly enforced on a daily basis, but rather as a result of complaints about limited parking availability.

Parking Occupancy Survey

Surveys of downtown business owners and results of focus-group meetings indicate a general perception that parking availability is limited. A closer look at the parking conditions helps identify potential parking problems and may provide an explanation for the perceived problems. This special study explores occupancy, turnover, duration, and peak demand. Occupancy and turnover indicate the intensity of parking activity in the study area. Duration is the average length of time that cars are parked in a specific parking space, and peak demand is defined as the hour with the highest level of

occupancy. Cars coming to St. Marys from outside the county also are identified.

Methodology. A parking occupancy survey involves counting the number of occupied spaces within the study area at regular intervals for a given period of time. Downtown parking activities are likely to differ on weekdays and weekends; therefore, surveys should be conducted to reflect this difference. The parking occupancy survey for St. Marys was conducted on Saturday, February 15, 1997, and Wednesday, February 19, 1997. The area was studied in 30-minute time intervals between the hours of 9 a.m. and 5 p.m. each day.

License numbers were recorded to indicate an occupied space. This not only identified the space as occupied, but also allowed the surveyors to track duration of stay, identify areas of high turnover, and identify non-local plates. It is important to note that this survey, conducted during a mid-winter month, does not account for seasonal fluctuations or parking activities during special events.

Parking Occupation. Parking occupation is determined by identifying the number of cars in the study area for an entire day and dividing that figure by the total number of available spaces. As expected, Wednesday had a significantly greater turnover rate than Saturday. The total number of cars on Wednesday was 692, resulting in a turnover rate of 3.74. In comparison, Saturday's total number of cars was 546, providing a turnover rate of 2.95. This implies that not only was there a larger number of cars in the study area on Wednesday, but that, on average, each space was occupied by nearly four cars throughout the day, compared to slightly less than three cars per space on Saturday.

Figure 7-1 shows the occupation levels for both days. On Saturday, the peak demand was at 11 a.m., with a total downtown occupation of 50.27 percent. Notice that overall occupation declines during the afternoon as compared to the morning hours. The occupation rate is considerably higher on Wednesday, with all but four 30-minute intervals below 50 percent, two of which are late-afternoon time intervals. Peak demand was between noon and 1 p.m., with 57.84 percent at noon and 55.68 percent at 12:30.

Some blocks have higher occupation levels than others, as shown in Figure 7-2. For example, Block F (between Fifth and Sixth streets and north of Bertrand) had the highest occupation levels on Wednesday, ranging from 56.25 percent to 93.75 percent during peak demand. Block C, on Wednesday, also had high levels of occupancy, with a high of 64.15 percent at 12:30 p.m.. This reflects the number of generator businesses on this block. Although the same blocks, C

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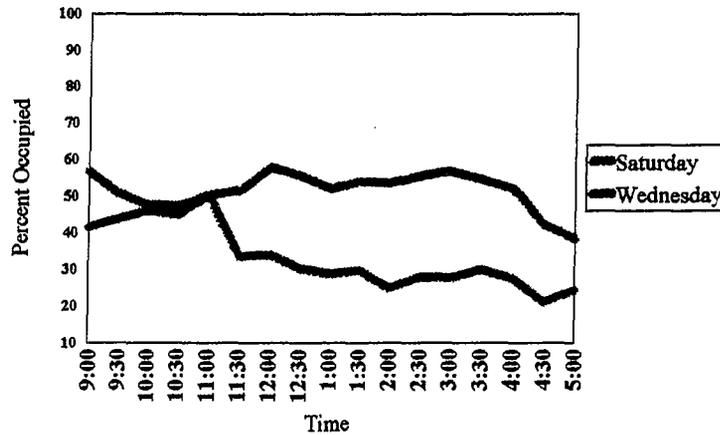
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On Saturday, peak demand was at 11 a.m., while the peak demand on Wednesday occurred between noon and 1 p.m.

Block F, between Fifth and Sixth streets and north of Bertrand, had the highest occupation levels on Wednesday, ranging from 56.25 percent to 93.75 percent.

Total Downtown Occupation



Source: February, 1997 Parking Survey, KSU

Figure 7-1. Total downtown parking occupancy.

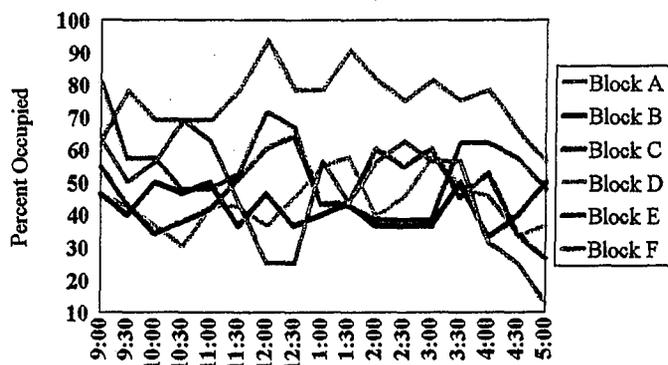
and F, have the highest occupation on Saturday, they are considerably lower, with highs of 56.60 percent at 10:30 a.m. and 59.38 percent at 11 a.m.

Parking duration studies identify the length of time cars are staying in individual spaces. This type of study may help determine the reasons for the perceived parking problems.

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Occupation by Block

Wednesday



Source: February, 1997 Parking Survey, KSU

Figure 7-2. Downtown parking occupation by block.

For example, if a car is in a space for more than five hours, it is most likely that of an employee of a downtown business. This eliminates spaces that could be used by customers. If these spaces are consistently filled, people will associate the business district with a lack of available parking, discouraging residents from shopping at and using those services and facilities. The resulting loss of customers could cause distress for downtown merchants. Therefore, it is suggested that alternative parking facilities be identified for employees so that "on-street" spaces are available for customers.

Figure 7-3 shows the number and percentage of cars that stayed in their space for more than one hour. Slightly more than 20 percent of all cars stayed in the space for more than one hour on Saturday and 23 percent on Wednesday. On Saturday, one- and two-hour stays were most common. These duration levels were comparable to Wednesday; however, the number of cars staying more than five hours is considerably higher on Wednesday. Much of this can be attributed to employees parking on Bertrand, especially on the north side between Fifth and Sixth streets.

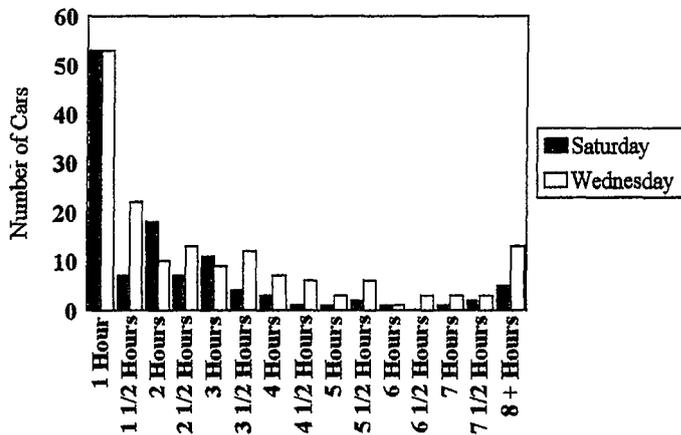
Out-of-County Plates. Recording license plate numbers during the parking study helps identify who is shopping in the businesses and using the services located in St. Marys. Local and non-local users were determined by documenting the county on the license plates.

More cars from outside the county were present on the weekday than on the weekend day, 114 and 109, respectively. Figure 7-4 indicates

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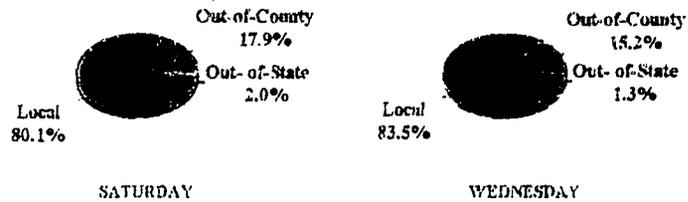
Parking Duration



Source: February, 1997 Parking Survey, KSU

Figure 7-3. Downtown parking duration.

Local and Non-Local Plates



Source: February, 1997, Parking Survey, ISU

Figure 7-4. Parking with reference to local and non-local plates.

that fewer non-local cars were present on Wednesday (16.46 percent) than on Saturday (19.96 percent). This could reflect a greater general tendency toward out-of-town travel (to visit friends and relatives or to shop) on weekends, whereas weekday travel is more typically limited to daily business activities.

Similarly, more cars from out-of-state were using downtown on Saturday than on Wednesday. Out-of-state cars from Missouri, California, Florida, and Michigan were observed, with Missouri accounting for most (six) of the vehicles.

The most common out-of-county Kansas plates on both days were those from Shawnee and Wabaunsee counties, though Jackson County also was well-represented.

The most common out-of-county Kansas plates on both days were those from Shawnee and Wabaunsee counties, though Jackson County also was well represented on both Saturday and Wednesday. These counties are in close proximity to St. Marys, and residents of these counties are likely to drive to St. Marys for certain services and products. This is a good sign for St. Marys and the central business district's economic viability, and it suggests a considerable market area for St. Marys services. This is discussed further in the Economics chapter.

CONCLUSIONS

Congestion at the intersection of U.S. 24 and K-63 continues to be a primary concern.

The transportation and parking systems do appear to have some threats and challenges. Congestion at the intersection of U.S. 24 and K-63 continues to be a primary transportation concern. The most critical safety hazard is attempting to back-out onto to U.S. 24. The parking study reveals an adequate amount of parking and no significant problem with parking availability. However, there are a number of employees parking in areas that should be available for customers.

RECOMMENDATIONS

Transportation

Enforce Speed Regulations. The local police department is encouraged to strictly enforce local speed limits. These limits were adopted for safety reasons and should be enforced for the same purpose. Since Bertrand is a highway (U.S. 24), it is difficult to encourage travelers to slow down when coming through town. The best way to ensure compliance with set speed limits is to have clearly posted regulations and to ticket violators appropriately. Enforcement of these limits will create a safer environment for pedestrians and help alleviate problems pulling onto U.S. 24.

Create a Safe Environment for Pedestrian Traffic. Pedestrian crossings currently lack high visibility. They should be repainted to ensure that drivers are aware of crossings and have adequate time to stop for pedestrians.

Parking

Enforce Existing Parking Regulations. Lack of enforcement makes regulations ineffective. The police department should be in charge of identifying parking regulation violators and of dispensing violation notices.

Discourage Employee Parking on Bertrand. When storefront parking spaces are filled by employees, they are unavailable for potential customers. Therefore, employees should park in back of buildings or in designated employee parking lots. One existing lot that may be appropriate for employee parking is the lot north Railroad Park.

SOURCES

Davies, S., Love, K., and Ziegler, S. 1981. *What do People Do Downtown: How To Look At Main Street Activity*. Washington, D.C.: National Trust for Historic Preservation.

Glisson, L. S. 1994. *The Parking Handbook for Small Communities*. Washington, D.C.: National Trust for Historic Preservation and The Institute of Transportation Engineers, Washington, D.C.

The parking study reveals an adequate amount of parking and no significant problem with parking availability.

Transportation Recommendations:

- *Enforce speed regulations*
- *Create a safe environment for pedestrian traffic*