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ABSTRACT

In 1981, a study of the costs to students of commuting to community colleges in Illinois was conducted as an aid to analyzing student financial need policies, to helping students make informed decisions about college attendance, and to analyzing tuition policies related to student costs. A survey instrument was administered to 2,847 students from seven representative community colleges, requesting information on campus attended, time of attendance, commuting distance, number of trips made to campus, and costs of car pooling and using public transportation. The study revealed that: (1) the average cost of commuting was \$1,160 per academic year for full-time students; \$381 for students taking one course; and \$624 for students attending two courses; (2) the average commuting cost for all students was \$996 per year; (3) weekly commuting costs were \$31.57 for students attending a main campus only; \$21.18 for those attending an off-campus center only; and \$37.67 for those attending both main and off-campus centers; (4) weekly commuting costs were \$34.06 for day students, \$15.77 for evening students, and \$36.87 for those attending both day and evening courses; and (5) average commuting costs were \$32.68 for those driving a personal vehicle, \$8.93 for car poolers, and \$13.07 for those using public transportation. Policy implications of the findings and the survey instrument are included in the report.  
(DAB)

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A STUDY OF COMMUTING COSTS AT SEVEN  
ILLINOIS PUBLIC COMMUNITY COLLEGES

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## INTRODUCTION

Public community colleges in Illinois are by design commuter institutions. These colleges were created so that there would be a community college within commuting distance of each citizen within the state. At most community colleges, either all or a very large majority of the students commute each day. Hence, commuting costs make up a significant part of the student's total cost of attending a community college.

Accurate data on commuting costs of community college students are needed (1) for an analysis of the Illinois State Scholarship Commission (ISSC) policies regulating commuting costs in determining a student's financial need, (2) for an understanding of the total student cost of attending a community college, and (3) for policy analyses of tuition and other issues that are related to student costs. Financial aid need analyses typically include tuition and fees, room and board for on-campus resident students, books and supplies, miscellaneous personal expenses, and transportation for commuters. Controversy exists over how costs affecting all educational sectors are defined and measured; however, measurement of commuting costs affect the community college student budget more because of the distance students travel to attend college.

Availability of current data on commuting costs can also be useful in helping students to make a decision about attending college and perhaps reduce the rate of attrition. Alexander Astin's 1975 college dropout study indicated that the second most frequent reason cited for withdrawal from college was financial difficulties.<sup>1</sup> William Hyde's analysis of factors impacting student access at community colleges showed that the distance the students lived from a community college was inversely related to enrollment rate.<sup>2</sup> Hence, for many students the decision to attend college, the choice of college, and the ability to remain in college depend on a realistic approach to and understanding of educational costs.

1. Alexander W. Astin, "Preventing Students from Dropping Out" (San Francisco: Jossey-Bass, 1975).

2. William Hyde, "A New Look at Community College Access" (Denver: Education Commission of the States, 1982) pp. 66-69.

## PURPOSE OF THE STUDY

This study was conducted to provide current information on costs of commuting to attend community colleges in Illinois to students, college personnel, and state officials. More specifically, the objectives of the study were:

1. To determine the average commuting costs of full-time students attending seven selected community colleges in Illinois.
2. To determine the average commuting costs of part-time students attending seven selected community colleges in Illinois.
3. To determine the commuting costs of community college students attending classes at off-campus locations only, attending the main campus only, and attending both main campus and off-campus locations.
4. To determine the commuting costs of community college students attending evening classes only, attending day classes only, and attending both day and evening classes.

## RESEARCH DESIGN

The study utilized a survey completed by the students. The survey instrument was pilot tested with 100 students in Illinois public community colleges. The results of the pilot provided suggestions regarding readability and item clarity which resulted in revisions that were incorporated into the final questionnaire. A copy of the survey is included in Appendix A.

Seven community colleges volunteered to participate in the study. These seven colleges were representative of the 52 public community colleges within Illinois. Of the seven colleges, one was an urban college in Chicago, one a large suburban college, one a very rural college with a large geographic area, and one college each from northern Illinois, western Illinois, and central Illinois.

The questionnaire was then administered by each of the seven community colleges to all students enrolled in classes meeting at 10:00 a.m. and at 7:00 p.m. on a specified day during the fall term of 1981. Table 1 on the next page shows the number of students by college who responded to the survey and provided all essential information.

Table 1

NUMBER OF STUDENTS PROVIDING USABLE RESPONSES  
BY COLLEGE AND ENROLLMENT STATUS

<u>College</u>	<u>Enrolled in One Class</u>	<u>Enrolled in Two Classes</u>	<u>Enrolled in Three or More Classes</u>	<u>Total Students</u>
Black Hawk College-Quad Cities	82	44	133	259
City Colleges of Chicago - Loop	48	48	357	453
Danville Area Community College	16	57	365	438
Joliet Junior College	65	40	191	296
Lake Land College	39	34	349	422
Lincoln Land Community College	75	75	413	563
Rock Valley College	<u>34</u>	<u>45</u>	<u>337</u>	<u>416</u>
All Seven Colleges	359	343	2,145	2,847

METHOD OF CALCULATING DRIVING COSTS

A fixed cost per mile was utilized in this study to eliminate the errors caused by different assumptions that could be introduced into the results if each student were asked to report his/her driving cost and to ensure consistent comparisons among the seven colleges in the study.

Students who drove a personal vehicle were asked to report only the number of miles they commuted each week. Travel cost of 32.9¢ per mile based on findings of the Hertz Corporation of New York was applied to the miles reported to calculate the commuting cost. The 32.9¢ per mile was the 1981 cost of driving a compact car driven 10,000 miles per year and depreciated over a ten-year period.

The 1981 cost per mile of 32.9¢ rose 15.3 percent over the 1980 cost of 27.86¢ per mile for a compact car. Of the 32.9¢, the fixed cost is 20.1¢ per mile. Fixed cost includes depreciation (7.5¢), insurance and license/fees (7.8¢), and interest (4.8¢). The variable cost of 12.8¢ per mile includes maintenance and fuel (3.8¢) and other standard services (9¢).

OTHER COMMUTING COSTS

In addition to driving costs, this survey included commuting costs for car pooling and riding public transportation. Information on these costs was obtained directly from the students. In calculating total commuting cost, the cost of driving a personal vehicle was added to the cost of car pooling and/or riding public transportation for each student.

## COMMUTING COSTS FOR FULL-TIME STUDENTS

Each student was asked to indicate for how many courses he/she was enrolled at the community college. This enabled an analysis of the commuting costs for full-time students (students enrolled in three or more courses), part-time students taking only one course, and part-time students taking two courses.

The commuting costs for full-time students were higher than for part-time students because these students made more trips to the college each week. Many full-time students reported commuting to college five days each week.

The results showed that the average commuting cost of full-time students ranged from \$494 per academic year at Loop College to \$1,555 at Lake Land College. The wide range in average commuting costs is not surprising because Loop College is located in the densely populated loop area of Chicago, while Lake Land College is a sparsely populated large rural district of 3,456 square miles, including all or parts of fifteen counties. The average commuting cost of full-time students for all seven colleges was \$1,160 per academic year (32 weeks).

Table 2

AVERAGE COMMUTING COSTS OF FULL-TIME STUDENTS  
AT THE SEVEN COMMUNITY COLLEGES

<u>College</u>	<u>Cost Per Week</u>	<u>Cost Per Academic Year</u>
Black Hawk College - Quad Cities	\$32.26	\$1,032
City Colleges of Chicago - Loop	15.44	494
Danville Area Community College	41.85	1,339
Joliet Junior College	37.41	1,197
Lake Land College	48.60	1,555
Lincoln Land Community College	42.40	1,357
Rock Valley College	<u>32.82</u>	<u>1,050</u>
All Seven Colleges	\$36.25	\$1,160

Although average commuting distances and commuting costs give a good description of the typical student within community colleges of Illinois, averages greatly understate the actual commuting **distances** and commuting costs of a significant number of community college students.

It was not uncommon for students to commute from a distance of 50 to 76 miles from the college each day for five days each week. These students commuted from 500 to 760 miles per week at a cost of \$165 to \$250 per week for an annual academic year cost of from \$5,200 to \$7,000.



## COMMUTING COSTS FOR PART-TIME STUDENTS

The results of the survey confirmed that average commuting costs for part-time students were lower than the average commuting cost for full-time students. Part-time students reported that they make fewer trips to the college each week because they are enrolled in only one or two courses. The average commuting cost for part-time students was \$11.91 per week (\$381 per academic year) for part-time students enrolled in one course and \$19.50 per week (\$624 per academic year) for students enrolled in two courses.

Table 3 below compares the average commuting costs of students by the number of courses for which they were enrolled for each of the seven community colleges.

Table 3

AVERAGE COMMUTING COSTS OF PART-TIME STUDENTS  
AT THE SEVEN COMMUNITY COLLEGES

College	Part-time Students Enrolled in One Course		Part-time Students Enrolled in Two Courses	
	Per Week	Per Academic Year	Per Week	Per Academic Year
Black Hawk College-Quad Cities	\$16.34	\$523	\$18.90	\$605
City Colleges of Chicago-Loop	6.69	214	8.29	265
Danville Area Community College	8.65	277	17.12	548
Joliet Junior College	13.19	422	19.19	614
Lake Land College	7.82	250	30.79	985
Lincoln Land College	11.25	360	23.98	767
Rock Valley College	<u>13.79</u>	<u>441</u>	<u>19.33</u>	<u>619</u>
All Seven Colleges	\$11.91	\$381	\$19.50	\$624

## COMMUTING COSTS FOR ALL STUDENTS

The results showed that the average commuting costs of all students (full-time and part-time) ranged from \$440 per academic year (32 weeks) at Loop College in Chicago to \$1,389 at Lake Land College in Mattoon. The average commuting costs for all students from all seven colleges was \$996 per academic year. Table 4 on the next page shows the average commuting costs for all students for each of the seven community colleges in the study.



Table 4

AVERAGE COMMUTING COSTS FOR ALL STUDENTS  
AT EACH COLLEGE IN THE STUDY

<u>College</u>	<u>Average Commuting Cost Per Week</u>	<u>Average Commuting Cost Per Academic Year</u>
Black Hawk College - Quad Cities	\$24.95	\$ 798
City Colleges of Chicago - Loop	13.24	440
Danville Area Community College	37.42	1,197
Joliet Junior College	29.59	947
Lake Land College	43.40	1,389
Lincoln Land Community College	35.80	1,145
Rock Valley College	<u>29.80</u>	<u>954</u>
All Seven Colleges	\$31.14	\$ 996

COMMUTING COSTS BY TYPE OF ATTENDANCE AND MODE OF TRANSPORTATION

To reduce student commuting costs and commuting time almost all community colleges offer courses at several off-campus attendance centers within their districts. Table 5 on the next page compares the average commuting costs for students attending main campus only, students attending an off-campus center only, and students attending both the main campus and an off-campus attendance center. Commuting costs of students attending off-campus locations are significantly lower than for students attending the main campus. It must be pointed out, however, that most students attending off-campus attendance centers are part-time students who generally live closer to the off-campus location than the main campus.

Table 5 also shows a distribution of the average commuting costs by mode of transportation. These results show that public transportation and car pooling are significantly less expensive than driving a personal vehicle. Public transportation is not available for many students, however. Only 165 of the 2,847 students in the study (6 percent) reported car pooling.

Since some students had only public transportation costs, while others had both personal vehicle and either public transportation or car pooling costs, the combined total commuting cost shown in the last column of Table 5 is not the sum of the costs by the various modes but is the overall average commuting costs for this group of students.

Table 5

AVERAGE STUDENT COMMUTING COSTS PER WEEK BY  
MODE OF TRANSPORTATION AND TYPE OF ATTENDANCE

<u>Type of Attendance</u>	<u>Personal Vehicle</u>	<u>Car Pooling</u>	<u>Public Transportation</u>	<u>Combined Total</u>
Main Campus Only	\$35.26 N=2,033	\$ 8.56 N=150	\$12.66 N=455	\$31.57 N=2,493
Off Campus Only	\$22.09 N=171	\$ 7.29 N=7	\$12.90 N=35	\$21.18 N=202
Main Campus and Off Campus	\$39.96 N=136	\$17.38 N=8	\$10.06 N=29	\$37.67 N=152
All Students	\$32.68 N=2,340	\$ 8.93 N=165	\$13.07 N=519	\$31.14 N=2,847

COMMUTING COSTS BY TIME OF ATTENDANCE

This survey also asked students to indicate if they were attending day classes only, evening classes only, or both day and evening classes. Table 6 below shows the average commuting costs for students by time of attendance for each of the seven community colleges. These results indicate that students attending only evening classes experience the lowest commuting costs.

Table 6

AVERAGE COMMUTING COSTS OF ALL STUDENTS BY TIME OF  
ATTENDANCE AT THE SEVEN COMMUNITY COLLEGES

<u>College</u>	<u>Attended Day Only</u>	<u>Attended Evening Only</u>	<u>Attended Both Day and Evening</u>
Black Hawk College - Quad Cities	\$29.34	\$14.25	\$26.34
City Colleges of Chicago - Loop	13.97	9.24	15.28
Danville Area Community College	40.36	11.02	41.78
Joliet Junior College	33.36	13.49	37.83
Lake Land College	48.97	20.16	48.30
Lincoln Land Community College	40.78	17.25	46.86
Rock Valley College	<u>32.39</u>	<u>18.03</u>	<u>33.21</u>
All Seven Colleges	\$34.06	\$15.77	\$36.87

## AVERAGE COMMUTING COSTS BY TIME AND PLACE OF ATTENDANCE

Table 7 below shows an analysis of the average commuting costs of students by time and place of attendance. These results show that commuting costs by place and time of attendance are significantly different. Students attending off-campus centers during the evening had the lowest average commuting cost. This is primarily because students taking evening classes only are generally enrolled on a part-time basis and make only one or two trips to the attendance center each week.

Table 7

AVERAGE COMMUTING COSTS PER WEEK OF ALL STUDENTS BY  
TIME OF ATTENDANCE AND PLACE OF ATTENDANCE

Place of Attendance	Evening Classes		
	Day Classes	Only	Day and Evening
Main Campus Only	\$33.83 N=1,724	\$17.38 N=387	\$35.68 N=382
Off Campus Only	\$36.23 N=89	\$ 7.75 N=106	\$33.32 N=7
Both Main and Off Campus	\$40.09 N=41	\$22.46 N=34	\$43.09 N=77
All Students	\$34.06 N=1,854	\$15.77 N=527	\$36.87 N=466

## AVERAGE DISTANCE FROM CAMPUS

This study requested each student to indicate the distance from his/her residence to the main campus and/or the off-campus location that the student was attending. A summary of these data are shown in Table 8 on the next page. These results show the diversity of sparsity of the population from the campus location at each of the seven colleges in the study. The average distance from the main campus ranged from 9.3 miles at Black Hawk College to 20.2 miles at Lake Land College. The average distance of all students at the seven colleges was 13.7 miles from the main campus and 9.3 miles from the off-campus attendance center in which they were enrolled.

Table 8

AVERAGE DISTANCE FROM CAMPUS OF STUDENTS PARTICIPATING IN THE  
COMMUTING COST STUDY AT THE SEVEN COLLEGES

<u>College</u>	<u>Miles One Way To Main Campus</u>	<u>Miles One Way to Off-Campus Center,</u>
Black Hawk College - Quad Cities	9.3	9.7
City Colleges of Chicago - Loop	10.1	8.1
Danville Area Community College	12.5	7.4
Joliet Junior College	13.4	8.6
Lake Land College	20.2	7.6
Lincoln Land Community College	16.7	5.6
Rock Valley College	<u>9.9</u>	<u>16.8</u>
All Seven Colleges	13.7	9.3

### CONCLUSIONS

The results of this study of commuter costs at seven community colleges in Illinois showed that the average commuting cost for full-time students was \$1,160 per academic year (32 weeks) and ranged from an average of \$494 to \$1,555 per year at the various colleges. A sizable number of students reported commuting from a distance of 50 to 76 miles from college five days each week. Hence, although the average commuting cost for the community college students in this study was \$1,160 per academic year, many students reported commuting costs over \$5,000 per year. Although it might have been more economical for these students to obtain a room or apartment near the college, family responsibilities or other reasons made it necessary for them to commute each day.

Implication #1: Each college's budget for a full-time student's educational costs used in the present financial needs analysis for determining eligibility for Pell grants and ISSC awards should consider the average commuting cost for full-time students at each community college. This is a significant cost for community college students that varies considerably from college to college.

Implication #2: The average total cost of education for full-time students at each community college should be considered when making policy decisions on student tuition and fees. The \$1,160 per year average commuting cost at the seven colleges is a substantial amount which needs to be considered. In addition, the variation in average commuting costs among colleges may justify different tuition and fee rates.

Implication #3: Realistic information about commuting costs should be presented to prospective students by community colleges so that the students can make adequate plans to meet their obligations and to make decisions about whether to commute or find housing near the college.

The results of the study showed that many students reduced their commuting distance and cost by attending off-campus locations. Most community colleges already provide courses in all areas of their districts to make these offerings more accessible to all residents. This approach is definitely one way of reducing commuting costs for many community college students.

Implication #4: Community colleges should consider offering more off-campus courses to reduce the commuting costs of many students within their districts.

The highest commuting costs are experienced by full-time day students at community colleges. Many full-time students reported commuting to college from 50 to 70 miles away for five days per week. In these cases it might be more economical for the student to obtain housing near the community college campus.

Implication #5: There seems to be an economic need for student housing near the community college for a significant number of full-time day students who live a long distance from the college.

Students who utilized public transportation and/or car pooling had significantly lower commuting costs than did students driving personal vehicles. Although these modes of transportation are not available to all students at all colleges, an attempt to maximize the use of public transportation and car pooling could result in substantial savings for many students.

Implication #6: There seems to be a need for the colleges to provide good commuting cost information so that students would seriously consider using public transportation and/or car pooling. Assistance in forming and maintaining car pools also seems to be needed. Adequate information about public transportation schedules and routes might also be helpful.

APPENDIX A

SURVEY INSTRUMENT USED IN THE COMMUTER COST STUDY

COMMUNITY COLLEGE COMMUTING COST SURVEY

College Name \_\_\_\_\_  
District Number \_\_\_\_\_

1. Where do you attend classes? (Check One)

Main Campus \_\_\_\_\_  
Off-Campus Center \_\_\_\_\_  
Both Main and Off-Campus \_\_\_\_\_

2. What time of day do you attend classes? (Check One)

Only Day \_\_\_\_\_  
Only Evening \_\_\_\_\_  
Both Day and Evening \_\_\_\_\_

3. Are you enrolled in: (Check One)

One Class \_\_\_\_\_  
Two Classes \_\_\_\_\_  
Three or More Classes \_\_\_\_\_

4. What is the approximate distance, one way, in miles, from your residence to the campus location(s) where you take classes?

Distance to Main Campus \_\_\_\_\_ Miles One Way  
Distance to Off-Campus Center \_\_\_\_\_ Miles One Way

ANSWER 5 ONLY IF YOU TRAVEL TO CLASSES BY PERSONAL VEHICLE SUCH AS CAR, TRUCK, MOTORCYCLE, VAN, OR JEEP

5. If you travel to classes by personal vehicle such as car, truck, motorcycle, van, or jeep;

a. How many round trips per week, on the average, do you make as the driver to the:

Main Campus \_\_\_\_\_ Round trips per week  
Off-Campus Center \_\_\_\_\_ Round trips per week

b. How many round trips per week, on the average, do you make as a passenger to the:

Main Campus \_\_\_\_\_ Round trips per week  
Off-Campus Center \_\_\_\_\_ Round trips per week

c. If you car pool and pay the driver, how much do you pay each week?

\$ \_\_\_\_\_ Per week

(OVER)



6. If you use public transportation to get to classes,

a. How many round trips per week, on the average, do you make to the:

Main Campus	_____	Round trips per week
Off-Campus Center	_____	Round trips per week

b. How much does a round trip on public transportation cost to the:

Main Campus	\$ _____	Per round trip
Off-Campus Center	\$ _____	Per round trip

#### GENERAL INSTRUCTIONS FOR COMMUNITY COLLEGE COMMUTER COST SURVEY

The Illinois Community College Board is conducting this survey to determine the costs incurred by community college students while commuting to and from classes. For the purposes of this survey, we are assuming that a person who walks or rides a bicycle does not have a commuting expense, even though shoes or a bicycle are expenses. We are only requesting information about your driving and public transportation costs.

The survey is short and will take only a few minutes of your time. Directions for responding to each question are on the survey form.

All answers should reflect the means by which you travel to college classes most of the time. For example, if you usually drive to classes and only occasionally take a bus, you do not have to report the occasional bus trip.

The following directions are provided to clarify any questions which may arise.

Question 4: Even if a person travels to classes from his place of employment, we would like him to record the distance from his place of residence. If he does not know the exact distance, an approximation is sufficient.

Question 5a: If you drive a different number of times each week, you can average those trips using the method illustrated in the following examples.

If you alternately drive five (5) days per week one week and no (0) days per week the second week, your average round trips per week is 2.5.

$$\frac{5 + 0}{2} = 2.5$$

If you alternately drive two (2) days per week one week and three (3) days per week the second week, your average round trips per week is 2.5.

$$\frac{2 + 3}{2} = 2.5$$

If you alternately drive five (5) days per week one week and no (0) days per week for three (3) weeks, your average round trips per week is 1.25.

$$\frac{5 + 0 + 0 + 0}{4} = 1.25$$

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