TRAFFIC AND PARKING COSTS

	66-67	66-65	64-65
(3308) Parking signs and markings	$27,134.45	$17,475.16	$13,689.07
(3309) Parking lot maintenance	8,075.20	8,730.32	10,538.17
(3304) Student parking maintenance	5,925.80	5,698.98	6,157.62
Subtotal	$41,135.45	$31,904.46	$30,384.86
(1344) Traffic and parking	10,971.52	7,965.67	8,148.72
(1346) Bicycle traffic and parking	7,322.71	7,212.00	6,416.83
(1341) Traffic control	40,112.90	40,966.41	39,414.31
Subtotal	$58,407.13	$56,144.08	$53,979.86
TOTAL	$99,542.58	$88,048.54	$84,364.72

The cost data indicated above provides information on total charges by general work area (job number) but does not provide detailed knowledge of costs by job task, i.e. painting, sign maintenance, traffic signal maintenance, etc. Actions underway to correct this situation will be described at other points in this report.

Data on traffic volumes by location and time of the year is provided in the attachments. Generally, traffic volume peaks in September, ebbs in October, rises and maintains volume during November and December, then subsides in January and February. Peaks occur in the middle of the spring semester and at its end in May. This trend is also exhibited by variations in number of bus riders.

Bicycle parking occupancy observations are listed in an attachment.

ACCIDENT STATISTICS

Tables are provided to describe total number of reported accidents by time, vehicle type, injuries and location. Information on "near misses" is desirable but unobtainable. There were 268 accidents reported from September 1966 to June 1967. Such a number is a matter of concern!

There are 20,262 vehicles of all types registered with the Motor Vehicle office for the year 1966-67, while 468 vehicles were involved in accidents or 2.3% of the total registration. (Note: Even though some vehicles involved in accidents are unregistered, the above percentage gives some idea of the potential for accidents.) In effect, 2.4% of registered cars, 4.5% of registered motorcycles, and 0.3% of registered bicycles were involved in accidents. The involvement rate of motorcycles is double that of automobiles; the range nationally is in the ratio of 4:1 to 2:1.

Accidents were plotted on an accident spot map by location. There were 23 locations with three or more accidents and eight locations with five or more accidents. Three locations had 8.2% (22) of all accidents
(268)

or 22.3% $\frac{(22)}{(99)}$ of all accidents at locations with three or more accidents. Eight locations had 18.2% $\frac{(49)}{(268)}$ and 49.6% $\frac{(49)}{(99)}$ of accidents as described above. Obviously, improvements on this record must begin at high accident locations. Studies for such work have begun.

BUS USAGE

The bus usage figures are summarized in the attachments by a table and graph. Total ridership of the staff bus (Assembly Hall Route) has trended downward except for volume peaks as described above. When cash fare riders were terminated, both the total riders and the total mean daily riders decreased; but, the O&M staff riders immediately increased in both of the above categories. The peak total mean daily rider number occurred in November and was 612. The use of the bus has steadily trended downward except for an upturn beginning in February. Apparently, most faculty-staff members are not aware of the bus service or do not need it.

Several studies of bus loading and reliability of bus schedules have indicated that the 8:00 a.m. and 3:50 p.m. buses are most used and established that the schedule is reasonably dependable. Liaison is maintained with the bus company and the Housing Division Illibus managers. 1966-67 O&M bus riders totaled 117,564 at a total cost of $29,016; therefore, the cost per ride for an O&M staff member was 24.7 cents.

SIGNS AND MARKING

Paint records developed for the first time this year, in cooperation with the paint shop, indicate a total investment of $12,206 not including foreman's time or miscellaneous small jobs. Costs were distributed in the following manner: $3,296 - streets (Job 1344), $2,877 - bicycle lanes (Job 1346) and $6,033 - parking lots (Job 3308). This data, along with physical inspection, permits accurate estimates of yearly painting needs. Existing area maps and field measurements are being used to improve the applicability of these records to cost analysis. Data samplings shown in attachments indicate a marking rate of 158 feet per man-hour. Application rates are: Yellow paint - 149 feet per gallon and white paint - 206 feet per gallon. Material cost per foot is: Yellow - 10.9 cents and white - 6.8 cents. Labor costs 3.3 cents per foot. The total cost of marking in place is: Yellow - 14.2 cents per foot and white - 10.1 cents per foot. The following quantities of paint were used: (Non-beaded) white - 370 gallons and yellow - 300 gallons; (beaded) white - 245 gallons and yellow - 90 gallons. A total of 550 pounds of glass beads were used.

A sign installation record book was instituted as well as a sign sketch book with dimensions. These records indicate that an average of 71 separate sign calls are received each month (Note: Each call may be for multiple signs). A record is made of the date call received

and date work is executed, as well as material and labor used; the job number charged is also recorded. The "Manual on Uniform Traffic Control Devices for Streets and Highways" is the standard used in design of signing. Specific designs including dimensions, material, and color are cataloged for ready reference (separate copies are supplied to the police, laborers and painters). Sign and sign material stocks are reviewed with Physical Plant Stores personnel; records and stocks are revised as necessary.

NEW CONSTRUCTION

About 30 projects totaling $175,380 were assigned. Miscellaneous coordination with contract projects was carried out, i.e., Goodwin Avenue realignment, Gregory Drive gas supply line, various sewer projects, building projects (with respect to the traffic influence during and prior to construction), etc.

COMMITTEES AND MEETINGS

Various committees have been served by membership including: Parking, Mass Transportation subcommittee, Motorcycle and Bicycle subcommittee, and Section Safety committee-secretary. Information has been supplied to the Traffic and Transportation committee, Traffic Flow subcommittee and other groups. Various committees are regularly engaged in traffic, parking, special events, traffic safety, police traffic control, etc. Some specialized meeting topics were: Veterinary Medicine bicycle accident hazards, traffic flow, waste containers, Krannert reflecting pool, Assembly Hall parking, etc.

CIVIL DEFENSE

Three Civil Defense warning horns are maintained at the following locations: Stadium, Morrill Hall and Horticulture Field Laboratory. The horns are tested in conjunction with Champaign County Civil Defense headquarters every first Tuesday of each month. Inspection and maintenance are performed each month by O&M personnel. The University police report on the horn test each month. Equipment improvements concerning a battery case and valving have improved horn reliability.

MISCELLANEOUS SERVICE

The following items are some of the services provided: Traffic consultation, estimates, liaison (city, state and University traffic and police personnel), project justification, design service, correspondence, sketches, section plan file maintenance, traffic studies, record and product files, and articles and cartoons for house paper.

NEEDS

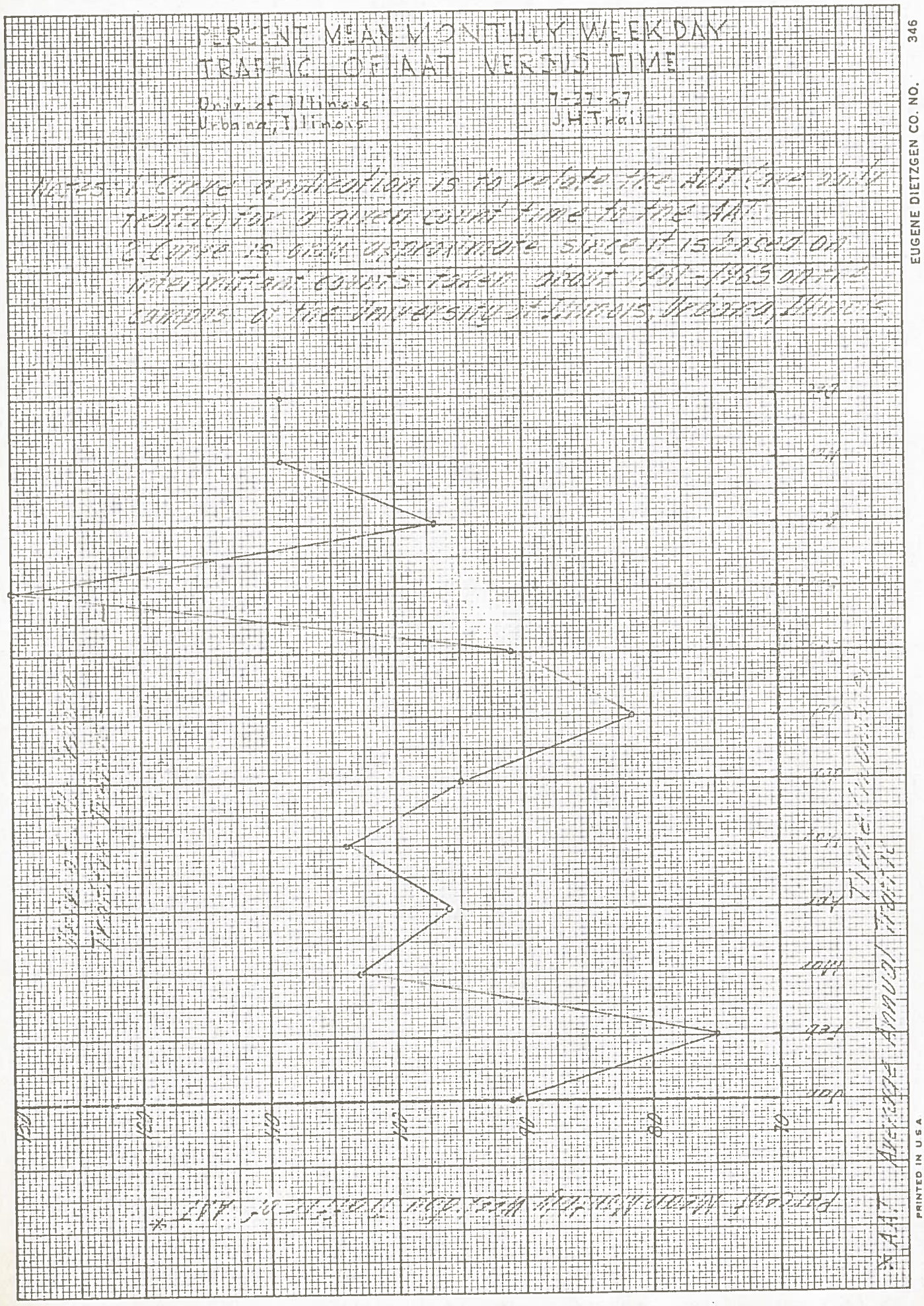
The items listed below constitute needed data records and improvements in service: Construction signing specification improvement, sign and marking inventory, traffic signal progression on Florida Avenue, additional statistical data, parking record sketches of all bicycle and motorcycle

lots, cost analysis of records and accident analysis for site improvement projects.

IMPROVEMENTS IN SERVICE

These items have been added to existing procedures during the year 1966-67: Sign catalog (available to police sign shop and laborers), improved cooperation in signing and barricading by contractors (Utilities Section personnel and architects aided in this work), police accident report summaries, signal maintenance reports, new traffic signal approved for Sixth and Armory, sign job record book, Civil Defense inspection procedure, parking meter inventory by police, uniform sign data distributed to University and contractor personnel, permanent traffic counting station constructed, scheduled traffic counting program for bicycles and automobiles instituted, accident spot map maintained, bus data on scheduling and loading, and painting record established.

Physical Plant Department
August 1, 1967
JHT:ka



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MOTOR VEHICLE COUNTS

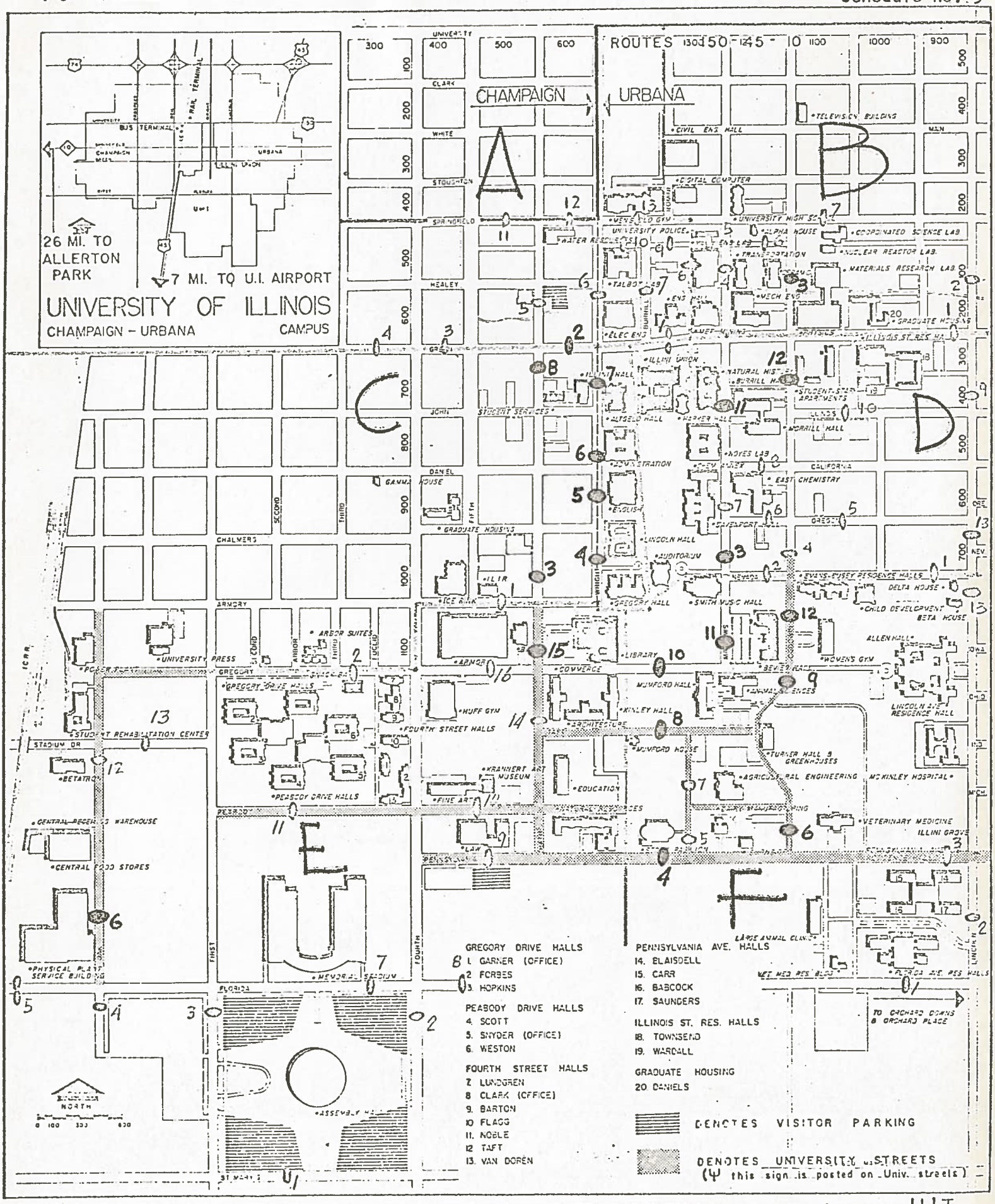
Spring 1967

Counting Location	Traffic Volume (ADT)*
A-2	15,144
B-3	8,162
C-3	13,782
C-4	4,736
C-5	4,889
C-6	6,107
C-7	7,146
C-8	8,907
D-3	6,734
D-11	8,481
D-12	9,542
E-6	2,202
E-15	6,529
F-4	21,424
F-6	13,044
F-8	842
F-9	4,648
F-10	6,663
F-11	2,691
F-12	7,423

* Average Daily Traffic not corrected for holiday, weather influence, etc.

MOTOR VEHICLE COUNTING STA.

TO HELP YOU FIND YOUR WAY.... 1966-67 Schedule No. 3



Note: Darkened stations indicate location of count data reported.

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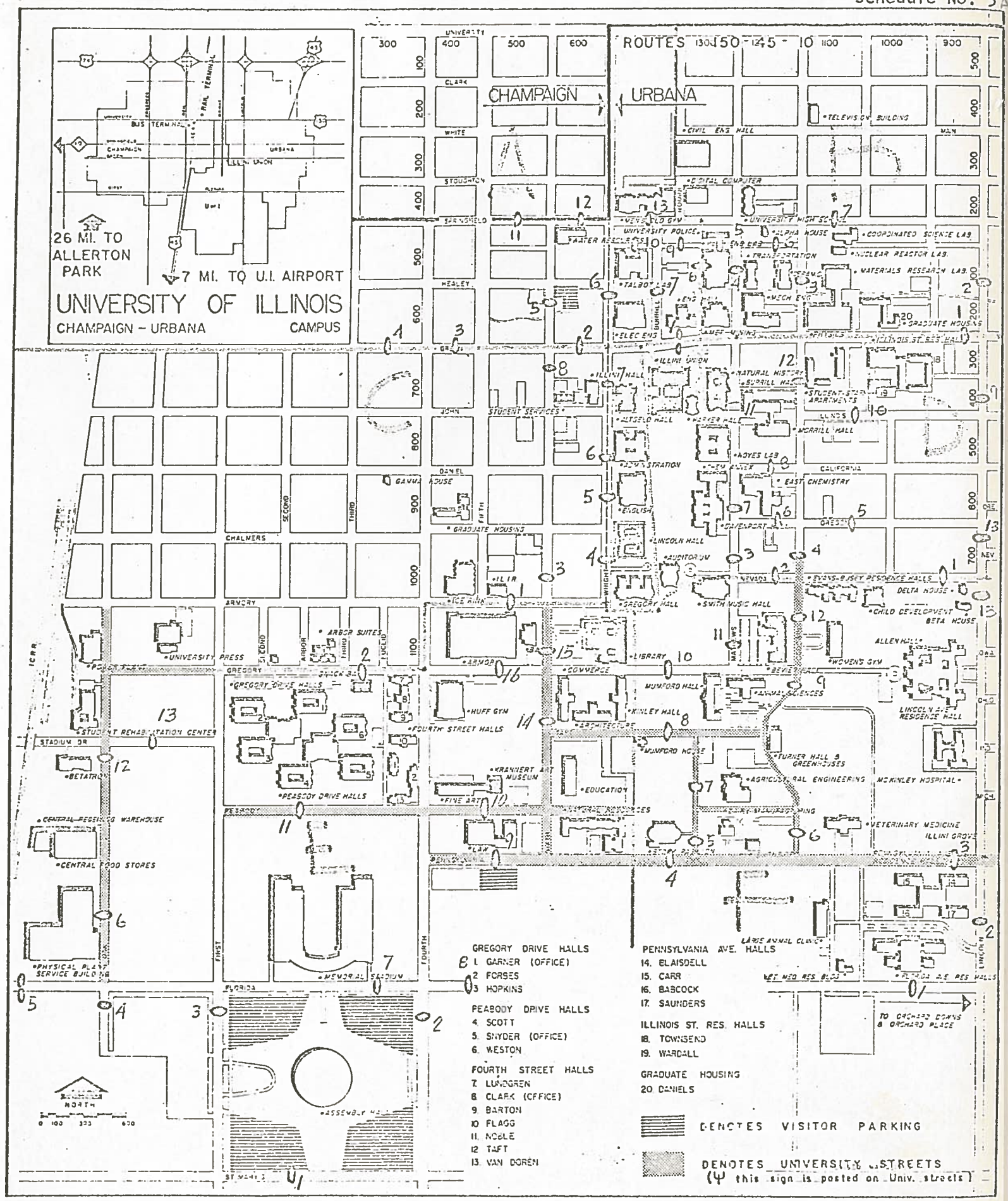
MOTOR VEHICLE COUNTING STA.

TO HELP YOU FIND YOUR WAY.... 1966-67 Schedule No. 3A



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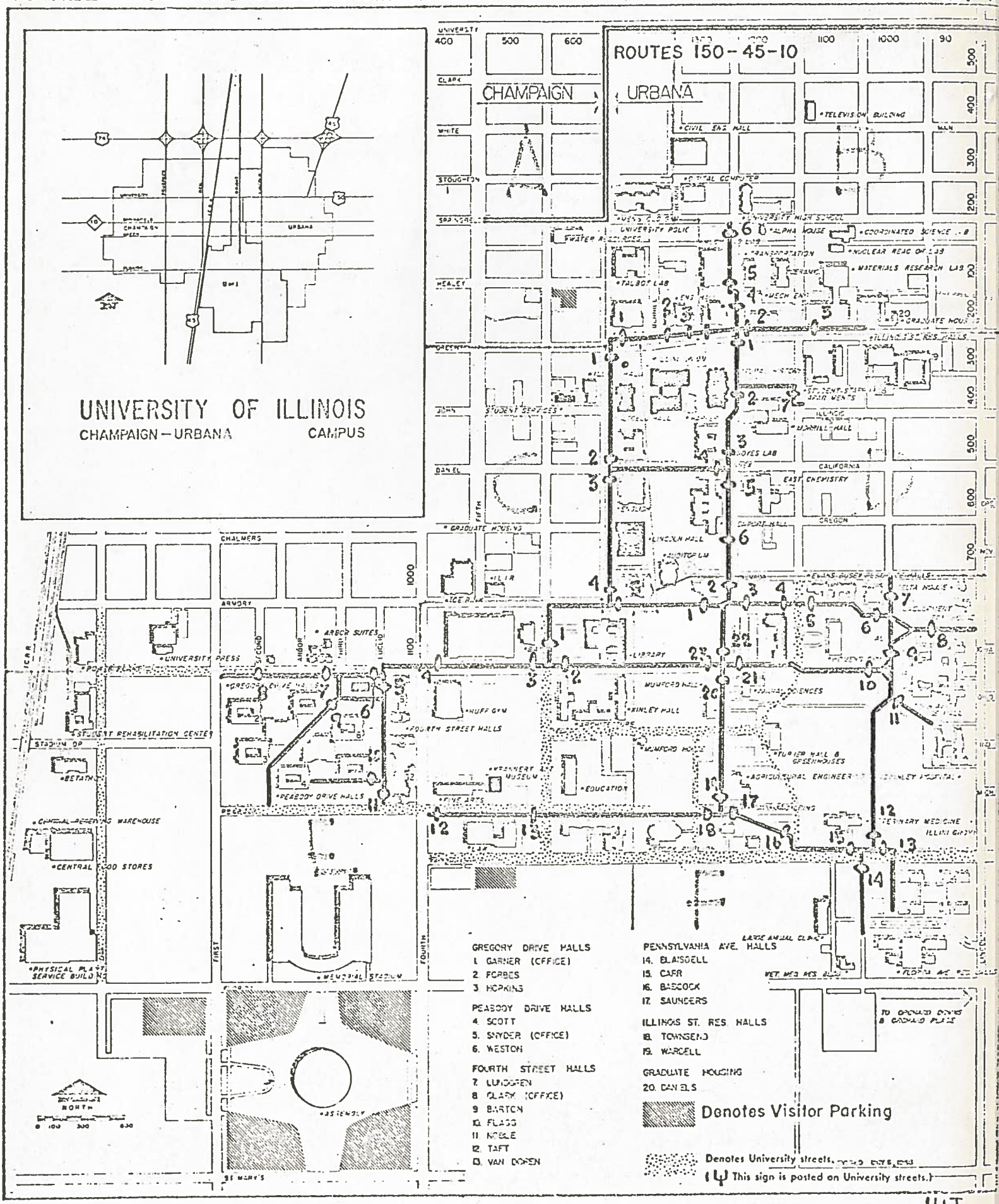
BICYCLE LANES

TO HELP YOU FIND YOUR WAY..... COUNTING STATIONS 1966-67 Schedule No. 4



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Approx. mileage = 5

BICYCLE LANE TRAFFIC VOLUMES

July 1966 - June 1967

Location	Winter 1966	Spring 1967
Green and Engineering Hall	1,300	650
Gregory near Sixth		800
Mathews near Observatory	1,800	
Mathews near Agricultural Engineering	600	
Gregory near Mumford Hall	1,000	
Armory extended near Busey Evans Hall	600	
Pennsylvania near Veterinary Medicine	800	
Dorner Drive near Veterinary Medicine (Lily Pond Road)	650	
South of Lincoln Avenue Residence Halls	550	
North of Lincoln Avenue Residence Halls	400	
Gregory Place extended near Child Development	500	

BICYCLE SURVEY

January 6, 1967

10 A.M. - 11 A.M.

Location	Parked Bicycles	Unregistered Bicycles
Allen Hall	62	17
Lincoln Avenue Residence	51	6
Health Service	2	1
Veterinary Medicine	10	3
Mumford Hall	32	5
Mech. Engr. Bldg. (West)	46	0
Pennsylvania Ave. Res.	299	68
1010 West Green	103	4
New Physics	35	3
Engineering Hall	58	4
Mech. Engr. Lab.	14	2
David Kinley Hall	25	3
Art Bldg.	17	1
Commerce	35	3
Armory	12	0
Band	2	0
Lincoln Hall	29	9
Altgeld Hall	70	21
English Bldg.	15	4
Natural History	59	9
Smith Music	20	3
Chemistry Annex	51	3
Weston Hall	128	7
Total	1,175	176

1/10/67

NUMBER OF BICYCLE RACKS BY LENGTH AND NUMBER OF PARKING SPACES IN PLACE ON CAMPUS

Rack Size (ft.)	5		8		10		16		20		30
Faces in Use	SF	DF	SF	DF	SF	DF	SF	DF	SF	DF	DF
Number of Racks	6	28	14	92	29	34	14	23	7	9	1
Number of Spaces	12	112	56	736	145	340	112	368	70	180	15

DF = Double Face
SF = Single Face

Lineal Feet of Loop Racks

SF	DF
548'	182'
274 spaces	91 spaces

Total Campus Bicycle Parking Spaces
2511

(Excluding Housing Spaces)

VEHICLE REGISTRATION BY YEAR

Type of Registration	1957-58	1958-59[1]	1959-60
Student Car Total	5,892	4,936	4,852
	1960-61	1961-62	1962-63
Student Car Total	5,205	5,421	5,783
Faculty-Staff			
First Car		6,766	--
Total		10,876	--

	1963-64[3]	1964-65	1965-66[2]	1966-67
Student Car Total	6,074	7,009	7,425	7,963
Faculty-Staff				
First Car	4,446	4,265	4,442	4,682
Total	6,942	5,691	6,338	6,731
Motorcycle		1,000[4,6]	1,733[5,6]	1,859
Bicycle	8,335[7]		5,433	3,709

1. Fee $7.50/semester begun for student car registration.
2. Fee for student car registration reduced to $5/year.
3. Fee $15/year begun for faculty-staff car registration and $5/year for second car.
4. Registration form supply exceeded (registration terminated).
5. Forms exceeded in May i.e. value given is a good approximation of yearly total.
6. No prior records available.
7. Value given applies to 1963-65 biennium. Yearly sum <u>not</u> available.