TRANSPORTATION IN THE DIVISION OF CORRECTIONS

FISCAL YEAR 1979

Report # 3

Research Conducted by

Paul D. Woehlke
Research Analyst

Executive Summary Prepared by

Richard J. Oldroyd, Ph.D.

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EXECUTIVE SUMMARY

Transportation within the Division of Corrections is a broad, nebulous operation. This study attempted to give some description of transportation and its associated costs and to make some suggestions that might make transportation more efficient.

The fiscal 1979 budget shows the following costs associated with transportation:

In-State Transportation (includes mileage reimbursement for use of private vehicles and motor pool vehicle rental costs)		$ 135,617
Motor Vehicle Supplies & Operating (includes gas, oil, repairs)		53,952
Vehicle Purchase		40,392
Prison Community Release Transportation Expenditures		53,818
Prison Project Discovery Transportation Expenditures		21,770
Out-of-State Travel		16,454
Extraditions		Unknown
Total Costs excluding personnel	over	$ 317,000
Personnel estimated at 2 1/3 times total costs above		738,610
Rough Estimate of Total Transportation		$1,055,610

One of the more important and obvious findings of this study (and one that should have come as less of a surprise) is that the personnel costs associated with travel are far more expensive than the costs of the transportation itself.

By far, the largest consumers of transportation within Corrections are the programs that provide transportation for offenders involved in work release programs (Prison Community Release - approximately 279,000 miles during FY 1979; Lakehills-Community Correctional Center - approximately 130,000 miles; St. Marks Diagnostic Center - approximately 113,000 miles). The other major consumer is the Prison transportation team - approximately 117,000 miles. These programs dwarf all other Correctional programs in terms of transportation costs. As a result, these are also the programs where the most significant savings might be anticipated.

Currently, the three community release programs all operate independently. They divide the city up into a variety of routes depending on

the location and time of specific offenders' employment. The routes change almost daily. One thing that all the runs have in common, though, is that the vehicles start out full, dispense passengers to the end of the run, and then return empty. The locations of the various programs readily suggest that considerable savings might be made if they were to cooperate. In its simplest form, if, when a Prison work release run drops of its last occupant in the downtown area, it were to pick up a new load at St. Marks Diagnostic Unit and drop them off as it returned to the Prison, overall mileage would be considerably reduced. More importantly, so would the staff time required to perform the transportation.

This concept could easily be refined to provide even greater efficiency. The ideal solution is to consolidate all work release transportation into a single program. All three units would communicate their transportation requirements to a central coordinator who would schedule and control routes. The solution that appears most efficient would be to establish a central rendezvous point near the center of the valley where vehicles from all three facilities would meet, transfer offenders to the vehicle that would then run a much smaller route dropping off offenders at their respective places of employment as it returned to its place of origin for another load. Reducing the size of the routes would not only result in considerable savings in terms of miles and driver time, but it would also reduce the amount of time the offender would have to wait in the car prior to arriving at his place of employment.

Perhaps the most critical decision in terms of cost savings or expense related to transportation is: "Who should be drivers be?" The Prison currently uses some inmate drivers, while all the other programs use staff drivers (in some instances the Center Director). Not only are these folks expensive, but also there are usually more important things they could be doing (although the association with offenders as they travel to and from work is certainly not to be considered meaningless or a waste of time). If all the drivers for a consolidated work release program were inmates or center residents on temporary assignment, cost savings in the neighborhood of a third of a million dollars might be anticipated.

The Attorney General's Office has been informally contacted regarding the use of inmate drivers and has informally replied that it is not in

favor of inmates being involved in this role. However, the general attitude of the Attorney General toward the entire work release concept is negative. Informal consultation with other competent legal advice could find no sound reason for not using inmate drivers. The decision appears very political, but purely administrative.

Other things would greatly contribute to the effectiveness of consolidating work release. Most of these need to be worked out by a pilot project to determine the exact logistics, but it should be anticipated that the program would operate more efficiently with larger vehicles such as maxi-vans and possibly a couple of busses. Radio communications between the vehicles and the central coordination site are important and would be absolutely essential if inmate drivers were utilized.

Some more minor cost savings might be possible in other areas. There are many situations where inmate drivers are totally out of the question. These include the transporting of those whose probations have been revoked to the Prison and the transporting of non-work release prison inmates to and from court and the Medical Center, etc. The existing Prison transportation team accumulates considerable overtime. There may be some advantage in adding one more person to that team and then taking over the transporting that is currently being done by Adult Probation and Parole agents and the 90-Day Diagnostic staff. It might even take more than one additional transportation officer. Considerable overtime has also been accumulating among Community Corrections Centers staff as a result of providing transportation.

Extradition duplication and trip duplication might also offer the capability of small savings by providing better coordination, but the savings in these areas are miniscule compared with the opportunity to save by consolidating the work release transportation.

LIST OF TABLES, EXHIBITS, AND APPENDICES

TRANSPORT IN CORRECTIONS:

A Study of Transport in the
Division of Corrections
for
Fiscal 1979

Department of Social Services
Division of Corrections
William V. Milliken, Director

Report Prepared by
Paul D. Woehlke,
Research Analyst

Table 1

Transport Summary -- Fiscal 1979

Unit	Total Miles[1]	Avg.Mo. Miles	Total Hours[2]	Avg.Mo. Hours	Vehicle Costs[3]	Staff Costs[3]	Total Costs[3]	Veh.¢ @ Mi.	Staff ¢ @ Mi.	Total ¢ @ Mi.
USP--										
Transport	117,452[4]	9,788	2,936	245	$11,334	$30,397	$41,731	9.56 9.74	25.88	35.44 35.62
CCC--										
Diagn.	112,877	9,406	3,527	294	$12,212	$24,233	$36,445	10.87 9.45	21.47	32.34 30.92
Lakeh.	130,522	10,877	4,079	340	$14,347	$30,713	$45,060	11.01 10.65	23.53	34.54 34.18
Central	2,840	237	89	7	$ 335	$ 609	$ 944	9.89 16.33	21.44	31.33 37.77
Ogden	0	0	0	0	$ 0	$ 0	$ 0	0	0	0
AP&P--										
Parole	n/a	n/a	750[5]	63	$ n/a	$ 7,200	$ n/a	n/a	n/a	n/a
Central	2,208	184	138[6]	12	$ 237	$ 1,295	$ 1,532	11.18 9.56	58.63	69.81 68.19
North	880	73	55	5	$ 73	$ 533	$ 606	8.32	60.56	68.88
South	0	0	0	0	$ 0	$ 0	$ 0	0	0	0
TOTAL:	366,779	30,565	10,824	903	$38,538	$87,780	$126,318[7]	10.51	23.93	34.44

[1]From records and estimations (see Appendices I and II)

[2]See Appendix II for construction of these figures

[3]See Appendix II for construction of these estimates

[4]Annualized from ten months' data of 97,877 miles

[5]Estimated by head agent at Parole as 3+% of agents' total time (see Appendix II)

[6]For a larger estimate based on records see Appendix II

[7]Does not include AP&P Parole data

Table 2

Trip Flow Duplications by Month -- Fiscal 1979

Month	Past Provo-SLC area	Provo-SLC area	USP-SLC	USP-Ogden	SLC-Logan	Other	Total
July		data not available					
August		data not available					
September	2	?	2	1	0	0	7
October	1	0	2	0	0	0	3
November	1	0	2	1	0	0	4
December	1	0	3	2	0	0	6
January	1	0	3	1	1	0	6
February	0	1	1	1	0	1	4
March	0	0	6	1	1	0	8
April	3	1	13	3	1	0	21
May	0	0	3	2	0	0	5
June	0	6	7	1	0	0	14
TOTAL:	9	10	42	13	3	1	78

A P P E N D I X I

TRANSPORTATION DATA SOURCES

In conducting this study, I obtained data from a variety of sources. Some of the data was reasonably complete and appeared accurate. However, other records were obviously contrived. An example is one month's mileage log which listed 94 miles for every day of the month. Another is a log which erroneously logged twice the actual odometer miles. Where actual records were unavailable, I relied on estimates made by the people I believed most qualified to make them. By this process, I obtained the most accurate data accessible to me. This report and my recommendations are based on that data, so I must give my honest evaluation of my study. It is tenuous in several areas. The cost estimates are accurate enough to serve for comparison purposes, but they are not solid enough to use as a basis for strict economic decisions (such as mileage reimbursement were the transport to be contracted out). The trip flows are grossly incomplete and may represent only a fraction of the actual duplications. And, finally, I was unable to obtain enough time data to construct a simulation of the whole transport system--a step which would have been extremely helpful in determining the feasibility of transport consolidation. I took these weaknesses into account in my recommendations, as I therein mentioned. As there noted, a much better study could be done if data were to be kept for several months prior to its initiation.

The following is a list of data sources used in the course of my study:

State Motor Pool, Cindy Crossley - car authorizations, logs;
U.S.P. Maintenance Office, Frank Winward - monthly mileage logs;
U.S.P. Transportation Office, Felix Vaclavik - (daily trip logs);
U.S.P. Business Office, Bob Huetter, Brent Hollis - car costs, program accounts;
U.S.P. Women's Facility, Adele Peck - women's trips (interview);
U.S.P. Minimum Security, Harold Welling - work release interview;
U.S.P. Project Discovery, Gaylen Blackburn - program interview;
C.C.C. Administration, Kathy Brown, Willy Diddens - car data, comp. time;
Diagnostic Unit, Paul Giles, Don Morgan - transport interview;
All C.C.C. directors and transport heads - car, trip data;
AP&P, Steve Love, Don Long, Myron March, Jim Angeloff (Ogden), Larry Simmons (Provo) - car, trip, time data (some) and interviews;
Other sources as introduced by the above.

APPENDIX II

TRANSPORT COST CALCULATIONS

The following exhibits trace cost calculations from data obtained as explained in Appendix I. In the process of the calculations, many other key numbers are derived and/or stated. Therefore, these pages are appendages to the tables found in the body of the report. These exhibits have been included so that any future transport studies may be compared to the present one as to annual cost, etc.

In the calculation process, all estimates were based on the most complete findings available. For example, the auto life estimates were based on the history of two cars which had just been retired by the U.S.P. In each case, the mileages and remaining values were roughly comparable to the estimates herein made. Further, estimates were obtained from the most knowledgeable and qualified people available. I then checked these estimates with other data I had obtained to assure their reasonableness. In general, I feel good about all estimating procedures and thus all numbers in the calculations.

One note is important in interpreting these cost results. I was consistent throughout the calculations as to what I included in the totals. However, some may question my exclusion of such things as fringe benefits (in personnel costs), my division of salaries into 52-week years instead of allowing for vacations, etc. I merely tried to perform the calculations in the simplest way possible to yet derive some meaningful conclusions. My results can be altered drastically by the changing of some assumptions. However, I believe the comparisons would still be the same. The most expensive units would still be most expensive; only the gap may be even wider. In summary, my results should not be considered the bottom line cost to the Division for transport; rather they should be accepted as means to the analytical end of determining the most efficient, most economical yet most functional transport system for Corrections.

EXHIBIT 1

USP TRANSPORT CALCULATIONS FOR FISCAL 1979

I. Automobile costs

A. Vehicle cost per mile

1. July-December

a. one vehicle estimated at 4.0¢ per mile based on retrogression of following data

b. three vehicles calculated as follows:

--purchase price	$ 5,000.00
--life, estimated	5 years
--total miles in life, est.	120,000
--miles per year, calculated	24,000
--cost per year, calculated	$ 1,000.00
--cost per mile, calculated	4.20¢

c. average cost per mile, calculated
(3/4)(4.2)+(1/4)(4.0)= 4.15¢

2. January-June

a. three vehicles calculated as above 4.20¢

b. two vehicles calculated as follows:

--purchase price	$ 5,800.00
--life, estimated	5 years
--total miles in life, est.	125,000
--miles per year, calculated	25,000
--cost per year, calculated	$ 1,160.00
--cost per mile, calculated	4.64¢

c. average cost per mile, calculated
(3/5)(4.2)+(2/5)(4.64)= 4.38¢

B. Insurance cost per mile

--total prison annual premium, fiscal '79	$12,674.00
--per vehicle, estimated 45 insured	$ 282.00
--per mile based on above mileages	
24,000 miles	1.18¢
25,000 miles	1.13¢

C. Gasoline cost per mile

--total on-site cost, 10 months	$ 2,661.51
--total local miles, 10 months	82,395
--cost per mile, calculated	3.23¢

D. Maintenance cost per mile
--estimated based on personnel interview (no hard data available) 1.00¢

E. Total automobile cost per mile
--July-December: 4.15+1.18+3.23+1= 9.56¢
--January-June: 4.38+1.13+3.23+1= 9.74¢

II. Personnel costs

A. Salaries		
--Vaclavik		$17,796.00
--Bartell		14,929.00
--McNeill		14,843.00
--Higley		13,997.00
--Painter		13,938.00
	TOTAL:	$75,503.00
	AVERAGE:	15,100.00
B. Salaries per hour (15100)/52 wks./40 hrs.=		$ 7.26
C. Miles, ten months' data		97,877
D. Hours in actual transport --rough estimation of 40 mph on trips based on mix of highway and city, (97877)/40=		2,447
E. Cost of actual transport (7.26)(2447)		$17,765.00
F. Annualized cost of transport (17765)(12/10)		$21,318.00
G. Cost per mile (17765)/97877=		18.15¢
H. Administrative costs (scheduling, lost time, waiting for runs, etc.) --transporters' estimate of six hours per day away from USP plus some work time at prison doing inmate moves, shakedowns, etc. led to researcher's estimate of one hour per day per man (7.26)(5 men)(5 days)(50 work weeks)=		$ 9,079.00
I. Administrative cost per mile (9079)(10/12)/97877=		7.73¢
J. Total personnel cost per mile		25.88¢

III. Total transport cost per mile

A. July-December		
--automobile cost		9.56¢
--personnel cost		25.88¢
	TOTAL:	35.44¢
B. January-June		
--automobile cost		9.74¢
--personnel cost		25.88¢
	TOTAL:	35.62¢

E X H I B I T 2

USP COMMUNITY RELEASE DATA -- FISCAL 1979

1.	Account balance, June 30, 1978	$18,616.78
	--major purchase, July 28, 1978	7,936.53
2.	Account balance, July 31, 1978	13,614.21
3.	Account balance, August 31, 1978	17,050.67
4.	Account balance, September 30, 1978	21,180.08
5.	Account balance, October 31, 1978	21,041.57
6.	Account balance, November 30, 1978	16,755.52
7.	Account balance, December 31, 1978	16,001.58
8.	Account balance, January 31, 1979	16,044.45
9.	Account balance, February 28, 1979	12,639.48
10.	Account balance, March 31, 1979	12,183.05
11.	Account balance, April 30, 1979	16,330.10
12.	Account balance, May 31, 1979	13,601.83
	--major income, June 25, 1979	5,055.27
13.	Account balance, June 30, 1979	20,072.98
14.	Account balance, beginning-of-year	$18,616.78
15.	Account balance, end-of-year	20,072.98
	NET INCOME:	$ 1,456.20
16.	Year high balance, October 13, 1978	$23,833.58
17.	Year low balance, March 20, 1979	11,188.05
	RANGE:	12,645.53
18.	Total income for year	$55,274.46
19.	Total disbursements for year	53,818.26
	NET INCOME:	$ 1,456.20
20.	Year's average balance (not time adjusted)	$17,177.60
21.	Standard deviation from average balance	3,165.19

E X H I B I T 3

USP PROJECT DISCOVERY DATA -- FISCAL 1979

1.	Account balance, June 30, 1978	$ 2,720.08
2.	Account balance, July 31, 1978	1,802.80
3.	Account balance, August 31, 1978	535.33
4.	Account balance, September 30, 1978	353.16-
	--major income, October 13, 1978	17,947.75
5.	Account balance, October 31, 1978	18,039.52
	--major income, November 20, 1978	8,766.93
6.	Account balance, November 30, 1978	26,361.81
7.	Account balance, December 31, 1978	25,798.58
8.	Account balance, January 31, 1979	24,357.99
9.	Account balance, February 28, 1979	23,932.29
10.	Account balance, March 31, 1979	23,558.14
	--major expense, April 19, 1979 (bus)	1,500.00
	--major income, April 30, 1979	1,835.75
11.	Account balance, April 30, 1979	23,893.89
	--major expense, May 17, 1979 (marathon shirts)	1,075.00
	--major expense, May 21, 1979 (docu-film)	5,000.00
12.	Account balance, May 31, 1979	15,610.30
	--major expense, June 14, 1979 (camp equip.)	2,481.90
13.	Account balance, June 30, 1979	12,505.11
14.	Account balance, beginning-of-year	$ 2,720.08
15.	Account balance, end-of-year	12,505.11
	NET INCOME:	$ 9,785.03
16.	Year high balance, January 16, 1979	$27,041.51
17.	Year low balance, September 22, 1978	353.16-
	RANGE:	$27,394.67
18.	Total income for year	$31,554.99
19.	Total expenses for year	21,769.96
	NET INCOME:	$ 9,785.03
20.	Year's average balance (not time adjusted)	$13,172.35
21.	Standard deviation from average balance	10,256.05

E X H I B I T 4

DIAGNOSTIC UNIT TRANSPORT CALCULATIONS FOR FISCAL 1979

I.	Automobile costs	
	A. Rented vehicles (4 four mos., 3 eight mos.)	
	1. total rental paid to Motor Pool for year	$11,827.54
	2. total miles for year	108,780
	3. total cost per mile (11827.54)/108780=	10.87¢
	B. Owned vehicle (1 for administration, Center estimated 20% usage for transport), cost per mile	
	1. vehicle cost per mile	
	--purchase price	$ 4,172.00
	--life, estimated	6 years
	--total miles in life, est.	123,000
	--miles per year (based on 8 mos. data)	20,500
	--cost per year, calculated	$ 695.33
	--cost per mile, calculated	3.39¢
	2. insurance cost per mile	
	--total annual premium	$ 170.00
	--cost per mile	0.83¢
	3. gasoline cost per mile	
	--estimation based on USP transport cars of equivalent model and size due to lack of exact data	3.23¢
	4. maintenance cost per mile, estimated based on USP transport estimation and lack of in-house maintenance for CCC (which USP has)	2.00¢
	5. total cost per mile 3.39+0.83+2.72+2.00=	9.45¢
II.	Personnel costs	
	A. Salaries, per hour	
	--driving done by counselors at average salary of, per month	$ 1,190.00
	--per hour, average (1190)(12)/52wks./40hrs.=	$ 6.87
	B. Miles in year	
	--rental car miles (108,780) plus 20% of owned vehicle miles (est. 20,500)	112,877
	C. Hours in actual transport	
	--rough estimation of 32 mph on trips based on mix of city and highway, 112877/32=	3,527.41
	D. Cost of actual transport (6.87)(3527.41)=	$24,233.28
	E. Cost per mile (24233.28)/112877=	21.47¢

III. Total transport cost per mile

A. Rental cars		
--vehicle costs		10.87¢
--personnel costs		21.47¢
	TOTAL:	32.34¢
B. Owned car		
--vehicle costs		9.45¢
--personnel costs		21.47¢
	TOTAL:	30.92¢

EXHIBIT 5

LAKEHILLS CCC TRANSPORT CALCULATIONS FOR FISCAL 1979

I. Automobile costs

A. rented vehicles (3), cost per mile

1. total rental paid to Motor Pool for year	$13,655.49
2. total miles for year	124,042
3. total cost per mile --(13655.49)/124042=	11.01¢

B. owned vehicle (1 for staff, Center estimated 30% usage for transport), cost per mile

1. vehicle cost per mile	
--purchase price	$ 5,000.00
--life, estimated	5 years
--total miles in life, est.	108,000
--miles per year (based on 6 mos. data)	21,600
--cost per year, calculated	$ 1,000.00
--cost per mile, calculated	4.63¢
2. insurance cost per mile	
--total annual premium	$ 170.00
--cost per mile	0.79¢
3. gasoline cost per mile --estimation based on USP transport cars of equivalent model and size due to lack of exact data	3.23¢
4. maintenance cost per mile, estimated based on USP transport estimation and lack of in-house maintenance for CCC (which USP has)	2.00¢
5. total cost per mile 4.63+0.79+3.23+2.00=	10.65¢

II. Personnel costs

A. Salaries

--Wesemann, H. (average annual)	$14,377.50
--Bortolussi, G. (average annual)	15,872.00
--Buck, C. (average annual)	15,338.50
--Pedler, E.	17,868.00
--Devey, T.	19,812.00
--Pedler, J. (average annual)	13,261.50
--Freeland, F.	11,808.00
--Trujillo, A.	12,864.00
--Stewart, D.	19,756.00
TOTAL:	$140,957.50
AVERAGE:	$ 15,662.00

B. Salaries per hour (15662)/52 wks./40 hrs.= $ 7.53

C. Miles in year --rental car miles (124,042) plus 30% of owned vehicle miles (est. 21,600) 130,522

F. Hours in actual transport
--rough estimation of 32 mph on trips based on mix of city and highway
(130522)/32= 4,078.81

G. Cost of actual transport
(7.53)(4078.81) $30,713.46

H. Cost per mile
(30713.46)/130522= 23.53¢

III. Total transport cost per mile

A. Rented cars
--vehicle costs 11.01¢
--personnel costs 23.53¢
TOTAL: 34.54¢

B. Owned car
--vehicle costs 10.65¢
--personnel costs 23.53¢
TOTAL: 34.18¢

EXHIBIT 6

CENTRAL CCC TRANSPORT CALCULATIONS FOR FISCAL 1979

I. Automobile costs

A. Vehicle cost per mile, state car

1. car cost per mile

--purchase price	$ 4,263.00
--life, estimated	5 years
--total miles in life, est.	125,000
--miles per year (based on 8 mos. data)	25,000
--cost per year, calculated	$ 853
--cost per mile, calculated	3.41¢

2. insurance cost per mile

--total annual premium	$ 170
--cost per mile	0.68¢

3. gasoline cost per mile

--rough estimate based on 2 mos. data	3.80¢

4. maintenance cost per mile

--estimate based on USP transport estimation and lack of in-house maintenance for CCC (which USP has)	2.00¢

5. total cost per mile

3.41+0.68+3.8+2=	9.89¢

B. Vehicle cost per mile, private mileage

1. July-April, reimbursed at	16.00¢
2. May-June, reimbursed at	18.00¢

II. Personnel costs

A. Salaries

--Taylor, B.	$14,724.00
--Haywood, W.	13,075.00
--Hillam, H.	19,140.00
--Navarro, R.	17,443.00
--Christensen, S.	8,389.00
--Wright, D.	13,075.00
--Grow, W.	13,665.00
TOTAL:	$99,511.00
AVERAGE:	14,215.86

B. Salaries per hour

(14215.86)/52 wks./40 hrs.=	$ 6.84

C. Miles in transport

--state car, (.08)(25,000) as staff estimates 8% of miles are transport	2,000
--private miles, (.2)(4197) as staff estimates 20% of reimbursed miles are transport	840
TOTAL:	2,840

D. Hours in actual transport
--rough estimation of 32 mph on trips based on mix of city and highway
(2840)/32= 89.00

E. Cost of actual transport
(89)(6.84)= $ 608.76

F. Cost per mile
(608.76)/2840= 21.44¢

III. Total transport cost per mile

A. July-April

1. state car
--automobile cost 9.89¢
--personnel cost 21.44¢
TOTAL: 31.33¢

2. private mileage
--automobile cost 16.00¢
--personnel cost 21.44¢
TOTAL: 37.44¢

B. May-June

1. state car
--automobile cost 9.89¢
--personnel cost 21.44¢
TOTAL: 31.33¢

2. private mileage
--automobile cost 18.00¢
--personnel cost 21.44¢
TOTAL: 39.44¢

E X H I B I T 7

AP&P PAROLE UNIT TRANSPORT CALCULATIONS FOR FISCAL 1979

I. Vehicle costs

--There are no records of that portion of total travel devoted to actual transport. Therefore, a mileage total was not available for this unit. Any attempt to contrive one would have been solely the judgment of the researcher, as the agent contact was unwilling to even make an estimate on this matter. For the state car assigned to the Parole Unit, the following data was found:

--gasoline cost per mile for the year	3.06¢
--total miles for the year (based on 11 mos.)	20,841
--total maintenance for the year	$ 209.29
--original purchase price of vehicle	$3975.00
--make and model of car	1978 Volare

II. Personnel costs

A. Salaries

--twelve agents at average of $20,000 per year or, per hour (20000)/52wks./40hrs.=	$ 9.62
--agent contact estimate of 3+% of total agents' time devoted to transporting	750 hr.
--total cost (750)(9.62)=	$7200.00

EXHIBIT 8

AP&P CENTRAL TRANSPORT CALCULATIONS FOR FISCAL 1979

I.	Automobile costs	
A.	Vehicle cost, 1976 Torino	
	--purchase price	$ 5,096.00
	--life, estimated	5 years
	--miles in life, est.	105,000
	--miles per year, based on data	21,000
	--cost per year, calculated	$ 1,019.20
	--cost per mile, calculated	4.85¢
B.	Gasoline cost, Torino	
	--total cost for year, from data	$ 743.40
	--cost per mile, calculated	3.54¢
C.	Insurance cost, Torino	
	--none carried on vehicle (drivers have personal policies)	
D.	Maintenance cost, Torino	
	--total cost for year, from data	$ 585.41
	--cost per mile, calculated	2.79¢
E.	Total automobile cost per mile, Torino	
	4.85+3.54+2.79=	11.18¢
F.	Vehicle cost, 1977 Fury	
	--purchase price	$ 4,262.52
	--life, estimated	5 years
	--miles in life, est.	120,000
	--miles per year, based on data	24,000
	--cost per year, calculated	$ 852.50
	--cost per mile, calculated	3.55¢
G.	Gasoline cost, Fury	
	--total cost for year, from data	$ 1,036.31
	--cost per mile, calculated	4.32¢
H.	Insurance cost, Fury--none	
I.	Maintenance cost, Fury	
	--total cost for year, from data	$ 406.27
	--cost per mile, calculated	1.69¢
J.	Total automobile cost per mile, Fury	
	3.55+4.32+1.69=	9.56¢
K.	Total cost, Torino	
	--total miles in actual transport	1,596
	--total cost (1596)(.1118)	$ 178.43

L. Total cost, Fury
--total miles in transport 612
--total cost (612)(.0956) $ 58.51

M. Total cost, both cars $ 236.94

II. Personnel costs

A. Salaries, diagnostic agents

--Haefeli, L.		$18,504.00
--Presset, G.		20,508.00
	TOTAL:	$39,012.00
	AVERAGE:	19,506.00

B. Salaries per hour, average
(19506)/52 wks./40 hrs.= $ 9.38

C. Miles in transport, total 2,208

D. Hours in transport plus related lost time
--taken from actual time logs, including not only time on road but related lost time which an outside transport would have saved the agents (this was the most accurate data available) 408

E. Cost of transport and related duties
(408)(9.38)= $ 3,827.04

F. Cost of transport, per mile
(3827.04)/2208 173.00¢

III. Total transport cost, per mile

A. Torino

--automobile cost		11.18¢
--personnel cost		173.00¢
	TOTAL:	184.18¢

B. Fury

--automobile cost		9.56¢
--personnel cost		173.00¢
	TOTAL:	182.56¢

IV. Alternate total cost, using standard procedure for time calculations (as in other exhibits)

A. Total time, two agents per mile
(2208)(2)/32mph= 138

B. Cost per mile (138)(9.38)/2208 58.63¢

C. Total cost, Torino (11.18¢)+(58.63¢)= 69.81¢

D. Total cost, Fury (9.56¢)+(58.63¢) 68.19¢

EXHIBIT 9

AP&P NORTH TRANSPORT CALCULATIONS FOR FISCAL 1979

I.	Automobile costs		
	A. Vehicle cost, per mile		
	--purchase price		$ 3,825.00
	--life estimated		6 years
	--miles in life, est.		93,120
	--miles per year, based on data		15,520
	--cost per year, calculated		$ 637.50
	--cost per mile, calculated		4.11¢
	B. Gasoline and maintenance cost per mile		
	--total for year, based on data		$ 653.25
	--cost per mile 653.25/15520=		4.21¢
	C. Insurance cost--none		
	D. Total automobile cost, per mile		8.32¢
II.	Personnel costs		
	A. Salaries		
	--Angeloff, J.		$19,812.00
	--Morgan, J.		20,508.00
		TOTAL:	$40,320.00
		AVERAGE:	20,160.00
	B. Salaries per hour		
	20160/52 wks./40 hrs.		$ 9.69
	C. Hours transporting		
	--miles		880
	--hours at 32 mph (two agents)		55
	D. Cost of transporting		
	(55)(9.69)=		$ 532.95
	E. Cost per mile		
	532.95/880=		60.56¢
III.	Total cost per mile for transport		
	--automobile costs		8.32¢
	--personnel costs		60.56¢
		TOTAL:	68.88¢

EXHIBIT 10

YWCA CCC TRANSPORT CALCULATIONS FOR FISCAL 1979

I.	Automobile costs		
	--total rental paid to State Motor Pool		$ 3,309.87
	--Center personnel estimate of 60% of travel for transport (.6)(3309.87)=		$ 1,985.92 or
		per mile	20.72¢
II.	Personnel costs		
	A. Salaries		
	--Roberts, T.		$10,212.00
	B. Salaries per hour		
	(10212)/52 wks./40 hrs.		$ 4.91
	C. Time in transport		
	--total transport miles (.6)(15976 total miles)=		9586
	--time at 32 mph, hours		300
	D. Cost of transport, per mile		
	--total cost (300)(4.91)=		$ 1,473.00
	--cost per mile 1473/9586=		15.37¢
III.	Total cost per mile		
	--automobile costs		20.72¢
	--personnel costs		15.37¢
		TOTAL:	36.09¢

E X H I B I T 11

PARKVIEW CCC TRANSPORT CALCULATIONS FOR FISCAL 1979

I.	Automobile costs	
	A. vehicle cost per mile, rented vehicle (1 for eight full months of center operation) --total rental paid to Motor Pool	$ 2,198.45
	B. vehicle cost per mile, rental vehicle (1 for month of June when second car added)	240.00
	C. total automobile cost for year	$ 2,438.45
	D. automobile cost per mile for eight months of operation (15,204 miles)	16.04¢
II.	Personnel costs	
	A. Salaries	
	--two drivers (1/3 of driving) at	$ 9,072.00
	--two drivers (2/3 of driving) at	11,412.00
	B. Average driving salary (1/3)(9072)+(2/3)(11412)=	$10,632.00
	C. Salaries per hour 10632/52 wks./40 hrs.	$ 5.11
	D. Miles in transport	
	--total miles, eight months	15,204
	--transport miles (.6)(15204)=	9,122
	E. Cost of transport	
	--time in transport at 32 mph 9122/32=	285
	--cost, total (285)(5.11)=	$ 1,456.73
	--cost per mile (1456.73)/9122=	15.97¢
III.	Total costs per mile	
	--automobile costs	16.04¢
	--personnel costs	15.97¢
	TOTAL:	32.01¢

A P P E N D I X I I I

ADMINISTRATIVE TRAVEL -- NOTES AND COMMENTS

In the process of researching transport travel in the Division of Corrections, I became aware of some administrative travel issues which I felt worthy of comment. First of all, I noted that the U.S.P. has an abundance of underutilized vehicles. (See the following exhibit for one month's data on vehicle utilization as well as some implications of the data.) While some areas at the U.S.P. may warrant such a situation (e.g. the farm and supply vehicles), the motor pool may be an area to examine more closely. Presumably, one of the reasons for the number of vehicles in the pool is the policy to allow certain personnel to take cars home. I suggest that this policy may be costing the U.S.P. more than it imagines. If one less car would be needed without the policy, then the cost of that car is attributable to this practice. While such cost may be negligible (i.e. $1,000 per year book cost), it certainly is a contributing factor to overall transportation cost.

Another area of consideration in administrative travel is rental vs. purchased autos. In situations where large mileage amounts are logged consistently, I found owned cars to be cheaper than rented ones. An example of this result is the Lakehills C.C.C. Their rental vehicles were logging enough miles to be charged 11¢ per mile. An owned vehicle at the same place was estimated to be costing 10.65¢ per mile. These vehicles were not totally comparable, however, so the results may be misleading. At any rate, the difference is so slight as to not be reliable. Therefore, I feel that, overall, renting is only minimally inferior to purchase. The exception would be the Prison where an in-house maintenance unit lowers the cost of purchased auto upkeep.

The final area of consideration is State car vs. private car (or mileage reimbursement). In areas such as AP&P where much travel is inherent in job performance, heavy reliance should be placed on State car usage for that travel. I understand there are some problems to this rationale (such as nonproportionate reduction in turned-in miles), yet the reasoning is sound. Therefore, another look may be given to this issue.

E X H I B I T 12

TRANSPORT VS. ADMINISTRATIVE TRAVEL -- USP, APRIL 1979

Agency		Vehicles	Total Miles	Avg. Miles Per Vehicle	Underused Vehicles *
TRANSPORT --	transportation	5	11884	2376.80	0
	community release	8	23265	2908.13	0
	Project Discovery	1	2191	2191.00	0
	TOTALS:	14	37340	2667.14	0
ADMINISTRATIVE --	motor pool	12	10615	884.60	8
	agriculture	15	5148	343.20	14
	physical	15	5932	395.50	15
	supply	5	2648	529.60	4
	security	2	740	370.00	2
	TOTALS:	49	25083	511.90	43

*based on State Motor Pool criteria for underutilized vehicles (those with less than 1200 miles per month)

IMPLICATIONS:

1. Transport accounted for 59.8% of total miles with 22.2% of vehicles, thus was more resource cost effective (assuming depreciation cannot fully compensate for lower usage-longer life).

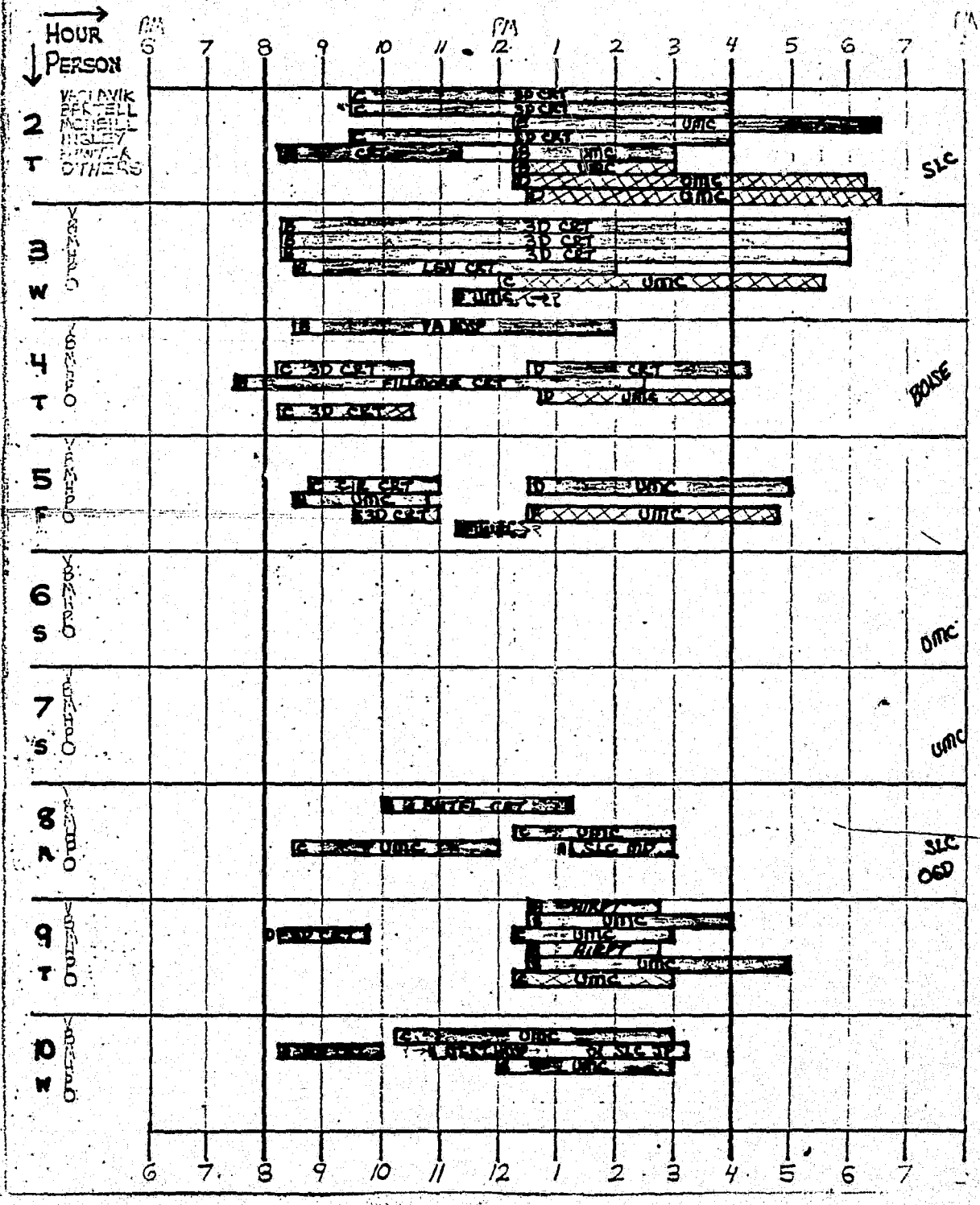
2. Transport logged an average 521% as many miles per vehicle as administrative, and had no underutilized vehicles; thus transport is far more resource use-intensive

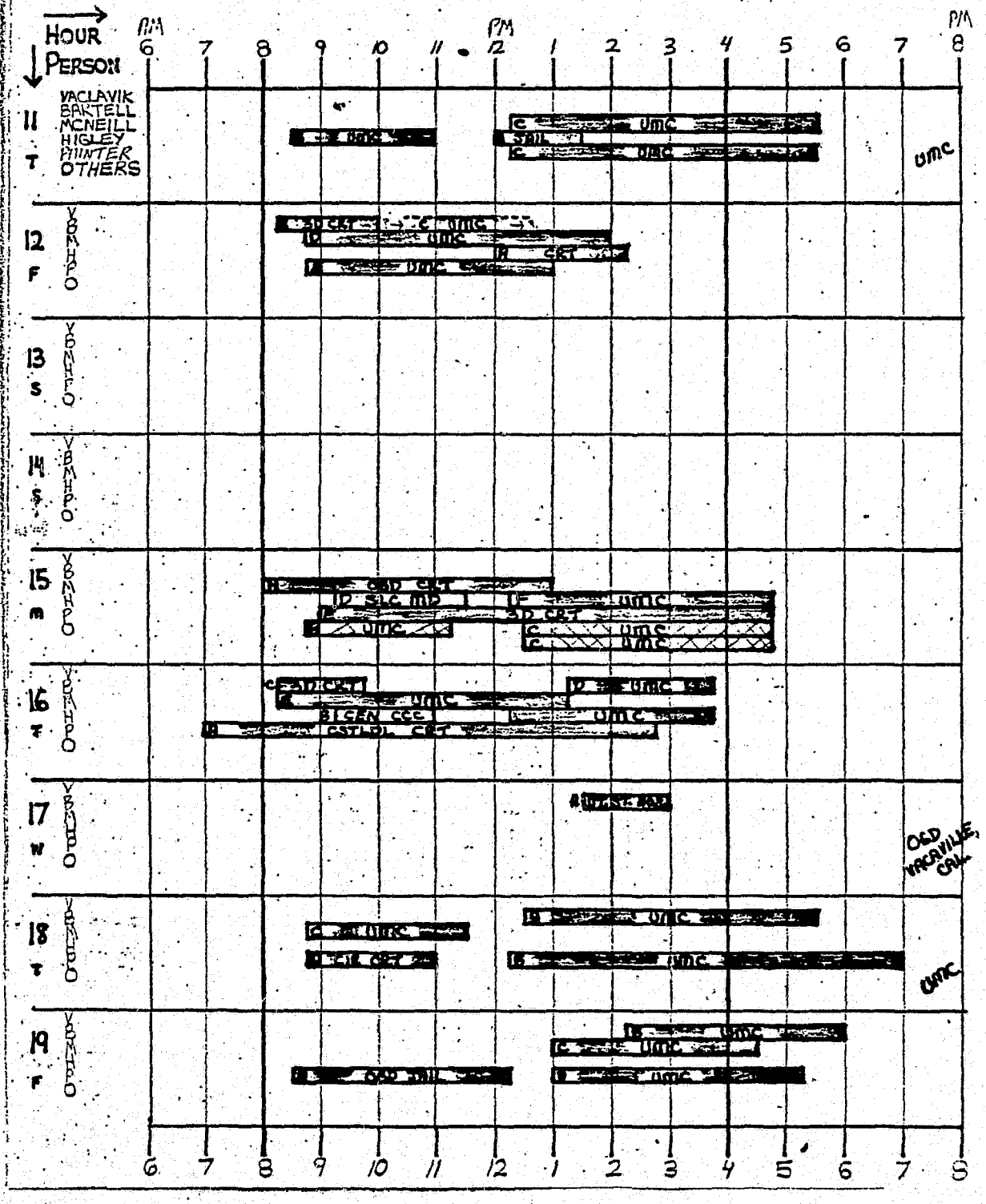
3. Transport needs -- vehicles available for regular transport usage; critical point is meeting scheduled times (court, medical appointments, etc.)
   Admin. needs -- vehicles available for infrequent jobs (e.g. dump trucks), sporadic staff usage (e.g. errands, escapes, etc.), etc.; critical point is meeting peak usage demand so key people's time is not wasted or lost and administration can flow smoothly

4. Points of further consideration -- cars available to take home? administrative vehicles oversupplied?

EXHIBIT 13

USP TRANSPORTATION OFFICE TIME AND TRIP CHART -- JANUARY 1979

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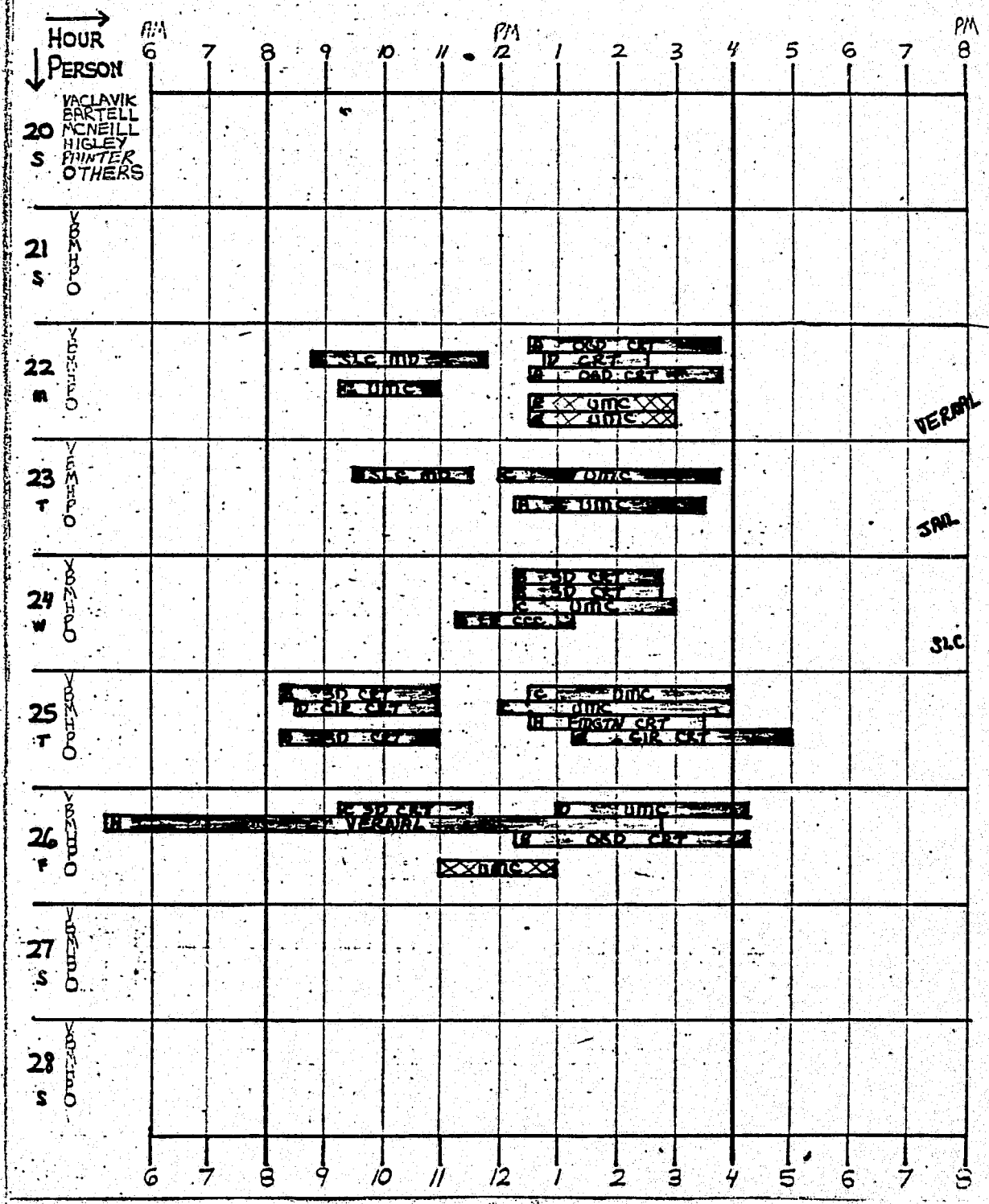
OLD VACAVILLE, CAL.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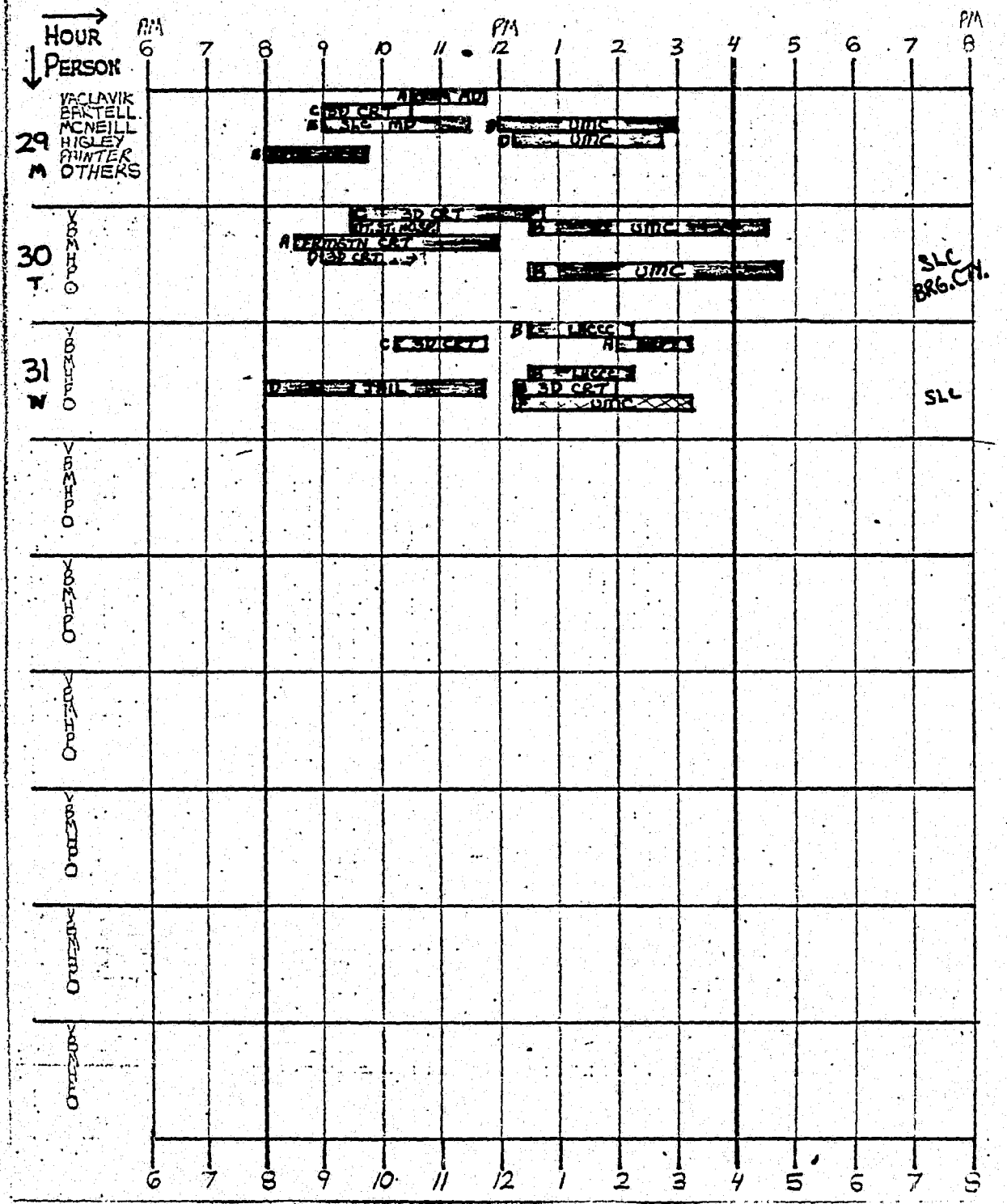
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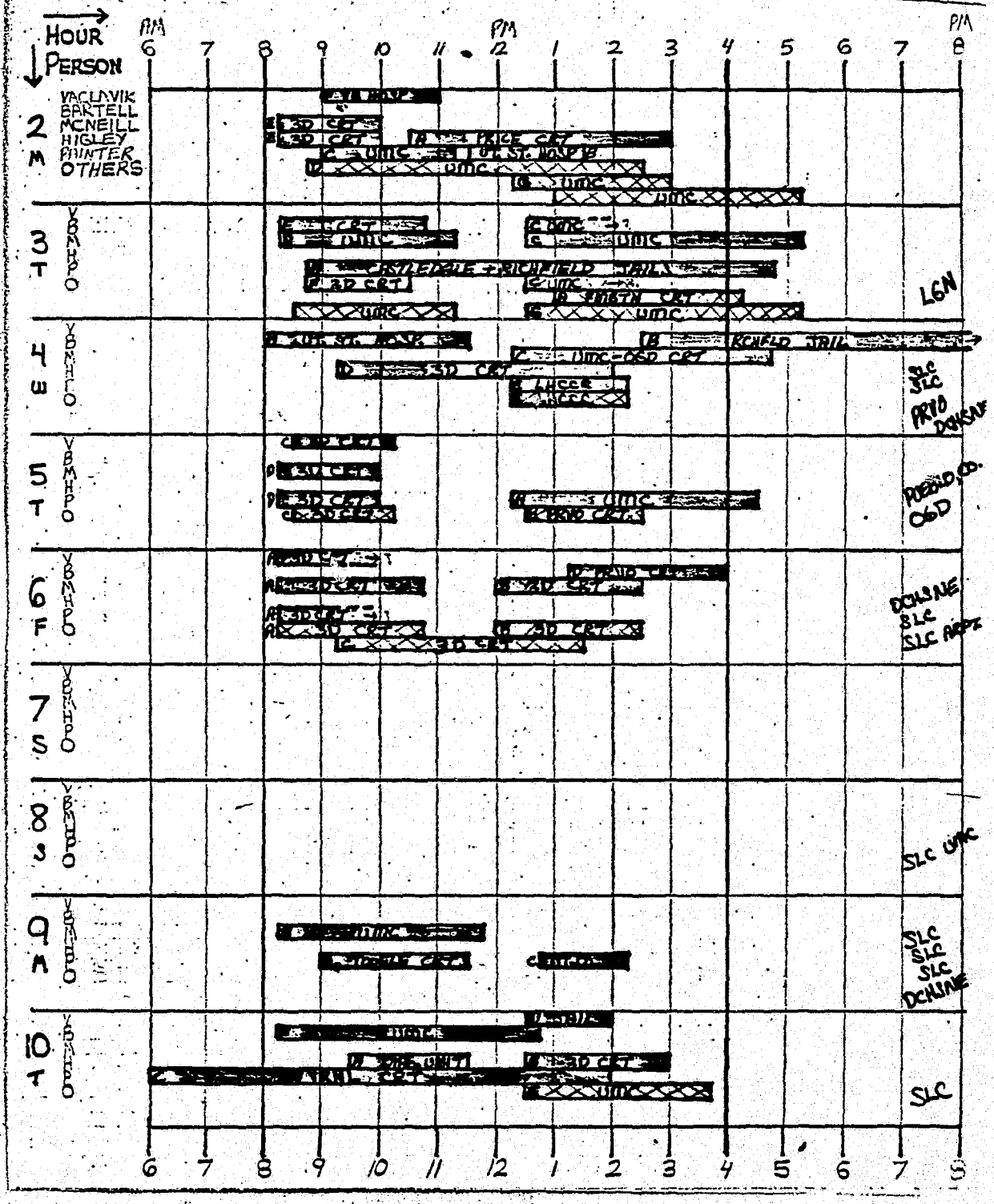
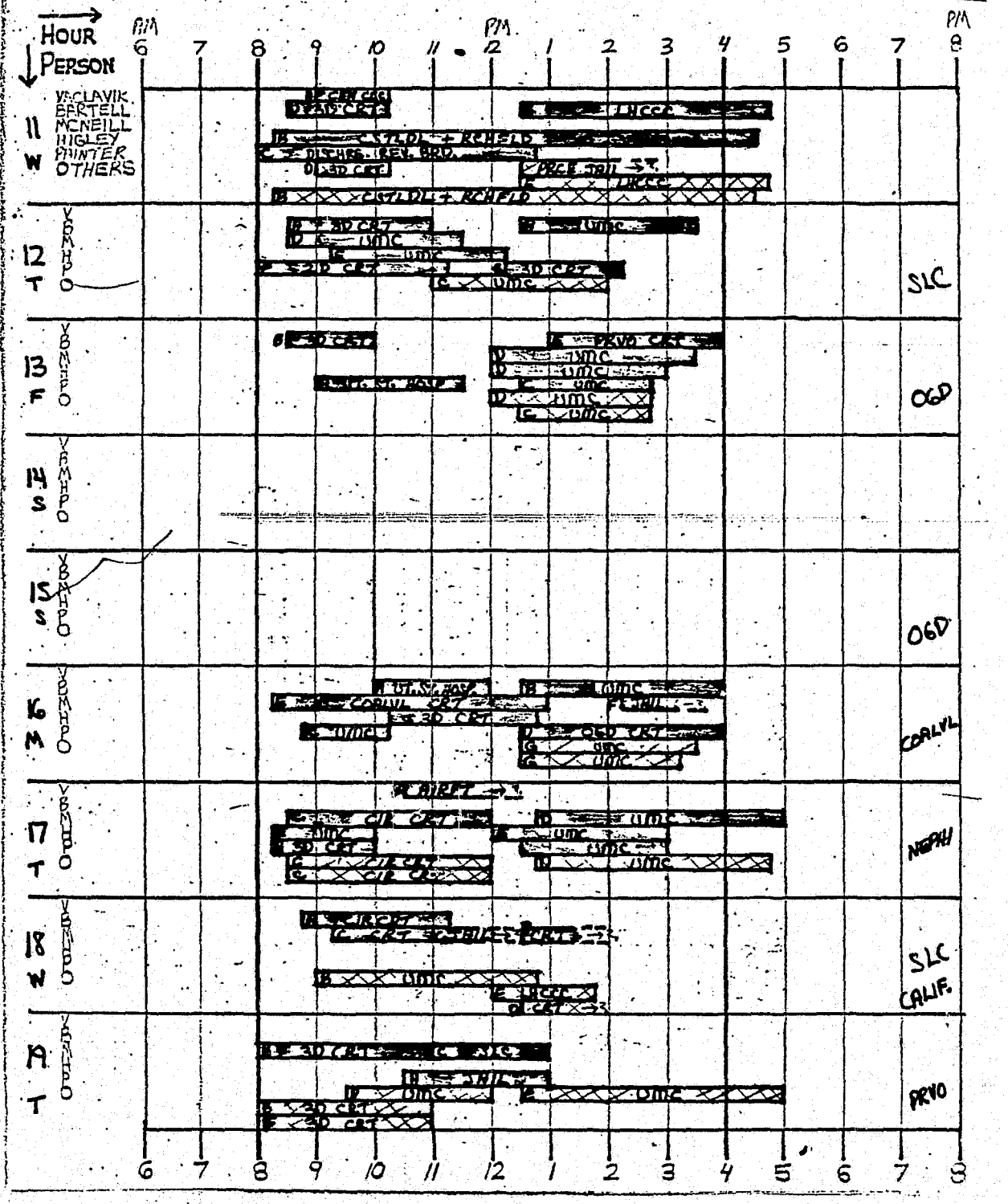
EXHIBIT 14

USP TRANSPORTATION OFFICE TIME AND TRIP CHART -- APRIL 1979

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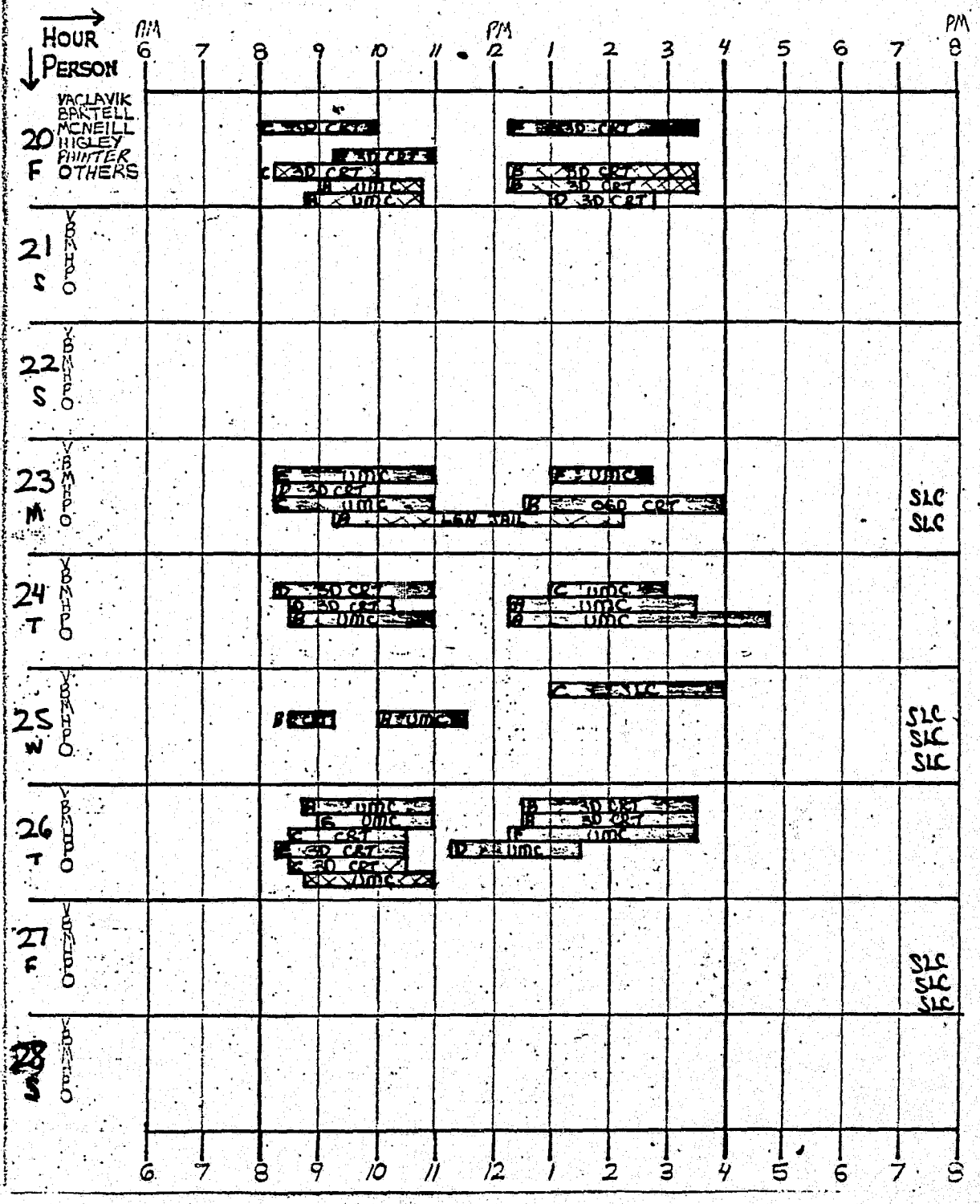
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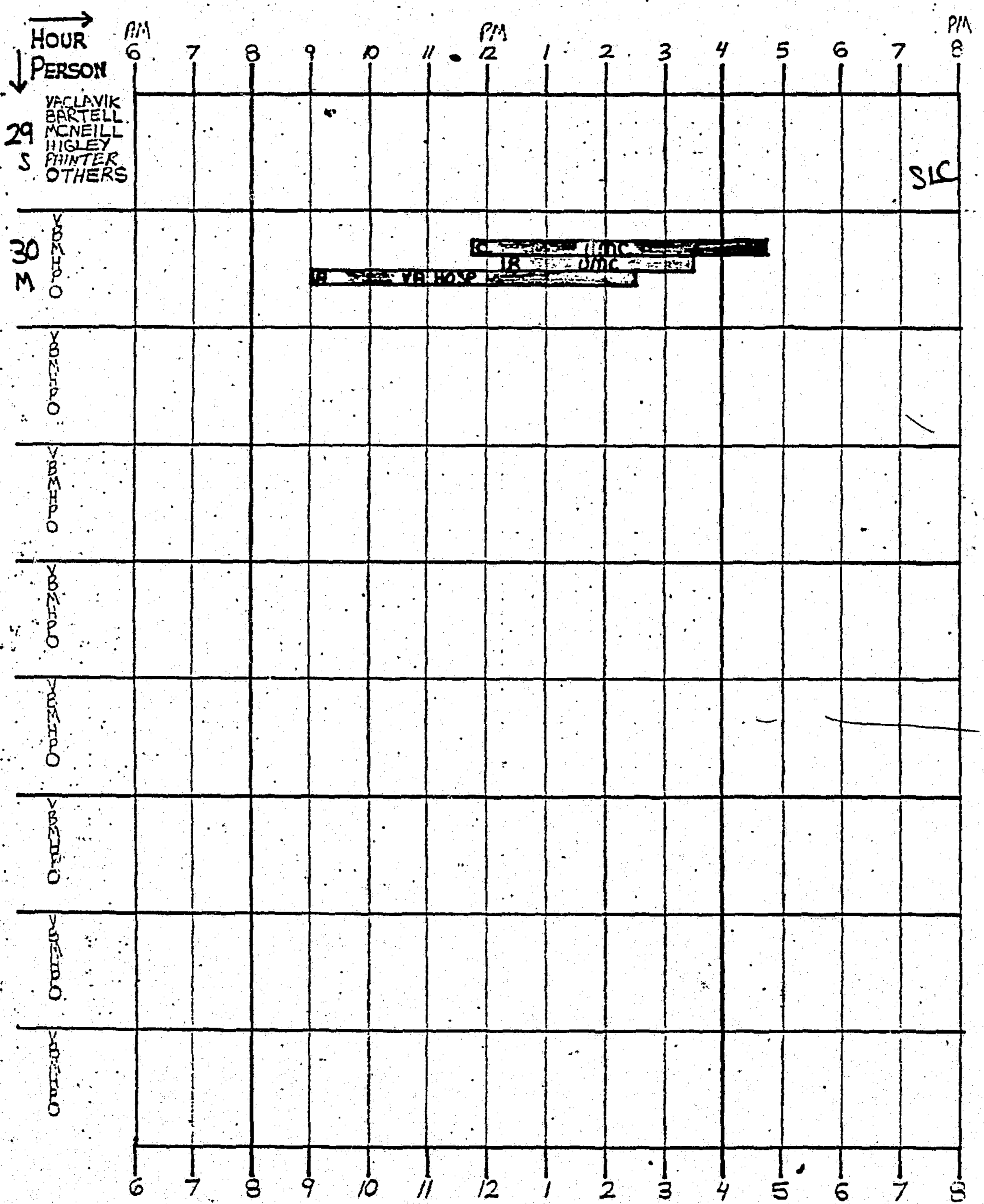
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