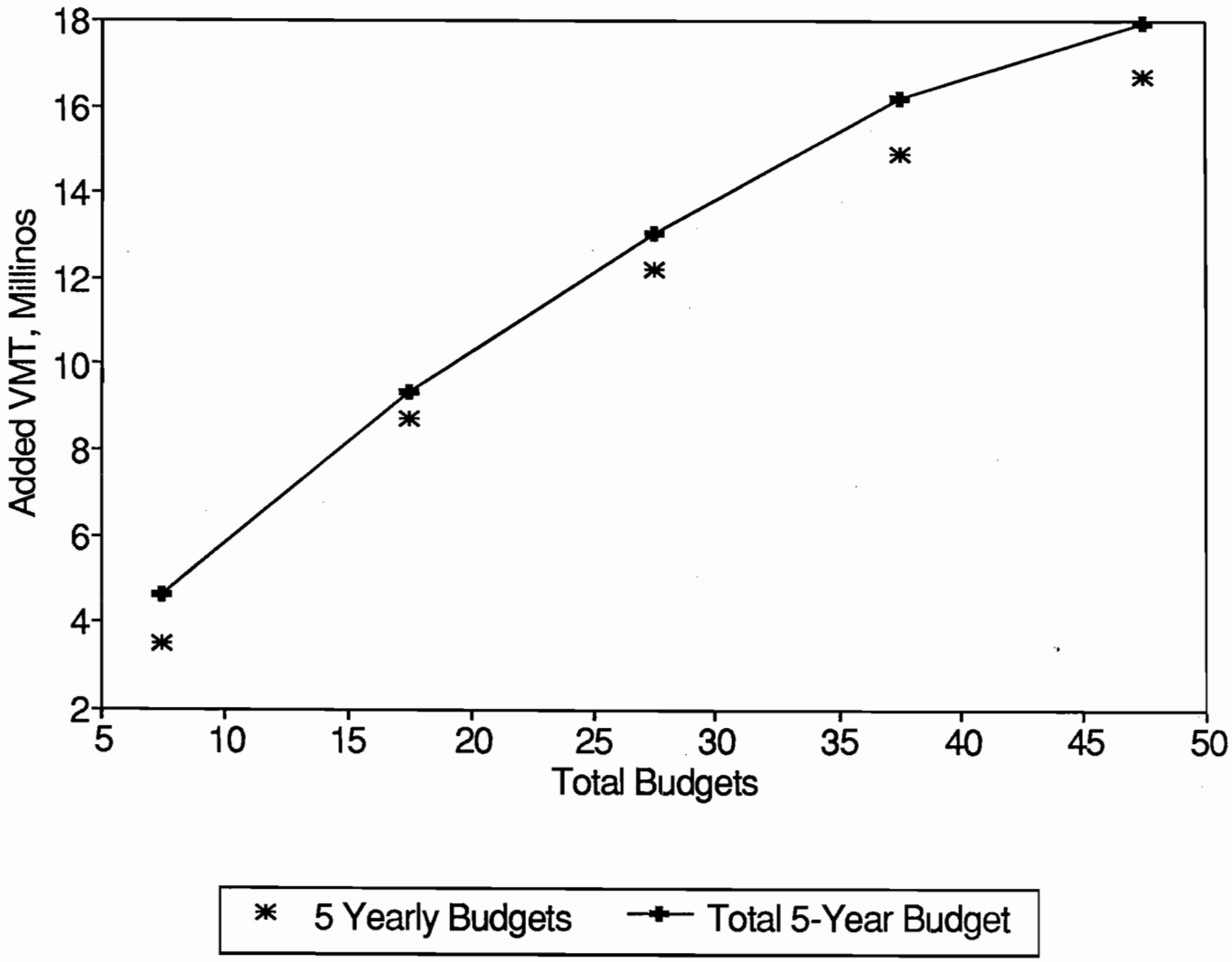
VAR	ID	REHAB	YEAR	LENGTH (Mile)	ADT (1000 Veh)	LIFE (Year)	COST ($1000)	VMT (1000 Veh-Mile)
P1S01	57-N-168.30	0	1	3.59	10.1	0		0
P1S31	57-N-168.30	3	1	3.59	10.1	11	1002	398.8
P1S32	57-N-168.30	3	2	3.59	10.1	10	1089	362.6
P1S33	57-N-168.30	3	3	3.59	10.1	10	1183	362.6
P2S02	57-N-171.89	0	2	5	10.1	0		0
P2S32	57-N-171.89	3	2	5	10.1	10	1452	505
P2S33	57-N-171.89	3	3	5	10.1	10	1593	505
P2S34	57-N-171.89	3	4	5	10.1	9	1745	454.5
P3S05	57-N-176.89	0	5	4.21	11.1	10		467.3
P4S05	57-N-181.10	0	5	2.69	11.1	11		328.4
P5S01	57-N-183.79	0	1	6.81	11.1	0		0
P5S31	57-N-183.79	3	1	6.81	11.1	12	1873	907.1
P5S32	57-N-183.79	3	2	6.81	11.1	12	2000	907.1
P5S33	57-N-183.79	3	3	6.81	11.1	11	2134	831.5
P6S05	57-N-190.60	0	5	8.62	11.1	3		287
P7S01	57-N-199.22	0	1	4.6	11.1	0		0
P7S31	57-N-199.22	3	1	4.6	11.1	9	1119	459.5
P7S32	57-N-199.22	3	2	4.6	11.1	9	1197	459.5
P7S33	57-N-199.22	3	3	4.6	11.1	9	1326	459.5
P8S05	57-N-203.82	0	5	3.85	12.1	3		139.8
P9S05	57-N-207.67	0	5	4.28	12.1	0		0
P9S35	57-N-207.67	3	5	4.28	12.1	8	1218	414.3
P10S05	57-N-211.95	0	5	3.84	12.1	2		92.9
P11S05	57-N-215.79	0	5	3.7	12.1	1		44.8
P12S05	57-N-219.49	0	5	4.65	13.1	1		60.9
P13S05	57-N-224.14	0	5	4.04	13.1	2		105.8
P14S05	57-N-228.18	0	5	5.4	13.1	0		0
P14S35	57-N-228.18	3	5	5.4	13.1	10	1634	707.4
P15S05	57-N-233.58	0	5	3.22	16.1	8		414.7
P16S05	57-N-236.80	0	5	0.91	16.1	4		58.6
P17S05	57-N-237.71	0	5	5.39	13.1	2		141.2
P18S01	57-N-243.10	0	1	2.12	13.1	0		0
P18S31	57-N-243.10	3	1	2.12	13.1	9	737	249.9
P18S32	57-N-243.10	3	2	2.12	13.1	8	794	222.2
P18S33	57-N-243.10	3	3	2.12	13.1	8	855	222.2
P19S01	57-N-245.22	0	1	5.23	12.1	0		0
P19S31	57-N-245.22	3	1	5.23	12.1	9	1296	569.5
P19S32	57-N-245.22	3	2	5.23	12.1	8	1436	506.3
P19S33	57-N-245.22	3	3	5.23	12.1	8	1534	506.3
P20S05	57-N-250.45	0	5	5.38	11.1	1		59.7
P21S01	57-S-168.30	0	1	3.59	10.1	0		0


Added VMT, Millinos
18
16
14
12
10
8
6
4
2
5
10
15
20
25
30
35
40
45
50
Total Budgets
5 Yearly Budgets
Total 5-Year Budget

Separate Yearly Budgets, M$	LP Optimum, Million VMT	Bound On Optimum, Million VMT	Optimum Found	Maximum Absolute Error, %
1.5 * 5 years	3.500	---	Yes	---
3.5 * 5 years	8.720	---	Yes	---
5.5 * 5 years	12.207	12.722	No	4.05
7.5 * 5 years	14.878	15.474	No	3.85
9.5 * 5 years	16.665	---	Yes	---

A Total 5-Year Budget, M$	LP Optimum, Million VMT	Bound On Optimum, Million VMT	Optimum Found	Maximum Absolute Error, %
7.5	4.625	---	Yes	---
17.5	9.335	---	Yes	---
27.5	13.044	---	Yes	---
37.5	16.213	---	Yes	---
47.5	17.949	---	Yes	---

	A Total 5-Year Budget = 7.5 M$		A Total 5-Year Budget = 17.5 M$		A Total 5-Year Budget = 27.5 M$		A Total 5-Year Budget = 37.5 M$		A Total 5-Year Budget = 47.5 M$	
Pave-ment Sect	Year to Rehab	Cost ($1000)	Year to Rehab	Cost ($1000)	Year to Rehab	Cost ($1000)	Year to Rehab	Cost ($1000)	Year to Rehab	Cost ($1000)
P 1			1	1002	1	1002	1	1002	1	1002
P 2							2	1452	2	1452
P 3										
P 4										
P 5			1	1873	1	1873	1	1873	1	1873
P 6										
P 7			1	1119	1	1119	1	1119	2	1197
P 8										
P 9					5	1218	5	1218	5	1218
P 10										
P 11										
P 12										
P 13										
P 14					5	1634	5	1634	5	1634
P 15										
P 16										
P 17										
P 18					1	737	1	737	1	737
P 19			1	1296	1	1296	1	1296	1	1296
P 20										
P 21									1	1863
P 22					1	1545	1	1545	1	1545
P 23										
P 24										
P 25										
P 26										
P 27			2	1065	2	1065	2	1065	2	1065
P 28										
P 29										
P 30										
P 31										
P 32			3	1328	3	1328	3	1328	3	1328
P 33					5	1346	5	1346	5	1346
P 34			1	992	1	992	1	992	1	992
P 35			5	347	5	347	5	347	5	347
P 36										
P 37										
P 38										

P41S32	1.000000	-537.500000
P46S34	1.000000	-55.899994
P60S35	1.000000	-198.699997
P85S35	1.000000	-597.500000
P88S33	1.000000	-470.399902
P94S34	1.000000	-276.599854
P97S34	1.000000	-231.299988
P98S31	1.000000	-919.699951
P99S34	1.000000	-1249.099850
P105S34	1.000000	-291.000000
P106S32	1.000000	-472.699951
P113S31	1.000000	-919.699951
P114S34	1.000000	-1249.099850
P121S33	1.000000	-420.199951
P3S05	1.000000	0.000000
P4S05	1.000000	0.000000
P6S05	1.000000	0.000000
P8S05	1.000000	0.000000
P10S05	1.000000	0.000000
P11S05	1.000000	0.000000
P12S05	1.000000	0.000000
P13S05	1.000000	0.000000
P14S05	1.000000	0.000000
P15S05	1.000000	0.000000
P16S05	1.000000	0.000000
P17S05	1.000000	0.000000
P20S05	1.000000	0.000000
P21S01	1.000000	0.000000
P23S05	1.000000	0.000000
P24S05	1.000000	0.000000
P25S05	1.000000	0.000000
P26S05	1.000000	0.000000
P28S05	1.000000	0.000000
P29S05	1.000000	0.000000
P30S05	1.000000	0.000000
P31S05	1.000000	0.000000
P36S05	1.000000	0.000000
P37S05	1.000000	0.000000
P38S05	1.000000	0.000000
P39S05	1.000000	0.000000
P42S05	1.000000	0.000000
P43S05	1.000000	0.000000
P44S05	1.000000	0.000000
P45S05	1.000000	0.000000
P47S05	1.000000	0.000000
P48S01	1.000000	0.000000
P49S05	1.000000	0.000000
P50S05	1.000000	0.000000
P51S05	1.000000	0.000000
P52S05	1.000000	0.000000
P53S05	1.000000	0.000000
P54S05	1.000000	0.000000
P55S05	1.000000	0.000000
P56S05	1.000000	0.000000
P57S05	1.000000	0.000000
P58S05	1.000000	0.000000
P59S05	1.000000	0.000000
P61S05	1.000000	0.000000
P62S05	1.000000	0.000000
P63S05	1.000000	0.000000
P64S05	1.000000	0.000000
P65S05	1.000000	0.000000
P66S05	1.000000	0.000000
P67S05	1.000000	0.000000
P68S05	1.000000	0.000000
P69S05	1.000000	0.000000

P70S05	1.000000	0.000000
P71S05	1.000000	0.000000
P72S05	1.000000	0.000000
P73S05	1.000000	0.000000
P74S05	1.000000	0.000000
P75S05	1.000000	0.000000
P76S05	1.000000	0.000000
P77S05	1.000000	0.000000
P78S05	1.000000	0.000000
P79S05	1.000000	0.000000
P80S05	1.000000	0.000000
P81S05	1.000000	0.000000
P82S05	1.000000	0.000000
P83S05	1.000000	0.000000
P84S05	1.000000	0.000000
P86S05	1.000000	0.000000
P87S05	1.000000	0.000000
P89S05	1.000000	0.000000
P90S05	1.000000	0.000000
P91S05	1.000000	0.000000
P92S05	1.000000	0.000000
P93S05	1.000000	0.000000
P95S05	1.000000	0.000000
P96S05	1.000000	0.000000
P100S05	1.000000	0.000000
P101S05	1.000000	0.000000
P102S05	1.000000	0.000000
P103S05	1.000000	0.000000
P104S05	1.000000	0.000000
P107S05	1.000000	0.000000
P108S05	1.000000	0.000000
P109S05	1.000000	0.000000
P110S05	1.000000	0.000000
P111S05	1.000000	0.000000
P112S05	1.000000	0.000000
P115S05	1.000000	0.000000
P116S05	1.000000	0.000000
P117S05	1.000000	0.000000
P118S05	1.000000	0.000000
P119S05	1.000000	0.000000
P120S05	1.000000	0.000000

ROW	SLACK OR SURPLUS	DUAL PRICES

NO. ITERATIONS= 1051895
BRANCHES=99328 DETERM.= 1.000E 0
:

optout.1

```
LINDO (22 JUNE 88 CHICAGO)
:

:
NEW COEFFICIENT:
NEW COEFFICIENT:
NEW COEFFICIENT:
NEW COEFFICIENT:
NEW COEFFICIENT:
:
:
:
LP OPTIMUM FOUND AT STEP     87
OBJECTIVE VALUE =   15513.3008

New integer solution of    14354.5977     at branch     35 pivot    525
BOUND ON OPTIMUM:  15473.55

New integer solution of    14396.9961     at branch     39 pivot    549
BOUND ON OPTIMUM:  15473.55

New integer solution of    14633.2969     at branch     61 pivot    686
BOUND ON OPTIMUM:  15473.55

New integer solution of    14785.1953     at branch     81 pivot    837
BOUND ON OPTIMUM:  15473.55

New integer solution of    14827.5977     at branch     83 pivot    853
BOUND ON OPTIMUM:  15473.55

New integer solution of    14835.6953     at branch    121 pivot   1142
BOUND ON OPTIMUM:  15473.55

New integer solution of    14878.0977     at branch    123 pivot   1158
BOUND ON OPTIMUM:  15473.55

PIVOT LIMIT OF 51891 EXCEEDED.  HOW MANY  MORE ALLOWED?
 ?

PIVOT LIMIT OF****** EXCEEDED.  HOW MANY  MORE ALLOWED?
 ?
RE-INSTALLING BEST SOLUTION...
:

WARNING, solution may be nonoptimal/nonfeasible

      OBJECTIVE FUNCTION VALUE

      1)    14878.0977

 VARIABLE        VALUE          REDUCED COST
    P1S31         1.000000       -398.799805
    P2S33         1.000000       -505.000000
    P5S32         1.000000       -907.099854
    P7S33         1.000000       -459.500000
    P9S35         1.000000       -414.299805
   P18S31         1.000000       -249.899994
   P19S31         1.000000       -569.500000
   P22S31         1.000000       -555.500000
   P27S32         1.000000       -459.500000
   P32S33         1.000000       -670.099854
   P33S35         1.000000       -529.199951
   P34S32         1.000000       -622.500000
   P35S35         1.000000       -141.500000
   P40S35         1.000000       -506.299805
```

D5.3

```
*****************************************
*                                       *
*    ILLINOIS PAVEMENT FEEDBACK SYSTEM  *
*     NETWORK REHAB MANAGEMENT PROGRAM  *
*                                       *
*              ILLINET 2.0              *
*          REVISED: 12 APR 1990         *
*                                       *
*****************************************
*                                       *
* ANALYSIS DETAIL FOR:                  *
* REHAB SELECTION:   FIXED STRATEGY (3) *
* NETWORK ALGORITHM: MULTI-YEAR         *
* MEASURE OF BENEFIT: VMT               *
*                                       *
*****************************************
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ID	YEAR	REHAB	LEN	LANE	ADT	LIFE	AREA	RUC	COST
57-N-168.30	1	0	3.59	2	10.1	0	25.1		
57-N-168.30	1	3	3.59	2	10.1	11	76.2	83	1002
57-N-168.30	2	3	3.59	2	10.1	10	76.8	79	1089
57-N-168.30	3	3	3.59	2	10.1	10	76.9	79	1183
57-N-171.89	2	0	5.00	2	10.1	0	28.6		
57-N-171.89	2	3	5.00	2	10.1	10	69.1	70	1452
57-N-171.89	3	3	5.00	2	10.1	10	70.2	73	1593
57-N-171.89	4	3	5.00	2	10.1	9	71.3	69	1745
57-N-176.89	5	0	4.21	2	11.1	10	138.0		
57-N-181.10	5	0	2.69	2	11.1	11	131.4		
57-N-183.79	1	0	6.81	2	11.1	0	17.1		
57-N-183.79	1	3	6.81	2	11.1	12	103.6	96	1873
57-N-183.79	2	3	6.81	2	11.1	12	104.2	96	2000
57-N-183.79	3	3	6.81	2	11.1	11	104.4	89	2134
57-N-190.60	5	0	8.62	2	11.1	3	48.3		
57-N-199.22	1	0	4.60	2	11.1	0	23.9		
57-N-199.22	1	3	4.60	2	11.1	9	66.3	63	1119
57-N-199.22	2	3	4.60	2	11.1	9	68.4	69	1197
57-N-199.22	3	3	4.60	2	11.1	9	69.8	69	1326
57-N-203.82	5	0	3.85	2	12.1	3	28.7		
57-N-207.67	5	0	4.28	2	12.1	0	18.4		
57-N-207.67	5	3	4.28	2	12.1	8	61.7	59	1218
57-N-211.95	5	0	3.84	2	12.1	2	21.9		
57-N-215.79	5	0	3.70	2	12.1	1	21.6		
57-N-219.49	5	0	4.65	2	13.1	1	28.3		
57-N-224.14	5	0	4.04	2	13.1	2	30.8		
57-N-228.18	5	0	5.40	2	13.1	0	24.8		
57-N-228.18	5	3	5.40	2	13.1	10	70.9	70	1634
57-N-233.58	5	0	3.22	2	16.1	8	83.1		
57-N-236.80	5	0	.91	2	16.1	4	48.4		
57-N-237.71	5	0	5.39	2	13.1	2	39.7		
57-N-243.10	1	0	2.12	2	13.1	0	.0		
57-N-243.10	1	3	2.12	2	13.1	9	82.4	69	737
57-N-243.10	2	3	2.12	2	13.1	8	79.3	65	794
57-N-243.10	3	3	2.12	2	13.1	8	76.6	62	855
57-N-245.22	1	0	5.23	2	12.1	0	15.8		
57-N-245.22	1	3	5.23	2	12.1	9	67.8	69	1296
57-N-245.22	2	3	5.23	2	12.1	8	68.6	65	1436
57-N-245.22	3	3	5.23	2	12.1	8	69.7	65	1534
57-N-250.45	5	0	5.38	2	11.1	1	19.9		
57-S-168.30	1	0	3.59	2	10.1	0	.0		
57-S-168.30	1	3	3.59	2	10.1	11	101.3	86	1863
57-S-168.30	2	3	3.59	2	10.1	10	97.6	79	1994
57-S-168.30	3	3	3.59	2	10.1	10	93.9	79	2143
57-S-171.89	1	0	5.00	2	10.1	0	28.7		
57-S-171.89	1	3	5.00	2	10.1	11	72.6	77	1545
57-S-171.89	2	3	5.00	2	10.1	10	73.7	73	1688

57-S-171.89	3	3	5.00	2	10.1	10	74.3	76	1841
57-S-176.89	5	0	4.21	2	11.1	12	146.9		
57-S-181.10	5	0	2.69	2	10.1	11	131.4		
57-S-183.79	5	0	6.81	2	11.1	1	42.9		
57-S-190.60	5	0	8.62	2	11.1	3	52.5		
57-S-199.22	2	0	4.60	2	11.1	0	21.9		
57-S-199.22	2	3	4.60	2	11.1	9	65.5	66	1065
57-S-199.22	3	3	4.60	2	11.1	9	67.2	66	1165
57-S-199.22	4	3	4.60	2	11.1	8	68.6	65	1271
57-S-203.82	5	0	3.85	2	12.1	2	24.6		
57-S-207.67	5	0	4.28	2	12.1	3	26.6		
57-S-211.95	5	0	3.84	2	12.1	1	20.6		
57-S-215.79	5	0	3.70	2	12.1	2	22.7		
57-S-219.49	3	0	4.65	2	13.1	0	29.6		
57-S-219.49	3	3	4.65	2	13.1	11	72.9	77	1328
57-S-219.49	4	3	4.65	2	13.1	10	74.2	76	1448
57-S-219.49	5	3	4.65	2	13.1	10	75.7	76	1605
57-S-224.14	5	0	4.04	2	13.1	0	25.3		
57-S-224.14	5	3	4.04	2	13.1	10	70.4	70	1346
57-S-228.18	1	0	4.32	2	13.1	0	25.3		
57-S-228.18	1	3	4.32	2	13.1	11	82.8	89	992
57-S-228.18	2	3	4.32	2	13.1	11	82.9	86	1062
57-S-228.18	3	3	4.32	2	13.1	11	83.0	86	1137
57-S-232.50	5	0	1.08	2	13.1	0	24.3		
57-S-232.50	5	3	1.08	2	13.1	10	71.4	70	347
57-S-233.58	5	0	3.22	2	16.1	6	73.9		
57-S-236.80	5	0	.91	2	16.1	6	55.3		
57-S-237.71	5	0	5.39	2	13.1	2	40.3		
57-S-243.10	5	0	2.12	2	13.1	1	18.9		
57-S-245.22	5	0	5.23	2	12.1	0	14.3		
57-S-245.22	5	3	5.23	2	12.1	8	58.4	56	1547
57-S-250.45	1	0	5.38	2	11.1	0	22.8		
57-S-250.45	1	3	5.38	2	11.1	9	62.1	63	1284
57-S-250.45	2	3	5.38	2	11.1	9	64.0	63	1400
57-S-250.45	3	3	5.38	2	11.1	8	65.4	62	1524
70-E-106.70	5	0	1.80	2	11.1	2	32.2		
70-E-108.50	5	0	1.20	2	11.1	2	33.4		
70-E-109.70	5	0	7.28	2	11.1	2	32.2		
70-E-116.98	5	0	1.42	2	11.1	1	30.8		
70-E-118.40	4	0	.72	2	11.1	0	4.9		
70-E-118.40	4	3	.72	2	11.1	7	61.5	52	210
70-E-118.40	5	3	.72	2	11.1	6	63.1	51	257
70-E-119.12	5	0	2.33	2	11.1	4	55.7		
70-E-121.45	1	0	4.05	2	11.1	0	.0		
70-E-121.45	1	3	4.05	2	11.1	8	83.1	65	3434
70-E-121.45	2	3	4.05	2	11.1	8	81.3	65	3683
70-E-121.45	3	3	4.05	2	11.1	8	79.0	65	3948
70-E-125.50	5	0	4.00	2	11.1	5	59.4		
70-E-129.50	5	0	4.90	2	12.1	4	54.3		
70-E-134.40	5	0	2.50	2	12.1	1	37.2		
70-E-136.90	5	0	4.30	2	12.1	4	54.7		
70-E-141.20	5	0	5.50	2	12.1	0	6.1		
70-E-141.20	5	3	5.50	2	12.1	8	69.1	59	1687
70-E-146.70	5	0	9.05	2	13.1	5	73.4		
70-W-106.70	5	0	.80	2	11.1	2	32.2		
70-W-107.50	5	0	1.30	2	11.1	2	34.0		
70-W-108.80	5	0	1.70	2	11.1	2	34.0		
70-W-110.50	5	0	4.50	2	11.1	3	34.7		
70-W-115.00	5	0	1.20	2	11.1	2	31.0		
70-W-116.20	5	0	3.58	2	11.1	0	6.9		
70-W-116.20	5	3	3.58	2	11.1	5	44.3	38	1078
70-W-119.78	5	0	3.98	2	11.1	3	51.4		
70-W-123.76	5	0	1.76	2	11.1	0	6.1		
70-W-123.76	5	3	1.76	2	11.1	8	69.1	59	540
70-W-125.52	5	0	3.79	2	11.1	3	48.5		
70-W-129.31	5	0	5.69	2	12.1	4	54.3		

70-W-135.00	5	0	6.20	2	12.1	1	38.9			
70-W-141.20	5	0	5.50	2	12.1	0	6.1			
70-W-141.20	5	3	5.50	2	12.1	8	69.1	59	1687	
70-W-146.70	5	0	9.05	2	13.1	3	60.1			
72-E- 21.24	5	0	7.86	2	7.1	23	182.5			
72-E- 29.10	5	0	2.29	2	6.1	18	141.6			
72-E- 31.39	5	0	2.97	2	5.1	19	154.8			
72-E- 34.36	5	0	3.19	2	5.1	15	126.3			
72-E- 37.55	5	0	4.32	2	6.1	11	108.3			
72-E- 41.87	5	0	6.53	2	6.1	7	88.7			
72-E- 48.40	5	0	5.02	2	6.1	2	25.5			
72-E- 53.42	5	0	4.64	2	6.1	3	33.5			
72-E- 58.06	5	0	4.82	2	6.1	2	26.7			
72-E- 62.88	5	0	4.78	2	8.1	6	71.8			
72-E- 67.66	5	0	5.19	2	8.1	9	107.3			
72-E- 72.85	5	0	5.40	2	8.1	7	91.8			
72-W- 21.24	5	0	7.86	2	7.1	21	172.1			
72-W- 29.10	5	0	2.29	2	6.1	20	164.4			
72-W- 31.39	5	0	2.97	2	5.1	20	158.7			
72-W- 34.36	5	0	3.19	2	5.1	22	173.1			
72-W- 37.55	5	0	4.32	2	6.1	17	138.9			
72-W- 41.87	5	0	6.53	2	6.1	0	78.4			
72-W- 41.87	5	3	6.53	2	6.1	15	68.1	87	1787	
72-W- 48.40	5	0	5.02	2	6.1	1	24.3			
72-W- 53.42	5	0	4.64	2	6.1	1	22.7			
72-W- 58.06	1	0	4.82	2	6.1	0	18.6			
72-W- 58.06	1	3	4.82	2	6.1	16	138.0	169	1194	
72-W- 58.06	2	3	4.82	2	6.1	16	138.5	169	1300	
72-W- 58.06	3	3	4.82	2	6.1	16	138.9	124	1414	
72-W- 62.88	5	0	4.78	2	8.1	7	77.1			
72-W- 67.66	5	0	5.19	2	8.1	9	107.1			
72-W- 72.85	5	0	5.40	2	8.1	9	99.6			
74-E-155.04	5	0	5.18	2	8.1	6	62.8			
74-E-160.22	5	0	2.85	2	9.1	5	40.0			
74-E-163.07	4	0	3.80	2	9.1	0	34.1			
74-E-163.07	4	3	3.80	2	9.1	8	40.5	53	730	
74-E-163.07	5	3	3.80	2	9.1	8	42.3	56	767	
74-E-166.87	5	0	4.63	2	9.1	0	14.8			
74-E-166.87	5	3	4.63	2	9.1	7	55.2	52	1369	
74-E-171.50	5	0	6.99	2	15.1	3	40.7			
74-E-178.49	3	0	1.42	2	18.1	0	19.8			
74-E-178.49	3	3	1.42	2	18.1	9	68.8	66	452	
74-E-178.49	4	3	1.42	2	18.1	9	70.7	66	508	
74-E-178.49	5	3	1.42	2	18.1	8	72.2	65	568	
74-E-179.91	1	0	4.24	2	24.1	0	9.5			
74-E-179.91	1	3	4.24	2	24.1	9	76.4	69	1395	
74-E-179.91	2	3	4.24	2	24.1	8	77.0	65	1576	
74-E-179.91	3	3	4.24	2	24.1	8	77.0	65	1772	
74-E-184.15	3	0	10.34	2	15.1	0	44.4			
74-E-184.15	3	3	10.34	2	15.1	8	39.0	53	1984	
74-E-184.15	4	3	10.34	2	15.1	8	41.4	56	2083	
74-E-184.15	5	3	10.34	2	15.1	8	43.4	56	2187	
74-E-194.49	5	0	3.28	2	13.1	6	69.3			
74-E-197.77	5	0	2.50	2	13.1	6	69.9			
74-E-200.27	5	0	5.68	2	13.1	6	67.8			
74-E-205.95	5	0	2.35	2	13.1	6	70.7			
74-E-208.30	5	0	2.10	2	11.1	6	65.5			
74-E-210.40	3	0	4.49	2	8.1	0	17.7			
74-E-210.40	3	3	4.49	2	8.1	8	67.5	59	1319	
74-E-210.40	4	3	4.49	2	8.1	8	69.6	62	1515	
74-E-210.40	5	3	4.49	2	8.1	8	70.9	65	1741	
74-E-214.89	2	0	5.20	2	10.1	0	19.2			
74-E-214.89	2	3	5.20	2	10.1	9	68.7	66	1619	
74-E-214.89	3	3	5.20	2	10.1	8	70.7	62	1829	
74-E-214.89	4	3	5.20	2	10.1	8	72.3	65	2071	
74-W-155.04	5	0	5.18	2	8.1	4	52.7			

74-W-160.22	5	0	2.85	2	9.1	5	40.0		
74-W-163.07	5	0	3.80	2	9.1	3	46.1		
74-W-166.87	5	0	4.63	2	9.1	1	17.4		
74-W-171.50	5	0	6.99	2	15.1	1	34.5		
74-W-178.49	5	0	1.42	2	18.1	1	21.5		
74-W-179.91	1	0	4.24	2	24.1	0	14.9		
74-W-179.91	1	3	4.24	2	24.1	9	71.1	66	1278
74-W-179.91	2	3	4.24	2	24.1	8	72.6	65	1454
74-W-179.91	3	3	4.24	2	24.1	8	73.6	65	1643
74-W-184.15	4	0	10.34	2	15.1	0	44.6		
74-W-184.15	4	3	10.34	2	15.1	8	36.3	53	2083
74-W-184.15	5	3	10.34	2	15.1	8	38.6	53	2187
74-W-194.49	5	0	3.28	2	13.1	5	62.0		
74-W-197.77	5	0	2.50	2	13.1	6	69.9		
74-W-200.27	5	0	5.68	2	13.1	6	67.8		
74-W-205.95	5	0	2.35	2	13.1	6	70.7		
74-W-208.30	5	0	2.10	2	11.1	6	70.8		
74-W-210.40	5	0	4.49	2	8.1	0	14.4		
74-W-210.40	5	3	4.49	2	8.1	8	65.6	62	1632
74-W-214.89	2	0	5.20	2	10.1	0	20.4		
74-W-214.89	2	3	5.20	2	10.1	9	67.5	66	1537
74-W-214.89	3	3	5.20	2	10.1	8	69.7	62	1743
74-W-214.89	4	3	5.20	2	10.1	8	71.5	65	1980

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ters
go
1000000
DIVE OPT O5 A
nonz
solution
range
rvrt

quit
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```
MAX     398.7998 P1S31 + 362.59985 P1S32 + 362.59985 P1S33
      + 505 P2S32 + 505 P2S33 + 454.5 P2S34 + 907.09985 P5S31
      + 907.09985 P5S32 + 831.5 P5S33 + 459.5 P7S31 + 459.5 P7S32
      + 459.5 P7S33 + 414.2998 P9S35 + 707.3999 P14S35
      + 249.89999 P18S31 + 222.2 P18S32 + 222.2 P18S33
      + 569.5 P19S31 + 506.2998 P19S32 + 506.2998 P19S33
      + 398.7998 P21S31 + 362.59985 P21S32 + 362.59985 P21S33
      + 555.5 P22S31 + 505 P22S32 + 505 P22S33 + 459.5 P27S32
      + 459.5 P27S33 + 408.5 P27S34 + 670.09985 P32S33
      + 609.19995 P32S34 + 609.19995 P32S35 + 529.19995 P33S35
      + 622.5 P34S31 + 622.5 P34S32 + 622.5 P34S33 + 141.5 P35S35
      + 506.2998 P40S35 + 537.5 P41S31 + 537.5 P41S32
      + 477.69995 P41S33 + 55.89999 P46S34 + 48 P46S35
      + 359.59985 P48S31 + 359.59985 P48S32 + 359.59985 P48S33
      + 532.3999 P53S35 + 198.7 P60S35 + 156.29999 P62S35
      + 532.3999 P66S35 + 597.5 P85S35 + 470.3999 P88S31
      + 470.3999 P88S32 + 470.3999 P88S33 + 276.59985 P94S34
      + 276.59985 P94S35 + 294.8999 P95S35 + 231.29999 P97S33
      + 231.29999 P97S34 + 205.59999 P97S35 + 919.69995 P98S31
      + 817.5 P98S32 + 817.5 P98S33 + 1249.09985 P99S33
      + 1249.09985 P99S34 + 1249.09985 P99S35 + 291 P105S33
      + 291 P105S34 + 291 P105S35 + 472.69995 P106S32
      + 420.19995 P106S33 + 420.19995 P106S34 + 919.69995 P113S31
      + 817.5 P113S32 + 817.5 P113S33 + 1249.09985 P114S34
      + 1249.09985 P114S35 + 291 P120S35 + 472.69995 P121S32
      + 420.19995 P121S33 + 420.19995 P121S34
SUBJECT TO
       2)   P1S31 + P1S32 + P1S33 + P1S01 =    1
       3)   P2S32 + P2S33 + P2S34 + P2S02 =    1
       4)   P3S05 =    1
       5)   P4S05 =    1
       6)   P5S31 + P5S32 + P5S33 + P5S01 =    1
       7)   P6S05 =    1
       8)   P7S31 + P7S32 + P7S33 + P7S01 =    1
       9)   P8S05 =    1
      10)   P9S35 + P9S05 =    1
      11)   P10S05 =    1
      12)   P11S05 =    1
      13)   P12S05 =    1
      14)   P13S05 =    1
      15)   P14S35 + P14S05 =    1
      16)   P15S05 =    1
      17)   P16S05 =    1
      18)   P17S05 =    1
      19)   P18S31 + P18S32 + P18S33 + P18S01 =    1
      20)   P19S31 + P19S32 + P19S33 + P19S01 =    1
      21)   P20S05 =    1
      22)   P21S31 + P21S32 + P21S33 + P21S01 =    1
      23)   P22S31 + P22S32 + P22S33 + P22S01 =    1
      24)   P23S05 =    1
      25)   P24S05 =    1
      26)   P25S05 =    1
      27)   P26S05 =    1
      28)   P27S32 + P27S33 + P27S34 + P27S02 =    1
      29)   P28S05 =    1
      30)   P29S05 =    1
      31)   P30S05 =    1
      32)   P31S05 =    1
      33)   P32S33 + P32S34 + P32S35 + P32S03 =    1
      34)   P33S35 + P33S05 =    1
      35)   P34S31 + P34S32 + P34S33 + P34S01 =    1
      36)   P35S35 + P35S05 =    1
      37)   P36S05 =    1
      38)   P37S05 =    1
      39)   P38S05 =    1
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 40)   P39S05 =    1
 41)   P40S35 + P40S05 =    1
 42)   P41S31 + P41S32 + P41S33 + P41S01 =    1
 43)   P42S05 =    1
 44)   P43S05 =    1
 45)   P44S05 =    1
 46)   P45S05 =    1
 47)   P46S34 + P46S35 + P46S04 =    1
 48)   P47S05 =    1
 49)   P48S31 + P48S32 + P48S33 + P48S01 =    1
 50)   P49S05 =    1
 51)   P50S05 =    1
 52)   P51S05 =    1
 53)   P52S05 =    1
 54)   P53S35 + P53S05 =    1
 55)   P54S05 =    1
 56)   P55S05 =    1
 57)   P56S05 =    1
 58)   P57S05 =    1
 59)   P58S05 =    1
 60)   P59S05 =    1
 61)   P60S35 + P60S05 =    1
 62)   P61S05 =    1
 63)   P62S35 + P62S05 =    1
 64)   P63S05 =    1
 65)   P64S05 =    1
 66)   P65S05 =    1
 67)   P66S35 + P66S05 =    1
 68)   P67S05 =    1
 69)   P68S05 =    1
 70)   P69S05 =    1
 71)   P70S05 =    1
 72)   P71S05 =    1
 73)   P72S05 =    1
 74)   P73S05 =    1
 75)   P74S05 =    1
 76)   P75S05 =    1
 77)   P76S05 =    1
 78)   P77S05 =    1
 79)   P78S05 =    1
 80)   P79S05 =    1
 81)   P80S05 =    1
 82)   P81S05 =    1
 83)   P82S05 =    1
 84)   P83S05 =    1
 85)   P84S05 =    1
 86)   P85S35 + P85S05 =    1
 87)   P86S05 =    1
 88)   P87S05 =    1
 89)   P88S31 + P88S32 + P88S33 + P88S01 =    1
 90)   P89S05 =    1
 91)   P90S05 =    1
 92)   P91S05 =    1
 93)   P92S05 =    1
 94)   P93S05 =    1
 95)   P94S34 + P94S35 + P94S04 =    1
 96)   P95S35 + P95S05 =    1
 97)   P96S05 =    1
 98)   P97S33 + P97S34 + P97S35 + P97S03 =    1
 99)   P98S31 + P98S32 + P98S33 + P98S01 =    1
100)   P99S33 + P99S34 + P99S35 + P99S03 =    1
101)   P100S05 =    1
102)   P101S05 =    1
103)   P102S05 =    1
104)   P103S05 =    1
105)   P104S05 =    1
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    106)   P105S33 + P105S34 + P105S35 + P105S03 =    1
    107)   P106S32 + P106S33 + P106S34 + P106S02 =    1
    108)   P107S05 =    1
    109)   P108S05 =    1
    110)   P109S05 =    1
    111)   P110S05 =    1
    112)   P111S05 =    1
    113)   P112S05 =    1
    114)   P113S31 + P113S32 + P113S33 + P113S01 =    1
    115)   P114S34 + P114S35 + P114S04 =    1
    116)   P115S05 =    1
    117)   P116S05 =    1
    118)   P117S05 =    1
    119)   P118S05 =    1
    120)   P119S05 =    1
    121)   P120S35 + P120S05 =    1
    122)   P121S32 + P121S33 + P121S34 + P121S02 =    1
    123)   1002 P1S31 + 1873 P5S31 + 1119 P7S31 + 737 P18S31
    + 1296 P19S31 + 1863 P21S31 + 1545 P22S31 + 992 P34S31
    + 1284 P41S31 + 3434 P48S31 + 1194 P88S31 + 1395 P98S31
    + 1278 P113S31 <=   7500
    124)   1089 P1S32 + 1452 P2S32 + 2000 P5S32 + 1197 P7S32
    + 794 P18S32 + 1436 P19S32 + 1994 P21S32 + 1688 P22S32
    + 1065 P27S32 + 1062 P34S32 + 1400 P41S32 + 3683 P48S32
    + 1300 P88S32 + 1576 P98S32 + 1619 P106S32 + 1454 P113S32
    + 1537 P121S32 <=   7500
    125)   1183 P1S33 + 1593 P2S33 + 2134 P5S33 + 1326 P7S33
    + 855 P18S33 + 1534 P19S33 + 2143 P21S33 + 1841 P22S33
    + 1165 P27S33 + 1328 P32S33 + 1137 P34S33 + 1524 P41S33
    + 3948 P48S33 + 1414 P88S33 + 452 P97S33 + 1772 P98S33
    + 1984 P99S33 + 1319 P105S33 + 1829 P106S33 + 1643 P113S33
    + 1743 P121S33 <=   7500
    126)   1745 P2S34 + 1271 P27S34 + 1448 P32S34 + 210 P46S34
    + 730 P94S34 + 508 P97S34 + 2083 P99S34 + 1515 P105S34
    + 2071 P106S34 + 2083 P114S34 + 1980 P121S34 <=   7500
    127)   1218 P9S35 + 1634 P14S35 + 1605 P32S35 + 1346 P33S35
    + 347 P35S35 + 1547 P40S35 + 257 P46S35 + 1687 P53S35
    + 1078 P60S35 + 540 P62S35 + 1687 P66S35 + 1787 P85S35
    + 767 P94S35 + 1369 P95S35 + 568 P97S35 + 2187 P99S35
    + 1741 P105S35 + 2187 P114S35 + 1632 P120S35 <=   7500
END
```