Items	Unit of	Financial Unit Rate		RH~1	(20 V=) "		Route Nur		-	RH-3 (46 Km)	
	Q'ty	(E)	Ο' ty	Financial Cost (10 ³ g)	Economic Cost (10 ³ g)	Q'ty	RH- 2 (1 Financial Cost (10 ³))	Economic Cost (10 ³ B)	Q'ty	Financial Cost (10 ³ g)	Economic Cost(10 ³ g)
DIRECT CONSTRUCTION COST									— · · · · · · · · · · · · · · · · · · ·		
Soil Aggregate Shoulder	m ³	105	-	-	_	_	_	_	_	_	_
Tack Coat	m2	10	182,000	1,820	1,674	60,000	600	552	276,000	2,760	2,539
Asphalt Concrete	m^2	t= 40\footnote{120mm} 88\footnote{264}	t= 40mm 182,000	15,840	14,256	t= 40mm 60,000	5,280	4,752	t= 40mm 276,000	24,310	21,879
Subtotal (a)				17,660	15,930		5,880	5,304		27,070	24,418
Miscellaneous Works (a) x 3.5%				618	558	•	206	186		947	855
Total (b)				18,278	16,488		6,086	5,490		28,017	25,273
PHYSICAL CONTINGENCY (b) x 15%				2,742	2,473		913	823		4,203	3,791
ENGINEERING AND ADMINISTRATION (b) x 8%				1,462	1,319		487	439		2,241	2,022
Subtotal				4,204	3,792		1,400	1,263		6,444	5,813
GRAND TOTAL	-			22,482	20,280		7,486	6,752		34,461	31,086

Items	Unit of	Financial Unit Rate		RH-4 (9 Km)			Route Nur RH-5 (23 Km)			RH-6 (25 Km)	
	Q'ty	(B)	Ω'ty	Financial Cost (10 ³ %)	Economic Cost (10 ³ g)	Q'ty	Financial Cost (10 ³ g)	Economic Cost (10 g)	Q'ty	Financial Cost (10 ³ g)	Economic Cost(10 ³ g)
DIRECT CONSTRUCTION CCST											
Soil Aggregate Shoulder	3 m	105	_	-	-	-	-	-	-	-	-
Tack Coat	m^2	10 t= 40√120i	54,000 mm t= 40mm	540	497	138,000 t= 40mm	1,380	1,270	150,000 t= 40mm	1,500	1,380
Asphalt Concrete	m^2	88\264	54,000	4,840	4,356	138,000	12,210	10,989	150,000	13,200	11,880
Subtotal				5,380	4,853		13,590	12,259		14,700	13,260
Miscellaneous Works (a) x 3.5%				188	170		476	429		515	464
Total (b)				5,568	5,023		14.066	12,688		15,215	13,724
PHYSICAL CONTINGENCY (b) x 15%				835	753		2,110	1,903		2,282	2,059
ENGINEERING AND ADMINISTRATION (b) x 8%				445	402		1,125	1,015		1,217	1,098
Subtotal				1,281	1,155		3,235	2,918		3,499	3,157
GRAND TOTAL				6,849	6,178		17,301	15,606		18,714	16,881

CONSTRUCTION QUANTITIES AND COSTS (Overlay) (2)

	Unit	Financial					Route Nur		 _		
Items	of	Unit Rate		RH-9 (7 Km)	••		RH-12 (6 Km)			RH-15 (44 Km)	
	Q'ty	(ä)	ο'ty	Financial Cost (10 ³ %)	Economic Cost (10 ³ ¤)	Q'ty	Financial Cost (10 ³)	Economic Cost (10 ³ B)	Q'ty	Financial * Cost (10 ³ g)	Economic Cost(10 ³ g)
DIRECT CONSTRUCTION COST Soil Aggregate Shoulder	m ³	105	-	-	_	-	-	-	-	-	-
Tack Coat	m2	10	42,000	420	386	36,000	360	331	264,000	2,640	2,429
Asphalt Concrete	m2	t=40∿120mm 88∿264	t=40mm 42,000	3,740	3,366	t=40mm 36,000	3,190	2,871	t=40mm 264,000	23,320	20,988
Subtotal (a)				4,160	3,752		3,550	3,202		25,960	23,417
Miscellaneous Works (a) x 3.5%				146	131		124	112		909	820
Total (b)				4,306	3,884		3,674	3,314		26,869	24,236
PHYSICAL CONTINGENCY (b) x 15%				646	583		551	497		4,030	3,635
ENGINEERING AND ADMINISTRATION (b) x 8%				344	311		294	265		2,149	1,
Subtotal				990	893		845	762		6,180	5,574
GRAND TOTAL				5,296	4,777		4,519	4,077		33,048	29,811

	Unit	Financial					Route Nur	mber			
Items	of	Unit Rate		RH-16(1/ Km)			RH-17 (9 Km)			RH-18 (30 Km)	
	Q'ty	(B)	Ω'ty	Financial Cost (10 ³ ß)	Economic Cost (10 ³ g)	Q'ty	Financial Cost (10 ³ ß)	Economic Cost (10 ³ g)	Q'ty	Financial Cost (10 ³ ¤)	Economic Cost(10 ³ #)
DIRECT CONSTRUCTION COST											
Soil Aggregate Shoulder	m ³	105	_	-	_	_	· -	_	-	_	-
Tack Coat	m^2	10	84,000	840	773	54,000	540	497	180,000	1,800	1,656
Asphalt Concrete	_m 2	t=40\120 88\264	t=40mm 84,000	8,030	7,227	t=40mm 54,000	4,840	4,356	t=40mm 180,000	15,840	14,256
Subtotal				8,870	8,000		5,380	4,853	•	17,640	15,912
Miscellaneous Works (a) x 3.5%				310	280		188	170		617	557
Total (b)				9,180	8,280		5,568	5,023		18,257	16,469
PHYSICAL CONTINGENCY (b) x 15%				1,377	1,242		835	753		2,739	2,470
ENGINEERING AND ADMINISTRATION (b) x 8%				734	662		445	402		1,461	1,318
Subtotal				2,112	1,904		1,281	1,155		4,199	3,788
GRAND TOTAL				11,292	10,184		6,849	6,178		22,457	20,257

Thomas	Unit	Financial		TV 20 /6 V			Route Nur				
Items	of	Unit Rate		RH-20 (6 Km)			RH-21 (13			RH-22 (8 Km)	
	 δ,tλ	(8)	Ö, fÅ	Financial Cost (10 ³ ß)	Economic Cost (10 ³)	Q'ty	Financial Cost (10 ³ g)	Cost (10 B)	Q'ty	Financial Cost (10 ³ ß)	Economic Cost(10 ³ g)
DIRECT CONSTRUCTION COST										•	
Soil Aggregate Shoulder	m ³		_	305	271	_	• -	_	_	_	_
Tack Coat	m ²		84,000	840	773	91,000	910	837	40,000	400	363
Asphalt Concrete	m ²	t=40∿120mm 88∿264	t=120mm 42,000	11,220	. 10,098	t =9 0mm 91,000	10,010	9,009	t=40mm 40,000	3,520	3,168
Subtotal (a)			-	12,365	11,142		10,920	9,846		3,920	3,536
Miscellaneous Works (a) x 3.5%				433	390		382	345		137	124
Total (b)				12,797	11,532		11,302	10,191		4,057	3,660
PHYSICAL CONTINGENCY (b) x 15%				1,920	1,730		1,695	1,529		609	549
ENGINEERING AND ADMINISTRATION (b) x 8%				1,024	923		904	815		325	293
Subtotal				2,943	2,652		2,600	2,344		933	842
GRAND TOTAL	•			15,741	14,184		13,902	12,535		4,990	4,502

	Unit	Financial					Route Num	ber			
Items	of	Unit Rate		RH-23 (16 I	(m)		RH-24 (16 Ki	n)		RH-27 (16 Km))
	Ç'ty	(R)	Ö, tλ	Financial Cost (10 ³)	Economic Cost (10 ³ g)	Q'ty	Financial Cost (10 ³ ß)	Economic Cost (10 B)	Q'ty	Financial Cost (10 ³)	Economic Cost(10 ³)
DIRECT CONSTRUCTION COST											
Soil Aggregate Shoulder	m ³	105		273	243		336	299	-	-	-
Tack Coat	m ²	10	182,000	1,920	1,766	182,000	1,920	1,766	80,000	800	736
Asphalt Concrete	m ²	t=40 ∿ 120m 88 ∿ 264		16,940	15,246	t=100mm 96,000	21,120	19,008	t=40mm 80,000	7,040	6,336
Subtotal				19,133	17,255		23,376	21,073		7,840	7,072
Miscellaneous Works (a) x 3.5%				670	604		818	738		274	248
Total (b)				19,803	17,859		24,194	21,811		8,114	7,320
PHYSICAL CONTINGENCY (b) x 15%				2,970	2,679		3,629	3,272		1,217	1,098
ENGINEERING AND ADMINISTRATION (b) x 8%				1,584	1,429		1,936	1,745		649	586
Subtotal				4,555	4,108		5,565	5,017		1,866	1,683
GRAND TOTAL				24,357	21,967		29,759	26,828		9,981	9,003

Appendix 8.9
4 of 6

CONSTRUCTION QUANTITIES AND COSTS (Overlay) (4)

Items	Unit of	Financial Unit Rate		Route Numb	
	Q'ty	(¥)	Q'ty	Financial Cost (10 ³ B)	Economic
DIRECT CONSTRUCTION COST					
Soil Aggregate Shoulder	m ³	105	-	-	-
Tack Coat	m ²	10	99,000	990	991
Asphalt Concrete	m ²	t=40∿120mm 88∿264	t=40mm 99,000	8,800	7,920
Subtotal (a)			-	9,790	8,831
Miscellaneous Works (a) x 3.5%				343	309
Total (b)				10,133	9,140
PHYSICAL CONTINGENCY (b) x 15%				1,520	1,371
ENGINEERING AND ADMINISTRATION (b) x 8%				811	731
Subtotal				2,331	2,102
GRAND TOTAL				12,463	11,242

CONSTRUCTION QUANTITIES AND COSTS (Reconstruction) (5)

	Unit	Financial					Route Nu	mber			
Items	of	Unit Rate	RH-10		=5 cm, C=15 cm	RH-13		cm, C=25 cm.	RH-14	(27 Km) t=5	cm, C=23 cm.
	Q'ty	(A)		Financial Cost (10 ³ B)	Economic Cost (10 ³ ½)	Q'ty	Financial Cost (10 ³ B)	Economic Cost (10 B)	Q'ty	Financial Cost (10 ³ ß)	Economic Cost(10 ³ ß)
DIRECT CONSTRUCTION COST											
Clearing and Grubbing	ha	15,600	-	-	-	48	720	655	54	810	737
Embankment	E _m 3	45	-	_	_	62,400	2,808	2,555	70,200	3,159	2,875
Scarifying (A.C)	m ²	20	30,000	600	540	-	_	-	=	_	· -
Scarifying (D.B.S.T)	m^2	7	_	· _	_	120,000	840	756	135,000	945	851
Soil Aggregate Subbase	m ³	105	-	_	_	19,200	2,016	1,794	21,600	2,268	2,019
Crushed Stone Base	r _m 3	370	5,300	1,961	1,804	46,700	17,279	15,897	50,000	18,500	17,020
Soil Aggregate Shoulder	εm	105	2,600	273	243	37,300	3,917	3,486	39,800	4,179	3,719
Tack Coat	m2	_10	30,000	300	270	144,000	1,440	1,296	162,000	1,620	1,458
Asphalt Concrete	2	t = 50 mm 110	30,000	3,300	2,970	144,000	15,840	14,256	162,000	17,820	16,038
Subtotal (a)				6,434	5,827		44,860	40,677		49,301	44,717
Miscellaneous Works (a) x 7%				450	408		3,140	2,847		3,451	3,130
Total (b)				6,884	6,235		48,000	43,524		52,752	47,847
PHYSICAL CONTINGENCY (b) x 15%				1,033	935		7,200	6,529		7,913	7,177
ENGINEERING AND											
ADMINISTRATION (b) x 10%			- 	688	624		4,800	4,352	-	5,275	4,785
Subtotal		,		1,721	1,559		12,000	10,881		13,188	11,962
GRAND TOTAL				8,605	7,794		60,000	54,405		65,940	59,809

CONSTRUCTION QUANTITIES AND COSTS (Reconstruction) (6)

	Unit	Financial					Route Nur	mber
Items	of	Unit Rate	RH-19	(46 Km) AC=5		RH-26	(22 Km) AC=5	cm, C=24 cm
	Q'ty 	(A)	<u>Ω'ty</u>	Financial Cost (10 ³ B)	Economic Cost (10 ³ %)	Q'ty	Financial Cost (10 ³ g)	Economic Cost (10 g)
RECT CONSTRUCTION COST								
Clearing and Grubbing	ha	15,000	_	-	-	_	-	_
Embankment	m ³	45	_	_	_	-	-	-
Scarifying (A.C)	m ²	20	140,000	2,800	2,520	_	-	
Scarifying (D.B.S.T)	m2	7	-	_	_	132,000	924	832
Soil Aggregate Subbase	r _m 3	105	_	-	-	-	-	_
Crushed Stone Base	ϵ_{m}	370	48,000	17,760	16,339	36,900	13,653	12,561
Soil Aggregate Shoulder	ϵ_{m}	105	20,700	2,174	1,935	11,800	1,239	1,102
Tack Coat	m2	t = 50 mm	182,000	1,820	2,898	132,000	1,320	1,188
Asphalt Concrete	m ²	110	322,000	35,420	31,878	132,000	14,520	13,068
Subtotal (a)	٠			61,374	55,570		31,656	28,751
Miscellaneous Works (a) x 7%				4,296	3,890	·	2,216	2,013
Total (b)				65,690	59,460		33,872	30,764
MYSICAL CONTINGENCY (b) x 15%				9,850	8,919		5,081	4,615
ADMINISTRATION (b) x 10%				6,567	5,946		3,387	3,076
Subtotal		,		16,417	14,865		8,468	7,691
GRAND TOTAL				82,087	74,325		42,340	38,445

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		LINK NO). RH ~	1			LINK NO				PROPOSED	LINK NO	. RH -	3
YEAR	COST		DISCOUNT	TED(12%)	VEAD			DISCOUNT	ED(12%)	YEAR			DISCOUNT	TED(12%)
		SAVING	COST	BENEFIT	YEAR	COST	SAVING		BENEFIT		COST	SAVING		BENEFIT
1983	20,280		20,280	3,678	1983	6,752	5,981	6,752	5,341		31,086	5,870	31,086	5,241
1984	Ō	4,322	Q		1984	0	6,267	0	4,996	1984	0	6,148	0	13244
1985		4,525		3,221	1985	0	4,553		4,664	1985	0		0	
1986 1987		4,728		3,005	1986	0			4,346	1986	0		0	
1988		4,931 5,133		2,798	1987		7,124		4,042	1937 1988		6,982 7,260		3,962
1989	0			2,601 2,414	1988 1989		7,410 7,695	0	3,754 3,481	1939	ő			3,678 3,410
	20,280				TOTAL		47,869			TOTAL		46,928		
-	TED ECONO			20,280	DISCOUNT	ED ECONO	OMIC COST	ទ:	6,752	DISCOUNT	ED ECONO	MIC COST	rs:	31,086
DISCOUN	TED ECONO	MIC BENE	FITS:	21,161	DISCOUNT	ED ECONC	OMIC BENE	FITS:	30,624	DISCOUNT	ED ECONO	OMIC BENE	FITS:	30,027
NET PRES	SENT VALL	Æ:		881	NET PRES	ENT VALI	JE :		23,872	NET PRES	SENT VALU	JE :		-1,059
BENEFIŢ	COST RAT	10:		1.04	BENEFIT	COST RAT	rio:		4.54	BENEFIT	COST RAT	10:		0.97
INTERNAL	L RATE OF	RETURN	:	13.3 %	INTERNAL	RATE OF	F RETURN	:	91.9 %	INTERNAL	. RATE OF	RETURN	:	11.0
		D LINK N	DISCOUN	TED(12%)				DISCOUNT	ED(12%)			_	DISCOUN	
YEAR	COST	SAVING	COST	BENEFIT	YEAR	COST	SAVING	_	BENEFIT	YEAR		SAVING	COST	BENEFIT
1500		1 000	/ 170	_										
1983		1,909	6.1/2	. 1701	1983	1.110000	1() -1()	15.404		1983	16,881	8,143	16,881	7,270
	. 0			1,704	1 ⊕ ⊕ ∆			15,606 0	9,384 8,789	1983 1984	16,881 O		16,881 0	4,815
1984		1,999	0	1,594	1984	0	11,024		9,384 8,789		:	8,549	_	4,815 4,374
1985	0	2,090	0	1,594 1,488	1985	0 0		0 0	9,384 8,789	1984	0	8,549 8,955 9,361	0 0 0	6,815 6,374 5,949
1985 1986	0	2,090 2,181	0 0	1,594 1,488 1,386	1985 1986	0 0 0	11,024 11,539	0 0	9,384 8,789 8,213 7,660	198 4 1985	0 0 0	8,549 8,955 9,361 9,767	0 0 0	6,815 6,374 5,949 5,541
1985 1986 1987	0 0	2,090 2,181 2,272	0 0 0	1,594 1,488 1,386 1,289	1985 1986 1987	0 0 0	11,024 11,539 12,053	0 0 0	9,384 8,789 8,213 7,660 7,131 6,628	1984 1985 1986 1987 1988	0 0 0 0	8,549 8,955 9,361 9,767 10,173	0 0 0 0	6,815 6,374 5,949 5,541 5,154
1985 1986	0 0 0	2,090 2,181	0 0 0 0	1,594 1,488 1,386	1985 1986	0 0 0 0	11,024 11,539 12,053 12,547	0 0 0	9,384 8,789 8,213 7,660 7,131 6,628	1984 1985 1986 1987	0 0 0	8,549 8,955 9,361 9,767 10,173	0 0 0	6,815 6,374 5,949 5,542 5,154
1985 1986 1987 1988		2,090 2,181 2,272 2,363 2,454	0 0 0 0 0	1,594 1,488 1,386 1,289 1,197	1º85 1986 1987 1988 1989 TOTAL	0 0 0 0 0 0	11,024 11,539 12,053 12,567 13,082 13,596	0 0 0 0 0 0	9,384 8,789 8,213 7,660 7,131 6,628 6,150	1984 1985 1986 1987 1988 1989	0 0 0 0 0 0	8,549 8,955 9,361 9,767 10,173 10,579	0 0 0 0 0 0 0	6,815 6,374 5,949 5,542 5,154 4,786
1985 1986 1987 1988 1989 TOTAL	0 0 0 0 0 0 0 0	2,090 2,181 2,272 2,363 2,454 15,268	6,173	1,594 1,488 1,386 1,289 1,197 1,110	1º85 1986 1987 1988 1989 TOTAL	0 0 0 0 0 0	11,024 11,539 12,053 12,567 13,082 13,596 84,371	0 0 0 0 0 0 15,606	9,384 8,789 8,213 7,660 7,131 6,628 6,150	1984 1985 1986 1987 1988 1989	0 0 0 0 0 0	8,549 8,955 9,361 9,767 10,173 10,579	0 0 0 0 0 0 16,881	6,815 6,374 5,949 5,542 5,154 4,786
1985 1986 1987 1988 1989 TOTAL	0 0 0 0 0 4,178 0	2,090 2,181 2,272 2,363 2,454 15,268	6,178	1,594 1,488 1,386 1,289 1,197 1,110 3,768	1985 1986 1987 1988 1989 TOTAL DISCOUNT	0 0 0 0 0 15,606 	11,024 11,539 12,053 12,567 13,082 13,596 84,371	0 0 0 0 0 15,606	9,384 8,789 8,213 7,660 7,131 6,628 6,150	1984 1985 1986 1987 1988 1989 TOTAL	0 0 0 0 0 0 16,381 TED ECON	8,549 8,955 9,361 9,767 10,173 10,579 65,527	0 0 0 0 0 16,881	4,815 6,374 5,949 5,542 5,154 4,786 41,890
1985 1986 1987 1988 1989 TOTAL TOTAL	0 0 0 0 0 4,178 0	2,090 2,181 2,272 2,363 2,454 15,268 OMIC COS	6,178 TS : EFITS :	1,594 1,488 1,386 1,289 1,197 1,110 3,768	1985 1986 1987 1988 1989 TOTAL DISCOUNT	0 0 0 0 0 15,606 ED ECONO	11,024 11,539 12,053 12,567 13,082 13,596 84,371 OMIC COS	0 0 0 0 0 15,606	9,384 8,789 8,213 7,660 7,131 6,628 6,150 53,954	1984 1985 1986 1987 1988 1989 TOTAL 	0 0 0 0 0 0 16,381 TED ECON	8,549 8,955 9,361 9,767 10,173 10,579 65,527 OMIC COST	0 0 0 0 0 16,881	41,890
1985 1986 1987 1988 1989 TOTAL BISCOUN DISCOUN	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2,090 2,181 2,272 2,363 2,454 15,268 OMIC COS OMIC BEN	6,178 	1,594 1,488 1,386 1,289 1,197 1,110 3,768 	1985 1986 1987 1988 1989 TOTAL DISCOUNT DISCOUNT	0 0 0 0 0 15,606 ED ECONO	11,024 11,539 12,053 12,567 13,082 13,596 84,371 DMIC COST	0 0 0 0 0 15,606	9,384 8,789 8,213 7,660 7,131 6,628 6,150 53,954	1984 1985 1986 1987 1988 1989 TOTAL DISCOUN' DISCOUN'	0 0 0 0 0 16,881 TED ECON	8,549 8,955 9,361 9,767 10,173 10,579 65,527 OMIC COST	0 0 0 0 0 16,881	4,815 6,374 5,949 5,542 5,154 4,786

COST AND BENEFIT STATEMENT (2)

		LIMP NU	. RH '	9 	···	PROPOSEI	D LINK N	D. RH - :	10	1	PROPOSEI) LINK NO). RH - :	12
YEAR	COST		DISCOUNTE		YEAR	COST		DISCOUNT			2022		DISCOUNT	
		SAVING		BENEFIT			SAVING		BENEFIT	'YEAR 	COST	SAVING	cost	BENEFIT
1983	4,777	1,206	4,777	1,077	1983	7,794	1,906	. 7,794	1,702	1983	4,077	746	4,077	666
1984	0	1,263	Ō	1,007	1984	0	2,007	0	1,600	1984	0	782	0	
1985		1,320		940	1985	0	2,108	0	1,501	1985	Ō	818	0	
1986		1,377		375	1986	O	2,209	0	1,404	1986	Ö	854	Ō	
1987		1,434	0		1987		2,310		1,311	1987	0		0	505
1988		1,491	0		1988		2,411		1,222	1988	0		Ō	
1989	Ü	1,548	0	700	1989	0	2,512	0	1,136	1989	Ŏ	963	0	435
TOTAL	4,777 	9,639 	4,777 		TOTAL	7,794 	15,465	7,794	9,876	TOTAL	4,077	5,981	4,077	3,826
DISCOUNT	ED ECONO	MIC COST	s:	4,777	DISCOUNT	ED ECONO	MIC COST	rs:	7,794	DISCOUNT	ED ECONO	MIC COST	·s:	4,077
DISCOUNT	ED ECONO	MIC BENE	FITS:	6,168	DISCOUNT	ED ECONO	MIC BENE	FITS:	9,876	DISCOUNT	ED ECONO	MIC BENE	FITS:	3,826
NET PRES	ENT VALU	E :		1,391	NET PRES	ENT VALL	JE :		2,082	NET PRES	ENT VALU	JE:		-251
BENEFIT	COST RAT	10:		1.29 :	BENEFIT	COST RAT	10:		1.27	BENEFIT	COST RAT	rio :		0.94
INTERNAL	. RATE OF	RETURN	:	20.3 %	INTERNAL	RATE OF	RETURN	:	19.6 %	INTERNAL	EATE OF	FETURN		10.1
						555555	5 1 7500 AL							. =
		·	DISCOUNT	 ED(12%)			·	DISCOUNT				D LINK N	DISCOUN	 ITED(12%)
YEAR	COST	VOC SAVING	DISCOUNT	ED(12%) BENEFIT	 YEAR		·	DISCOUNT	TED(12%)	YEAR	COST	VOC SAVING	DISCOUN	TED(12%)
YEAR	COST	VOC SAVING	DISCOUNT	ED(12%) BENEFIT	YEAR	COST	VOC SAVING	DISCOUNT	BENEFIT	YEAR	COST	VOC SAVING	DISCOUN	BENEFIT
YEAR 	COST	VOC SAVING 	DISCOUNT COST 	ED(12%) BENEFIT BENEFIT	YEAR 1983	COST	VOC SAVING	DISCOUNT COST 	TED(12%) BENEFIT	YEAR 1983	COST	VOC SAVING	DISCOUN COST	BENEFI 14,73
YEAR 1983 1984	COST 54,405 0	VOC SAVING 9,916 10,382	DISCOUNT COST 54,405 0	ED(12%) BENEFIT 8,853 8,276	YEAR 1983 1984	COST 59,809 0	VOC SAVING 11,609 12,143	DISCOUNT COST 	TED(12%) BENEFIT 10,365 9,680	YEAR 1983 1984	COST 29,811 0	VOC SAVING 16,503 17,314	DISCOUN COST 	14,73 13,30
YEAR 1983 1984 1985	COST 54,405 0 0	VOC SAVING 9,916 10,382 10,847	DISCOUNT COST 54,405 0	ED(12%) BENEFIT S,853 8,276 7,721	YEAR 1983 1984 1985	COST 59,809 0	VOC SAVING 11,609 12,143 12,677	DISCOUNT COST 	TED(12%) BENEFIT 10,365 9,680 9,023	YEAR 1983 1984 1985	29,811 0	VOC SAVING 16,503 17,314 18,125	DISCOUN COST 	14,73 13,30 12,90
YEAR 1983 1984 1985 1986	COST 54,405 0 0	VOC SAVING 9,916 10,382 10,847 11,313	DISCOUNT COST 54,405 0	ED(12%) BENEFIT 8,853 8,276 7,721 7,190	YEAR 1983 1984 1985 1986	59,809 0	VOC SAVING 	DISCOUNT COST 	TED(12%) BENEFIT 10,365 9,680 9,023 8,396	YEAR	29,811 0 0	VOC SAVING 16,503 17,314 18,125 18,936	DISCOUN COST 29,811	14,73 13,80 12,90
YEAR 1983 1984 1985 1986 1987	COST 	9,916 10,382 10,847 11,313 11,779	DISCOUNT COST 54,405 0 0	ED(12%) BENEFIT 8,853 8,276 7,721 7,190 6,684	YEAR 1983 1984 1985 1986 1987	59,809 0 0	VOC SAVING 11,609 12,143 12,677 13,211 13,745	59,809 0 0	TED(12%) BENEFIT 10,365 9,680 9,023 8,396 7,799	YEAR 1983 1984 1985 1986 1987	29,811 0 0	VOC SAVING 16,503 17,314 18,125 18,936 19,746	DISCOUN COST 	14,73 13,30 12,90 11,20
YEAR 1983 1984 1985 1986 1987 1988	54,405 0 0 0	9,916 10,382 10,847 11,313 11,779 12,245	DISCOUNT COST 54,405 0 0 0	ED(12%) BENEFIT S.853 8.276 7.721 7.190 6.684 6.204	YEAR	59,809 0 0 0	VOC SAVING 11,609 12,143 12,677 13,211 13,745 14,279	59,809 0 0 0	TED(12%) BENEFIT 10,365 9,680 9,023 8,396 7,799 7,234	YEAR	29,811 0 0 0	VOC SAVING 16,503 17,314 18,125 18,936 19,746 20,557	DISCOUN COST 29,811 0	14,73 13,30 12,90 11,20 11,20
YEAR 1983 1984 1985 1986 1987 1988 1989	54,405 0 0 0 0	VOC SAVING 9,916 10,382 10,847 11,313 11,779 12,245 12,711	DISCOUNT COST 54,405 0 0	ED(12%) BENEFIT	YEAR 1983 1984 1985 1986 1987 1988 1989	59,809 0 0 0 0	VOC SAVING 11,609 12,143 12,677 13,211 13,745 14,279 14,813	59,809 0 0 0	TED(12%) BENEFIT 10,365 9,680 9,023 8,396 7,799 7,234 6,701	YEAR 1983 1984 1985 1986 1987 1988 1989	29,811 0 0 0 0	VOC SAVING 16,503 17,314 18,125 18,936 19,746	DISCOUN COST 	14,735 13,802 12,901 12,034 11,205 10,415 9,666
YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL	54,405 0 0 0 0 0 0 54,405	VOC SAVING 9,916 10,382 10,847 11,313 11,779 12,245 12,711 79,192	DISCOUNT COST 54,405 0 0 0 0 54,405	ED(12%) BENEFIT 8,853 8,276 7,721 7,190 6,684 6,204 5,750	YEAR	59,809 0 0 0 0 0 0	VOC SAVING 11,609 12,143 12,677 13,211 13,745 14,279 14,813	59,809 0 0 0 0 0 0 59,809	TED(12%) BENEFIT 10,365 9,680 9,023 8,396 7,799 7,234 6,701 59,197	YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL	29,811 0 0 0 0 0 29,811	VOC SAVING 16,503 17,314 18,125 18,936 19,746 20,557 21,368	DISCOUN COST 	14,73 13,30 12,90 12,03 11,20 10,41 9,66
YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL DISCOUNT	COST 54,405 0 0 0 0 54,405	VOC SAVING 9,916 10,382 10,847 11,313 11,779 12,245 12,711 79,192	DISCOUNT COST 54,405 0 0 0 54,405	ED(12%) BENEFIT	YEAR	COST 59,809 0 0 0 59,809	VOC SAVING 11,609 12,143 12,677 13,211 13,745 14,279 14,813 92,475	DISCOUNT COST 59,809 0 0 0 0 59,809	TED(12%) BENEFIT 10,365 9,680 9,023 8,396 7,799 7,234 6,701 59,197	YEAR	29,811 0 0 0 0 29,811	VOC SAVING 16,503 17,314 18,125 18,936 19,746 20,557 21,368 132,549	DISCOUN COST 29,811 0 0 0 0 29,811 TS:	14,735 13,800 12,900 12,034 11,205 10,415 9,666 84,753
YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL DISCOUNT	54,405 0 0 0 0 0 0 54,405	VOC SAVING 9,916 10,382 10,847 11,313 11,779 12,245 12,711 79,192	DISCOUNT COST 54,405 0 0 0 54,405	ED(12%) BENEFIT 8,853 8,276 7,721 7,190 6,684 6,204 5,750	YEAR	COST 59,809 0 0 0 59,809	VOC SAVING 11,609 12,143 12,677 13,211 13,745 14,279 14,813 92,475	DISCOUNT COST 59,809 0 0 0 0 59,809	TED(12%) BENEFIT 10,365 9,680 9,023 8,396 7,799 7,234 6,701 59,197	YEAR	29,811 0 0 0 0 29,811	VOC SAVING 16,503 17,314 18,125 18,936 19,746 20,557 21,368	DISCOUN COST 29,811 0 0 0 0 29,811 TS:	14,735 13,800 12,900 12,034 11,205 10,415 9,666 84,753
YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL DISCOUNT	COST 54,405 0 0 0 0 54,405	VOC SAVING 9,916 10,382 10,847 11,313 11,779 12,245 12,711 79,192	DISCOUNT COST 54,405 0 0 0 54,405	ED(12%) BENEFIT 8,853 8,276 7,721 7,190 6,684 6,204 5,750 50,677	YEAR	59,809 0 0 0 0 59,809 ED ECON	VOC SAVING 	DISCOUNT COST 59,809 0 0 0 0 59,809	TED(12%) BENEFIT 10,365 9,680 9,023 8,396 7,799 7,234 6,701 59,197	YEAR	29,811 0 0 0 0 29,811 TED ECON	VOC SAVING 	DISCOUN COST 29,811 0 0 0 0 29,811 TS:	14,733 13,303 12,903 12,034 11,203 11,203 10,413 9,664 84,75
YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL DISCOUNT DISCOUNT	COST	VOC SAVING 9,916 10,382 10,847 11,313 11,779 12,245 12,711 79,192 OMIC COST	DISCOUNT COST 54,405 0 0 0 54,405	ED(12%) BENEFIT 8,853 8,276 7,721 7,190 6,684 6,204 5,750 50,677 54,405	YEAR	59,809 0 0 0 59,809 ED ECON	VOC SAVING 	DISCOUNT COST 59,809 0 0 0 0 59,809	10,365 9,680 9,023 8,396 7,799 7,234 6,701 59,197	YEAR	29,811 0 0 0 0 0 29,811 FED ECON SENT VAL	VOC SAVING 	DISCOUN COST 29,811 0 0 0 0 29,811 TS:	14,735 13,802 12,903 11,205 11,205 10,415 9,666

). RH - 1			LKOLOSEI	, FT 1417 147). RH -	re
YEAR	COST		DISCOUNT	ED(12%)				DISCOUNT	ED(12%)		**		DISCOUNT	
		SAVING	COST	BENEFIT	YEAR	COST	SAVING		BENEFIT	YEAR	COST	SAVING	COST	BENEFIT
1983	10,184	4,425	10,184	3,951	1983	6,178	2,233	6,178	1,994	1983	20,257	16,138	20,257	14,409
1984	0	4,634	0	3,694	1984	0	2,343	0	1,868	1984		16,941		13,505
1985	0	4,842		3,446	1985	Ō	· · · · ·		1,746	1985	-	17,744		12,630
1986 1987		5,050		3,209	1986	Q.			1,629	1986		18,547		11,787
1988		5,258		2,984	1987		2,674		1,518	1987		19,350		10,980
1989	o o	5,467 5,675	0	2,770 2,567	1988 1989	Q Q	2,785 2,895		1,411 1,310	1988 1989		20,154 20,957		10,210 9,480
	10,184				TOTAL		17,948	6,178	11,475			129,831	20,257	83,001
•	FED ECONO				F. 7.0004 INT									00 057
IT DOMINI	red econo	MIL CUSI	15 :	10,184	DISCOUNT	EU ECONI	JM1C COST	১ :	6,178	DISCOUNT	ED ECUNU	MIC CUS	15:	20,257
)ISCOUNT	red econo	OMIC BENE	FITS:	22,621	DISCOUNT	ED ECON(OMIC BENE	FITS:	11,475	DISCOUNT	ED ECONO	MIC BENE	EFITS:	83,001
NET PRES	SENT VALU	JE :		12,437	NET PRES	ENT VAL	JE:		5,297	NET PRES	ENT VALL	JE :		62,744
BENEFIT	COST RAT	rio:		2.22	BENEFIT	COST RAT	rio:		1.86	BENEFIT	COST RAT	TIO:		4.10
ナレエピになりなり					INTERNAL	RATE OF	F RETURN	:	34.5 %	INTERNAL	RATE OF	RETURN	:	82.8
INTERNAL	_ RATE OF	- KETUKN	•	43.1 %	200 2000									
	_ RATE OF	LINK NO	0. RH - 1	. .			LINK NO	. RH - 2 DISCOUNT			PROPOSE	D LINK N		21 ITED(12%)
	PROPOSEI	VOC	DISCOUNT	9 ED(12%)			LINK NO	DISCOUNT	ED(12%)		PROPOSE 	D LINK N	DISCOUN	TED(12%)
YEAR	PROPOSED	VOC SAVING	DISCOUNT	9 ED(12%) BENEFIT		PROPOSEI COST	VOC SAVING	DISCOUNT COST	ED(12%) BENEFIT		COST	D LINK N	DISCOUN	TED(12%)
YEAR	PROPOSEI COST	VOC SAVING	DISCOUNT COST	9 ED(12%) BENEFIT	YEAR	PROPOSEI COST	VOC SAVING	DISCOUNT	ED(12%) BENEFIT		COST	D LINK N VOC SAVING	DISCOUN	TED(12%)
YEAR 	PROPOSED COST 	VOC SAVING	DISCOUNT COST 74,325	9 ED(12%) BENEFIT 	YEAR	PROPOSEI COST	VOC SAVING	COST	BENEFIT		COST	D LINK N VOC SAVING	DISCOUN : COST	BENEFIT 2,843
YEAR 1983 1984	PROPOSED COST 74,325 0	VOC SAVING 	DISCOUNT COST 74,325	9 ED(12%) BENEFIT 	YEAR 1983	PROPOSED COST	VOC SAVING 4,131 4,336	COST	BENEFIT	 1983	COST	VOC SAVING 3,184	DISCOUN : COST 	BENEFIT 2,843 2,664
YEAR 1983 1984 1985	PROPOSED COST 74,325 0	VOC SAVING 	DISCOUNT COST 74,325	PED(12%) BENEFIT	YEAR 1983 1984	PROPOSED COST 14,184 0 0	VOC SAVING 4,131 4,336	COST 14,184 0 0	3,688 3,457 3,016	 1983 1984	COST 12,535 0 0	VOC SAVING 3,184 3,342 3,500 3,657	DISCOUN COST 12,535	BENEFIT 2,843 2,664 2,491 2,324
YEAR 1983 1984	PROPOSEI COST 74,325 0 0 0	VOC SAVING 	0. RH - 1 DISCOUNT COST 74,325 0 0	9 ED(12%) BENEFIT 	YEAR 1983 1984 1985	PROPOSED COST 14,184 0 0 0	VOC SAVING 4,131 4,336 4,541	COST 14,184 0 0 0 0	3,688 3,457 3,232 3,016 2,809	 1983 1984 1985 1986 1987	12,535 0 0 0 0	VOC SAVING 3,184 3,342 3,500 3,457 2,815	DISCOUN COST 12,535	BENEFIN 2,843 2,664 2,491 2,324 2,165
YEAR 1983 1984 1985 1986	PROPOSEI COST 74,325 0 0 0	VOC SAVING 	74,325 0	PED(12%) BENEFIT	YEAR	PROPOSED COST 14,184 0 0 0	VOC SAVING 4,131 4,336 4,541 4,746 4,950 5,155	COST 	3,688 3,688 3,457 3,232 3,016 2,809 2,612	 1983 1984 1985 1986 1987	12,535 0 0 0 0	70 LINK N VOC SAVING 3,184 3,342 3,500 3,457 3,815	DISCOUN COST 12,535	BENEFIT 2,840 2,664 2,490 2,324 2,165 2,010
YEAR 1983 1984 1985 1986 1987	PROPOSEI COST 74,325 0 0 0 0	VOC SAVING 	74,325 0 0 0 0 0 0 0	9 ED(12%) BENEFIT 	YEAR 1983 1984 1985 1986 1987	COST	VOC SAVING 4,131 4,336 4,541 4,746 4,950	COST 14,184 0 0 0 0	3,688 3,688 3,457 3,232 3,016 2,809 2,612	 1983 1984 1985 1986 1987	12,535 0 0 0 0	VOC SAVING 3,184 3,342 3,500 3,457 2,815	DISCOUN COST 12,535	3 2,843 2,843 2,664 2,491 2,324 2,165 2,013
YEAR 1983 1984 1985 1986 1987 1988 1989	PROPOSEI COST 74,325 0 0 0 0	VOC SAVING 	74,325 0 0 0 0 0 0 0 0	20,905 19,615 18,362 17,152 15,990 14,880 13,825	YEAR 1983 1984 1985 1986 1987 1988 1989	COST	VOC SAVING 4,131 4,336 4,541 4,746 4,950 5,155	COST 	3,688 3,457 3,232 3,016 2,809 2,612 2,425	 1983 1984 1985 1986 1987	12,535 0 0 0 0 0	VOC SAVING 3,184 3,342 3,500 3,657 3,815 3,973 4,131	DISCOUN COST 12,535	BENEFIT 3 2,843 2,843 2,664 2,491 2,324 2,165 2,013 1,869
YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL	74,325 0 0 0 0	VOC SAVING 23,414 24,605 25,797 26,988 28,180 29,371 30,563	74,325 0 74,325 0 0 0 0 74,325	9 ED(12%) BENEFIT 20,905 19,615 18,362 17,152 15,990 14,880 13,825	YEAR 1983 1984 1985 1986 1987 1988 1989	COST 14,184 0 0 0 0 0 14,184	VOC SAVING 4,131 4,336 4,541 4,746 4,950 5,155 5,360	DISCOUNT COST 14,184 0 0 0 0 14,184	3,688 3,457 3,232 3,016 2,809 2,612 2,425	 1983 1984 1985 1986 1987 1988 1989 TOTAL	12,535 0 0 0 0 0 0	VOC SAVING 3,184 3,342 3,500 3,657 3,815 3,973 4,131	DISCOUN COST 12,535	TED(12%) BENEFIT 2,843 2,664 2,491 2,165 2,013 1,869
YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL	PROPOSEI COST 74,325 0 0 0 0 74,325	VOC SAVING 23,414 24,605 25,797 26,988 28,180 29,371 30,563 188,918	0. RH - 1 DISCOUNT COST 74,325 0 0 0 74,325	9 ED(12%) BENEFIT 20,905 19,615 18,362 17,152 15,990 14,880 13,825 120,729	YEAR	COST 14,184 0 0 0 0 14,184 TED ECONO	VOC SAVING 4,131 4,336 4,541 4,746 4,950 5,155 5,360 33,219	COST 14,184 0 0 0 0 14,184	3,688 3,457 3,232 3,016 2,809 2,612 2,425 21,238	1983 1984 1985 1986 1987 1988 1989 TOTAL	12,535 0 0 0 0 0 12,535 TED ECON	VOC SAVING 3,184 3,342 3,500 3,457 3,815 3,973 4,131	DISCOUN COST 12,535 (0) (0) (12,535 (12,535	TED(12%) BENEFIT 2,843 2,664 2,491 2,324 2,165 2,013 1,865 16,368
YEAR 1983 1984 1985 1986 1989 TOTAL DISCOUNT	PROPOSEI COST 74,325 0 0 0 74,325 TED ECONO	VOC SAVING 	74,325 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ED(12%) BENEFIT 20,905 19,615 18,362 17,152 15,990 14,880 13,825 120,729 74,325	YEAR	COST 14,184 0 0 0 14,184 ED ECONO	VOC SAVING 4,131 4,336 4,541 4,746 4,950 5,155 5,360 33,219 OMIC COST	COST 14,184 0 0 0 0 14,184 TS:	3,688 3,457 3,232 3,016 2,809 2,612 2,425 21,238	1983 1984 1985 1986 1987 1988 1989 TOTAL DISCOUN	COST	VOC SAVING 3,184 3,342 3,500 3,457 3,815 3,973 4,131 25,602	DISCOUN COST 12,535	TED(12%) BENEFIT 2,843 2,664 2,491 2,324 2,165 2,013 1,869 16,368
YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL DISCOUNT	PROPOSET COST 74,325 0 0 0 74,325	VOC SAVING 	74,325 0 0 74,325 0 0 0 0 74,325	ED(12%) BENEFIT 20,905 19,615 18,362 17,152 15,990 14,880 13,825 120,729 74,325	YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL DISCOUNT	COST 14,184 0 0 0 14,184 ED ECONO	VOC SAVING 4,131 4,336 4,541 4,746 4,950 5,155 5,360 33,219 OMIC COST	COST 14,184 0 0 0 0 14,184 TS:	3,688 3,457 3,232 3,016 2,809 2,612 2,425 21,238	1983 1984 1985 1986 1987 1988 1989 TOTAL 	12,535 0 0 0 0 12,535 TED ECON TED ECON	VOC SAVING 3,184 3,342 3,500 3,457 3,815 3,973 4,131 25,602 OMIC COS	DISCOUN COST 12,535	TED(12%) BENEFIT 2,843 2,664 2,491 2,324 2,165 2,013 1,865 16,368

COST AND BENEFIT STATEMENT (4)

	PROPOSED					PROPOSEI). RH - 1	
YEAR	COST			ED(12%)	YEAR	COST	DISCOUNTE			VEAD	COST		DISCOUNT	
		SAVING	COST	BENEFLT		2-2.	SAVING	COST	BENEFIT	YEAR		SAVING		BENEFIT
1983	4,502	5,079	4,502	4,535	1983	21,967	7,828	21,967	6,989	1983	26,828	8,557	26,828	7,640
1984	0	5,400		4,305	1984	0		0	- /	1984	Ò	9,043	O	7,209
1985		5,721		4,072	1985		8,719		6,206	1985	Q	9,530	Ō	6,784
1986 1987		6,041 6,362		3,839	1986		9,164		5,824	1986		10,017	0	6,366
1988		6,683		3,610 3,386	1987		9,610		5,453	1987		10,504		5,960 5,560
1989	ó	7,004		3,168	1988 1989		10,055 10,501		5,094 4,750	1988 1989		10,991 11,478		5,569 5,192
TOTAL		42,290			TOTAL	21,967	64,149	21,967	40,911				26,828	
DISCOUNTED ECONOMIC COSTS: 4,502					DISCOUNT	DISCOUNTED ECONOMIC COSTS: 21,967					DISCOUNTED ECONOMIC COSTS: 26,829			
ISCOUNTED ECONOMIC BENEFITS: 26,915				26,915	DISCOUNT	DISCOUNTED ECONOMIC BENEFITS : 40,911					DISCOUNTED ECONOMIC BENEFITS: 44,720			
NET PRESENT VALUE :			22,413	NET PRES	NET PRESENT VALUE: 18,9				NET PRES	NET PRESENT VALUE :			17,892	
BENEFIT COST RATIO :				5.98	BENEFIT	BENEFIT COST RATIO :			1.86	BENEFIT	BENEFIT COST RATIO :			1.67
INTERNAL	RATE OF	RETURN	:	118.1 %	INTERNAL	INTERNAL RATE OF RETURN: 34.5 %					INTERNAL RATE OF RETURN: 29.			
		LINK NO		<u>6</u>			D LINK NO		_ ·		PROPOSE	D LINK N	10. RH -	
			DISCOUNT	6 ED(12%)		<u>-</u>		DISCOUN	TED(12%)		PROPOSE	D LINK N	DISCOUN	TED(12%
YEAR	COST		DISCOUNT COST	6 ED(12%) BENEFIT		COST	VOC	DISCOUN	TED(12%)	YEAR	PROPOSE 	D LINK N VOC SAVING	DISCOUN	TED(12%
YEAR	COST	VOC SAVING	DISCOUNT	6 ED(12%) BENEFIT	YEAR		VOC SAVING	DISCOUN	TED(12%) BENEFIT	YEAR	PROPOSE COST	D LINK N VOC SAVING	COST DISCOUN	TED(12%
YEAR	COST	VOC SAVING	COST	6 ED(12%) BENEFIT	YEAR	COST	VOC SAVING	DISCOUN	TED(12%) BENEFIT	YEAR	PROPOSE COST	VOC SAVING	DISCOUN COST	TED(12% BENEFI
YEAR 1983 1984 1985	COST 38,455 0	VOC SAVING 10,092 10,709 11,325	01SCOUNT COST 38,455 O	6 ED(12%) BENEFIT 9,011 8,537 8,061	YEAR 1983	COST 9,003 0	VOC SAVING	DISCOUN COST 9,003	BENEFIT	YEAR 1983	PROPOSE COST 11,242	VOC SAVING 2,234 2,360	DISCOUN COST	TED(12% BENEFI 1,999
YEAR	808T 38,455 0	VOC SAVING 10,092 10,709 11,325 11,942	01SCOUNT COST 	6 ED(12%) BENEFIT 9,011 8,537 8,061 7,589	YEAR 1983 1984 1985 1986	9,003 0 0	VOC SAVING 	9,003 0	1,294 1,224 1,155 1,087	YEAR 1983 1984 1985 1986	PROPOSE COST 	VOC SAVING 2,234 2,360 2,486 2,612	DISCOUN COST 	1,99 1,88 1,77
YEAR 1983 1984 1985 1986 1987	COST 38,455 0 0 0	V0C SAVING 10,092 10,709 11,325 11,942 12,559	01SCOUNT COST 38,455 0 0	6 ED(12%) BENEFIT 9,011 8,537 8,061 7,589 7,126	YEAR 	9,003 0 0 0	VOC SAVING 	9,003 0	TED(12%) BENEFIT 1,294 1,224 1,155 1,087 1,019	YEAR 1983 1984 1985 1986 1987	PROPOSE COST 	VOC SAVING 2,234 2,360 2,486 2,612 2,738	DISCOUN'	TED(12% BENEFI 1,99 1,88 1,77 1,66 1,55
YEAR 1983 1984 1985 1986 1987 1988	20ST 38,455 0 0 0	V0C SAVING 10,092 10,709 11,325 11,942 12,559 13,175	C0ST C0ST 38,455 O O O	6 ED(12%) BENEFIT 9,011 8,537 8,061 7,589 7,126 6,675	YEAR 1983 1984 1985 1986 1987 1988	9,003 0 0 0 0	V0C SAVING 1,449 1,536 1,623 1,710 1,797 1,883	9,003 0 0 0 0 0	1,294 1,294 1,224 1,155 1,087 1,019 954	YEAR 1983 1984 1985 1986 1987	PROPOSE COST 11,242 0 0 0	VOC SAVING 2,234 2,360 2,486 2,486 2,738 2,864	DISCOUN' COST 11,242 0 0 0 0	TED(12% BENEFI 1,99 1,88 1,77 1,66 1,55
YEAR 1983 1984 1985 1986 1987 1988 1989	20st 38,455 0 0 0 0	V0C SAVING 10,092 10,709 11,325 11,942 12,559 13,175 13,792	COST 	6 ED(12%) BENEFIT 9,011 8,537 8,061 7,589 7,126 6,675 6,239	YEAR 1983 1984 1985 1986 1987 1988	9,003 0 0 0 0 0	VOC SAVING 1,449 1,536 1,623 1,710 1,797 1,883 1,970	9,003 0037 9,003 000 000 000	1,294 1,294 1,224 1,155 1,087 1,019 954 891	YEAR 1983 1984 1985 1986 1987 1988	PROPOSE COST 	VOC SAVING 2,234 2,360 2,486 2,4738 2,738 2,864 2,991	DISCOUN'	1,9991,881,7761,6661,551,45
YEAR 1983 1984 1985 1986 1987 1988 1989	20st 38,455 0 0 0 0	V0C SAVING 10,092 10,709 11,325 11,942 12,559 13,175 13,792	COST 	6 ED(12%) BENEFIT 9,011 8,537 8,061 7,589 7,126 6,675	YEAR 1983 1984 1985 1986 1987 1988	9,003 0 0 0 0 0 0 0	VOC SAVING 1,449 1,536 1,623 1,710 1,797 1,883 1,970	9,003 0 9,003 0 0 0 0	1,294 1,294 1,224 1,155 1,087 1,019 954 891	YEAR 1983 1984 1985 1986 1987	PROPOSE COST 	VOC SAVING 2,234 2,360 2,486 2,4738 2,738 2,864 2,991	DISCOUN'	1,99 1,99 1,88 1,77 1,66 1,55 1,45
YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL	COST 38,455 0 0 0 0 0 38,455	V0C SAVING 10,092 10,709 11,325 11,942 12,559 13,175 13,792 83,594	COST 38,455 0 0 0 0 0 0 38,455	6 ED(12%) BENEFIT 9,011 8,537 8,061 7,589 7,126 6,675 6,239	YEAR 1983 1984 1985 1986 1987 1988 1989	9,003 0 0 0 0 0 0 0 0	VOC SAVING 1,449 1,536 1,623 1,710 1,797 1,883 1,970	9,003 9,003 0 0 0 0 0	1,294 1,294 1,224 1,155 1,087 1,019 954 891	YEAR	PROPOSE COST 11,242 0 0 0 0 0	VOC SAVING 2,234 2,360 2,486 2,612 2,738 2,864 2,991 18,286	DISCOUN'	TED(12% BENEFI 1,99 1,88 1,77 1,66 1,55 1,45 1,35
YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL	COST 38,455 0 0 0 0 38,455 ED ECONO	V0C SAVING 10,092 10,709 11,325 11,942 12,559 13,175 13,792 83,594	COST 38,455 0 0 0 0 0 38,455	6 ED(12%) BENEFIT 9,011 8,537 8,061 7,589 7,126 6,675 6,239 53,238	YEAR 1983 1984 1985 1986 1987 1988 1989	9,003 0 0 0 0 0 9,003 FED ECON	VOC SAVING 1,449 1,536 1,623 1,710 1,797 1,883 1,970 11,968	9,003 9,003	1,294 1,294 1,224 1,155 1,087 1,019 954 891 7,625	YEAR	PROPOSE COST 11,242 0 0 0 0 11,242 TED ECON	VOC SAVING 2,234 2,360 2,486 2,612 2,738 2,864 2,991 18,286	DISCOUN'	TED(12% BENEFI 1,99 1,88 1,77 1,66 1,55 1,45 1,35
YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL	COST 38,455 0 0 0 0 38,455 ED ECONO	VOC SAVING 10,092 10,709 11,325 11,942 12,559 13,175 13,792 83,594	COST 38,455 0 0 0 0 38,455	6 ED(12%) BENEFIT 9,011 8,537 8,061 7,589 7,126 6,675 6,239 53,238 38,455	YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL DISCOUN	9,003 0 0 0 0 0 9,003 FED ECON	VOC SAVING 1,449 1,536 1,623 1,710 1,797 1,883 1,970 11,968 OMIC COS	9,003 9,003 9,003	1,294 1,294 1,224 1,155 1,087 1,019 954 891 7,625	YEAR	PROPOSE COST 11,242 0 0 0 0 11,242 TED ECON	VOC SAVING 2,234 2,360 2,486 2,612 2,738 2,864 2,991 18,286 OMIC COS	DISCOUNT COST 11,242 0 0 0 11,242 TS: EFITS:	TED(12% BENEFI 1,99 1,88 1,77 1,66 1,55 1,45 1,35
YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL DISCOUNT	COST 38,455 0 0 0 0 0 38,455 ED ECONO	VOC SAVING 10,092 10,709 11,325 11,942 12,559 13,175 13,792 83,594 MIC COST	COST 38,455 0 0 0 0 38,455	6 ED(12%) BENEFIT 9,011 8,537 8,061 7,589 7,126 6,675 6,239 53,238 38,455	YEAR 1983 1984 1985 1986 1987 1988 1989 TOTAL DISCOUN' NET PRE	9,003 0 0 0 9,003 FED ECON FED ECON	VOC SAVING 1,449 1,536 1,623 1,710 1,797 1,883 1,970 11,968 OMIC COS OMIC BEN	9,003 9,003 0 0 0 9,003	1,294 1,294 1,224 1,155 1,087 1,019 954 891 7,625	YEAR	PROPOSE COST 11,242 0 0 0 11,242 TED ECON	VOC SAVING 2,234 2,360 2,486 2,612 2,738 2,864 2,991 18,286 OMIC COS	DISCOUN'	1,99 1,99 1,88 1,77 1,66 1,55 1,45 1,35



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