社会開発調査部報告書

No. 58

JAPAN INTERNATIONAL COOPERATION AGENCY

DEPARTMENT OF ROADS
MINISTRY OF TRANSPORT AND COMMUNICATION
THE REPUBLIC OF KAZAKHSTAN

THE STUDY ON DEVELOPMENT OF ROAD NETWORK IN WESTERN KAZAKHSTAN IN THE REPUBLIC OF KAZAKHSTAN

APPENDIX TO FINAL REPORT

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FEBRUARY, 1997

YACHIYO ENGINEERING CO. LTD.
IN ASSOCIATION WITH
PACIFIC CONSULTANTS INTERNATIONAL

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APPENDIX I

Socio-Economic Data of Western Kazakhstan

APPENDIX 1 : Socio-Economic Data of Western Kazakhstan

Annex 1 Agriculture Area in 1994

Description	Total Agriculture Area	Cultivated Area	Grazing	Rangeland	Other Agriculture	Others	Total Area
Area(1,000Ha)							
Aktyubinskaya	26,417.3	2,062.8	349.7	23,935.1	69.7	3,642.7	30,060.0
Atyrauskaya	10,067.5	26.4	160.5	9,864.2	16.4	1,792.5	11,860.0
West Kazakhstan	13,885.2	2,000.5	1,221.4	10,642.0	21.3	1,244.8	15,130.0
Mangistauskaya	13,167.0	0.8	0.3	13,164.6	1.3	3,393.0	16,560.0
Total	63,537.0	4,090.5	1,731.9	57,605.9	108.7	10,073.0	73,610.0
All Kazakhstan	222,328.5	34,914.7	5,096.2	181,723.8	593.8	50,161.5	272,490.0
Landuse Share(%)							
Aktyubinskaya	87.9	6.9	1.2	79.6	0.2	12.1	100.0
Atyrauskaya	84.9	0.2	1.4	83.2	0.1	15.1	100.0
West Kazakhstan	91.8	13.2	8.1	70.3	0.1	8.2	100.0
Mangistauskaya	79.5	0.0	0.0	79.5	0.0	20.5	100.0
Total	86.3	5.6	2.4	78.3	0.1	13.7	100.0
All Kazakhstan	81.6	12.8	1.9	66.7	0.2	18.4	100.0
Share in the Country(%)							
Aktyubinskaya	11.9	5.9	6.9	13.2	11.7	7.3	11.0
Atyrauskaya	4.5	0.1	3.1	5.4	2.8	3.6	4.4
West Kazakhstan	6.2	5.7	24.0	5.9	3.6	2.5	5.6
Mangistauskaya	5.9	0.0	0.0	7.2	0.2	6.8	6.1
Total	28.6	11.7	34.0	31.7	18.3	20.1	27.0
All Kazakhstan	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source : 1994 Annual Statistics

Annex 2 Population by Year and State

Unit:1,000

State		1985	1990	1991	1992	1993	1994	1995	95/94 (%)
Aktyubinskaya	Total	686.2	747.1	752.9	758.4	758.4	760.2	752.8	-1.0
	Urban	350.9	407.2	412.6	414.7	410.4	409.3	403.3	-1.5
	Rural	335.3	339.9	340.3	343.7	348.0	350.9	349.5	-0.4
Atyrauskaya	Total	398.9	441.6	447.1	449.1	453.9	457.7	459.6	0.4
	Urban	237.0	270.6	275.4	275.8	276.6	272.3	272.4	0.0
	Rural	161.9	171.0	171.7	173.3	177.3	185.4	187.2	1.0
West Kazakhstan	Total	605.2	638.9	648.1	659.9	669.3	674.3	669.8	-0.7
	Urban	240.8	277.8	278.4	270.0	274.5	277.1	274.0	-1.1
	Rural	364.4	361.1	369.7	389.9	394.8	397.2	395.8	-0.4
Mangistauskaya	Total	295.3	325.4	331.7	345.2	346.4	338.5	324.4	-4.2
	Urban	261.1	289.2	295.6	308.8	309.7	272.8	258.2	-5.4
	Rural	34.2	36.2	36.1	36.4	36.7	65.7	66.2	0.8
Western Kazakhstan	Total	1,985.6	2,153.0	2,179.8	2,212.6	2,228.0	2,230.7	2,206.6	-1.1
	Urban	1,089.8	1,244.8	1,262.0	1,269.3	1,271.2	1,231.5	1,207.9	-1.9
	Rural	895.8	908.2	917.8	943.3	956.8	999.2	998.7	-0.1
All Kazakhstan	Total	15,737.2	16,690.3	16,793.1	16,963.6	16,985.7	16,942.4	16,679.1	-1.6
	Urban	8,820.5	9,585.9	9,668.5	9,775.9	9,718.0	9,553.2	9,332.6	-2.3
	Rural	6,916.7	7,104.4	7,124.6	7,187.7	7,267.7	7,389.2	7,346.5	-0.6

Source : 1995 Annual Statistics

Annex 3 Population/ Employee/ Vehicles by District

State	District	Population in 1994 (x1,000)	Population in 1995 (x1,000)	Population in 1995 (x1,000) Adjusted	Employee(1995) Mining and manufacturing	Agriculture fishery, forestry and animal husbandry	Construction	Transport and communication	Commercial and other services	Total	Vehicles(1995) Private owned	Public owned	Total
Aktyubinskaya		760.2	747.5	752.8	47,051	74,740	15,490	22,904	85,007	245,192	16,919	32,234	49,153
	Aktyubinsk City	263.9	259.6	261.4	31,600	220	10,300	15,200	41,680	99,000	10,429	26,351	36,780
	1 Martukskiji	31.9	28.6	28.8	194	6,207	96	217	3,239	9,953	1,010	1,613	2,623
	2 Aktyubinskiji	37.2	35.8	36.1	420	6,920	0	0	0	7,340	1,632	2,284	3,916
	3 Leninskiji	19.3	18.6	18.7	49	3,536	127	218	1,778	5,708	1,255	2,002	3,257
	4 Isataiskiji	15.3	15.0	15.1	0	2,705	0	130	1,103	3,938	499	1,061	1,560
	5 Hobdinskiji	21.2	21.0	21.1	0	5,330	52	331	2,657	8,370	846	1,732	2,578
	6 Alginskiji	36.9	35.5	36.8	1,370	4,919	54	203	5,966	12,512	1,110	4,143	5,253
	7 Khromtauskiji	48.6	47.8	48.1	7,330	5,308	1,320	332	4,119	18,409	1,444	5,294	6,738
	8 Bogetkolskiji	26.3	26.2	26.4	0	7,090	97	133	2,029	9,349	976	919	1,895
	9 Aitekebinskiji	19.8	19.4	19.5	0	3,685	53	210	1,471	5,419	580	895	1,475
	10 Ulskiji	23.9	23.7	23.9	0	3,926	45	208	2,031	6,210	749	1,224	1,973
	11 Temirskiji	40.2	39.7	40.0	122	6,578	366	1,318	3,166	11,550	1,524	646	2,170
	12 Oktiabrskiji	42.6	42.3	42.6	3,811	4,703	2,022	242	1,964	12,742	2,148	2,953	5,101
	13 Baiganinskiji	28.8	28.8	29.0	30	4,124	101	115	2,890	7,260	710	2,062	2,772
	14 Mugodzharskiji	30.3	30.4	30.6	613	3,249	138	960	3,149	8,109	780	635	1,415
	15 Irgizskiji	18.1	18.1	18.2	35	3,052	192	101	2,232	5,612	522	553	1,075
	16 Chelkarskiji	55.9	56.0	56.4	1,477	3,188	527	2,986	5,533	13,711	1,134	4,218	5,352
West Kazakhstan			668.4	669.8	37,471	73,316	15,895	18,676	99,680	245,038	23,346	35,513	58,859
	Uralsk City		245.1	245.6	31,505	2,877	11,758	15,017	40,836	101,993	9,168	20,615	29,783
	1 Taskalinskiji		21.8	21.8		2,942	116	138	3,123	6,319	792	728	1,520
	2 Zelenovskiji		27.5	27.6	62	4,438	76	343	5,098	10,017	871	1,771	2,642
	3 Priuralayi		35.4	35.5	325	6,339	774	213	4,647	12,298	1,120	760	1,880
	4 Terektinskiji		28.3	28.4	139	5,513	187	267	4,085	10,191	1,155	1,707	2,862
	5 Burlinskiji		48.6	48.7	4,773	5,299	1,983	379	4,566	17,000	2,025	4,024	6,049
	6 Chingirlauskiji		27.8	27.9	55	4,658	181	312	4,535	9,741	1,017	843	1,860
	7 Dzhanybekskiji		21.5	21.5	39	3,537	139	304	3,966	7,985	874	606	1,480
	8 Kaztalovskiji		19.1	19.1		3,670	97	118	3,179	7,064	640	618	1,258
	9 Zhalpaktalskiji		22.7	22.7		3,992	40	224	2,945	7,201	666	1,045	1,711
	10 Chapaerskiji		27.5	27.6	347	3,979	149	462	3,383	8,320	836	400	1,236
	11 Akzhaikskiji		17.5	17.5	61	3,967		127	3,398	7,553	634	363	997
	12 Syrymskiji		35.0	35.1	70	7,501	30	163	3,774	11,538	1,077	659	1,736
	13 Ugdinskiji		19.2	19.2	16	3,408	68	120	2,645	6,257	605	289	894
	14 Dzhangalinskiji		23.0	23.0		3,708	50	226	3,344	7,328	678	481	1,159
	15 Taipakskiji		25.3	25.4	79	3,313	91	144	3,874	7,501	671	311	982
	16 Karatobinskiji		23.1	23.1		4,175	156	119	2,282	6,732	517	293	810
Atyrauskaya		457.7	459.6	459.6	28,900	16,720	12,600	18,500	61,200	137,920	15,723	25,426	41,149
	Atyrau City	153.4	154.0	154.0	14,500		9,400	14,900	39,600	78,400	6,115	9,662	15,777
	1 Inderskiji	30.5	30.6	30.6	1,000	2,400	100	600	2,200	6,300	995	2,559	3,554
	2 Kzylkoginskiji	33.7	33.8	33.8		4,500		100	2,800	7,400	862	795	1,657
	3 Kurmangazinskiji	53.9	54.1	54.1	500	6,500		700	3,800	11,500	1,252	2,899	4,151
	4 Isataiskiji	20.8	20.9	20.9		1,600		100	1,800	3,500	596	1,390	1,986
	5 Mahambetskiji	26.0	26.1	26.1	2,700				2,600	5,300	735	1,390	2,125
	6 Makatskiji	26.8	26.9	26.9		20		600	1,700	2,320	678	590	1,268
	7 Balykshinskiji	48.8	49.0	49.0	2,100	500	500	300	2,400	5,800	1,324	1,949	3,273
	8 Zhylyoiskiji	63.8	64.1	64.1	8,100	1,200	2,600	1,200	4,300	17,400	3,166	4,192	7,358
Mangistauskaya			331.3	324.4	28,400	5,700	15,400	21,700	46,300	117,400	13,780	14,344	28,124
	Aktau City		174.5	170.9	18,800	200	11,400	13,400	18,100	61,900	8,376	9,714	18,090
	1 Beyneuskiji		26.1	25.6	200	400	400	1,200	5,100	7,300	627	409	1,036
	2 Tupkaraganskiji		14.2	13.9	1,500	1,100	300	1,900	400	5,200	340	320	669
	3 Mangistauskiji		30.4	29.8	1,900	1,100	100	400	7,000	10,500	817	619	1,436
	4 Karakjanskiji		27.8	27.2	1,900	500	700	1,100	6,800	11,000	1,301	1,358	2,699
	5 Zhanaozen		58.3	57.1	4,100	2,400	2,400	3,700	8,900	21,500	2,319	1,884	4,203

Note Population in Atyrauskaya in 1995 are estimated figures based on the figures in central statistics office
Employee in Mangistauskaya are adjusted to the figures in 1994 in central statistics office

Annex 4 Trend of Migration Share (%)

State	1990	1991	1992	1993	1994
Natural Increase					
Aktyubinskaya	1.1	1.6	1.4	1.2	1.0
Atyrauskaya	1.2	1.9	1.8	1.5	1.4
West Kazakhstan	1.1	1.4	1.2	0.9	0.9
Mangistauskaya	1.2	1.9	1.8	1.6	1.4
Total	1.1	1.6	1.5	1.2	1.1
All Kazakhstan	1.1	1.3	1.2	0.9	0.9
Migration					
Aktyubinskaya	0.6	-0.8	-0.7	-1.2	-1.8
Atyrauskaya	0.9	-0.7	-1.3	-0.5	-0.2
West Kazakhstan	-0.0	0.0	0.6	0.5	-0.8
Mangistauskaya	0.8	-0.0	2.3	-1.2	-7.7
Total	0.5	-0.4	0.0	-0.5	-2.1
All Kazakhstan	0.1	-0.7	-0.2	-0.8	-2.7
Total Increase					
Aktyubinskaya	1.7	0.8	0.7	0.0	-0.7
Atyrauskaya	2.1	1.2	0.4	1.1	1.3
West Kazakhstan	1.1	1.4	1.8	1.4	0.1
Mangistauskaya	2.0	1.9	4.1	0.3	-6.4
Total	1.6	1.2	1.5	0.7	-1.0
All Kazakhstan	1.2	0.6	1.0	0.1	-1.8

Source : 1995 Annual Statistics

Annex 5 Trend of Employment

Unit:1,000

State/Sector	1985	1990	1991	1992	1993	1994	(%)	94/85
Aktyubinskaya								
Total	313.5	313.9	311.5	292.5	275.0	253.0	100.0	0.81
Agriculture	80.1	73.6	74.2	72.5	69.6	57.6	22.8	0.72
Mining/Manufactureing	56.1	56.1	55.4	55.3	49.8	45.3	17.9	0.81
Construction	32.1	25.8	23.6	27.2	24.8	22.6	8.9	0.70
Transport	43.2	39.4	39.2	33.4	32.2	33.2	13.1	0.77
Others	102.0	119.0	119.1	104.1	98.6	94.3	37.3	0.92
Atyrauskaya								
Total	158.9	174.2	184.7	158.0	151.6	137.0	100.0	0.86
Agriculture	26.9	25.8	24.3	21.9	20.8	27.1	19.8	1.01
Mining/Manufactureing	23.4	23.2	22.5	22.8	22.0	17.1	12.5	0.73
Construction	14.8	27.1	20.9	23.9	20.7	10.9	8.0	0.74
Transport	28.8	28.6	27.0	23.8	22.3	23.0	16.8	0.80
Others	65.0	69.5	90.0	65.6	65.8	58.9	43.0	0.91
West Kazakhstan								
Total	278.0	282.2	280.9	272.6	249.9	236.5	100.0	0.85
Agriculture	91.5	82.6	83.0	81.9	81.7	72.0	30.4	0.79
Mining/Manufactureing	46.2	44.4	43.6	43.8	37.0	33.5	14.2	0.73
Construction	22.1	22.2	20.5	25.9	19.7	16.0	6.8	0.72
Transport	28.6	25.5	26.2	23.6	20.7	18.7	7.9	0.65
Others	89.6	107.5	107.6	97.4	90.8	96.3	40.7	1.07
Mangistauskaya								
Total	90.3	139.3	94.1	133.4	126.0	117.5	100.0	1.30
Agriculture	7.2	6.6	6.6	6.4	6.1	5.7	4.9	0.79
Mining/Manufactureing	14.7	14.9	36.5	34.2	31.1	28.4	24.2	1.93
Construction	8.7	7.6	7.1	19.4	17.3	15.4	13.1	1.77
Transport	20.3	19.7	21.4	22.4	21.4	21.7	18.5	1.07
Others	39.4	90.5	22.5	51.0	50.1	46.3	39.4	1.18
Western Kazakhstan								
Total	840.7	909.6	871.2	856.5	802.5	744.0	100.0	0.88
Agriculture	205.7	188.6	188.1	182.7	178.2	162.4	21.8	0.79
Mining/Manufactureing	140.4	138.6	158.0	156.1	139.9	124.3	16.7	0.89
Construction	77.7	82.7	72.1	96.4	82.5	64.9	8.7	0.84
Transport	120.9	113.2	113.8	103.2	96.6	96.6	13.0	0.80
Others	296.0	386.5	339.2	318.1	305.3	295.8	39.8	1.00
All Kazakhstan								
Total	6,780.1	6,747.6	6,737.0	6,576.8	5,894.5	5,415.0	100.0	0.80
Agriculture	1,568.9	1,455.9	1,455.2	1,429.4	1,371.6	1,120.6	20.7	0.71
Mining/Manufactureing	1,402.6	1,359.7	1,385.3	1,350.9	1,195.2	1,195.8	22.1	0.85
Construction	706.6	673.4	673.6	650.2	492.4	391.0	7.2	0.55
Transport	825.4	699.2	692.7	648.1	575.7	545.6	10.1	0.66
Others	2,276.6	2,559.4	2,530.2	2,498.2	2,259.6	2,162.0	39.9	0.95

Source : 1995 Annual Statistics

Annex 7 Trend of GDP

Year	1988	1989	1990	1991	1992	1993	1994
GDP (B.Rbs)		42.0	51.0	94.0	1,593.0		
(M.Tgs)						26,838.0	449,916.4
(B.US$)		66.9	87.1	41.5	28.5	13.4	12.6
Rate (1US$=Rb)	0.6080	0.6274	0.5856	2.3	55.9		4500.0
(1US$=Tg)						2.00	35.76
Population(x1,000)		16,268.0	16,690.3	16,793.1	16,963.6	16,985.7	16,942.4
GDP/Capita(US$)		2,580	3,060	2,470	1,680	790	740

Source : 1994 Annual Statistics

Annex 6 GDP 1994 in 1994 Price

Sector	Mil.Tg	(%)
Industry	115,479.7	25.7
Agriculture	53,597.0	11.9
Construction	40,731.5	9.1
Transp/Commu	32,482.3	7.2
Trade/Service	53,647.9	11.9
Others	153,978.0	34.2
Total	449,916.4	100.0

Source : 1994 Annual Statistics

Annex 8 GRDP 1992

Sector	Mining	Agric	Construc	Transp	Others	Total
GRDP (B.Rbs.)						
Aktyubinskaya	47.4	32.6	10.4	17.4	10.8	118.6
Atyrauskaya	49.0	5.8	15.2	4.4	3.5	77.9
West Kazakhstan	19.8	21.1	6.9	3.6	3.9	55.3
Mangistauskaya	68.5	1.6	9.3	9.6	2.1	91.1
Total	184.7	61.1	41.8	35.0	20.3	342.9
All Kazakhstan	1,337.4	416.1	197.4	149.9	150.2	2,251.0
State Share (%)						
Aktyubinskaya	3.5	7.8	5.3	11.6	7.2	5.3
Atyrauskaya	3.7	1.4	7.7	2.9	2.3	3.5
West Kazakhstan	1.5	5.1	3.5	2.4	2.6	2.5
Mangistauskaya	5.1	0.4	4.7	6.4	1.4	4.0
Total	13.8	14.7	21.2	23.3	13.5	15.2
All Kazakhstan	100.0	100.0	100.0	100.0	100.0	100.0
Sector Share (%)						
Aktyubinskaya	40.0	27.5	8.8	14.7	9.1	100.0
Atyrauskaya	62.9	7.4	19.5	5.6	4.5	100.0
West Kazakhstan	35.8	38.2	12.5	6.5	7.1	100.0
Mangistauskaya	75.2	1.8	10.2	10.5	2.3	100.0
Total	53.9	17.8	12.2	10.2	5.9	100.0
All Kazakhstan	59.4	18.5	8.8	6.7	6.7	100.0

Source : 1994 Annual Statistics

Annex 9 Vehicle Owernership 1995

State	Truck	Bus	P.Car	Taxi	Total	(%)
Vehicles						
Aktyubinskaya	32,908	10,801	3,020	2,425	49,153	3.2
Atyrauskaya	30,049	7,082	2,186	1,831	41,149	2.7
West Kazakhstan	42,590	11,213	3,079	1,978	58,859	3.8
Mangistauskaya	17,476	7,507	1,715	1,427	28,124	1.8
Total	122,401	36,995	10,091	7,798	177,285	11.5
All Kazakhstan	1,048,503	357,199	77,219	64,499	1,547,420	100.0
Composition(%)						
Aktyubinskaya	66.9	22.0	6.1	4.9	100.0	
Atyrauskaya	73.0	17.2	5.3	4.5	100.0	
West Kazakhstan	72.4	19.1	5.2	3.4	100.0	
Mangistauskaya	62.1	26.7	6.1	5.1	100.0	
Total	69.0	20.9	5.7	4.4	100.0	
All Kazakhstan	67.8	23.1	5.0	4.2	100.0	

Note:Vehicle numbers are adjusted to the figures collected from each state.

State	Veh/1000
Aktyubinskaya	65.3
Atyrauskaya	89.5
West Kazakhstan	87.9
Mangistauskaya	86.7
Total	80.3
All Kazkhstan	92.8

Source : State Administrations

Annex 10 Crude Oil Production

	1985	1990	1991	1992	1993	1994
Production (x1,000 ton)						
Aktyubinskaya	1,523	2,611	2,774	2,693	2,619	2,674
Atyrauskaya	1,965	2,507	3,892	5,379	4,148	4,621
West Kazakhstan	1,347	4,058	4,474	3,837	3,335	1,674
Mangistauskaya	18,005	16,152	14,282	12,620	11,198	9,504
Others	0	492	1,169	1,319	1,675	1,806
Total	22,840	25,328	25,422	24,529	21,300	18,473
All Kazakh	22,840	25,820	26,591	25,848	22,975	20,279
State Share (%)						
Aktyubinskaya	6.7	10.1	10.4	10.4	11.4	13.2
Atyrauskaya	8.6	9.7	14.6	20.8	18.1	22.8
West Kazakhstan	5.9	15.7	16.8	14.8	14.5	8.3
Mangistauskaya	78.8	62.6	53.7	48.8	48.7	46.9
Total	100.0	98.1	95.6	94.9	92.7	91.1
All Kazakh	100.0	100.0	100.0	100.0	100.0	100.0
Annual Growth Rate (%)						
Aktyubinskaya		11.4	6.2	-2.9	-2.7	2.1
Atyrauskaya		5.0	55.2	38.2	-22.9	11.4
West Kazakhstan		24.7	10.3	-14.2	-13.1	-49.8
Mangistauskaya		-2.1	-11.6	-11.6	-11.3	-15.1
Total		2.1	0.4	-3.5	-13.2	-13.3
All Kazakh		2.5	3.0	-2.8	-11.1	-11.7

Source : 1995 Annual Statistics

Annex 11 Natural Gas Production

	1985	1990	1991	1992	1993	1994
Production (Million m3)						
Aktyubinskaya	102.9	230.8	229.4	230.2	242.2	243.1
Atyrauskaya	37.0	24.3	683.3	1,388.6	571.3	488.3
West Kazakhstan	2,230.4	4,064.3	4,208.2	3,940.0	3,478.6	1,650.8
Mangistauskaya	3,085.3	2,777.5	2,713.2	2,503.8	2,332.3	2,050.7
Others	0.0	16.6	51.0	50.0	61.0	55.0
Total	5,455.6	7,096.9	7,834.1	8,062.6	6,624.4	4,432.9
All Kazakh	5,455.6	7,113.5	7,885.1	8,112.6	6,685.4	4,487.9
State Share (%)						
Aktyubinskaya	1.9	3.2	2.9	2.8	3.6	5.4
Atyrauskaya	0.7	0.3	8.7	17.1	8.5	10.9
West Kazakhstan	40.9	57.1	53.4	48.6	52.0	36.8
Mangistauskaya	56.6	39.0	34.4	30.9	34.9	45.7
Others	100.0	99.8	99.4	99.4	99.1	98.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Annu:All Kazakh						
Aktyubinskaya		17.5	-0.6	0.3	5.2	0.4
Atyrauskaya		-8.1	2711.9	103.2	-58.9	-14.5
West Kazakhstan		12.8	3.5	-6.4	-11.7	-52.5
Mangistauskaya		-2.1	-2.3	-7.7	-6.8	-12.1
Others		5.4	10.4	2.9	-17.8	-33.1
Total		5.5	10.8	2.9	-17.6	-32.9

Source : 1995 Annual Statistics

Annex 12 Cereales Production

	1985	1990	1991	1992	1993	1994
Production (x1,000 ton)						
Aktyubinskaya	2,081.6	1,932.8	1,858.5	1,796.8	1,830.8	1,508.3
Atyrauskaya	10.6	9.9	12.5	11.2	13.5	3.3
West Kazakhstan	1,806.7	1,556.4	1,524.0	1,494.3	1,520.5	1,290.5
Mangistauskaya	0.0	0.2	0.2	0.0	0.0	0.0
Others	21,230.0	19,857.6	19,357.3	19,293.5	18,885.6	15,539.4
Total	3,898.9	3,499.3	3,395.2	3,302.3	3,364.8	2,802.1
All Kazakh	25,128.9	23,356.9	22,752.5	22,595.8	22,250.4	18,341.5
State Share (%)						
Aktyubinskaya	8.3	8.3	8.2	8.0	8.2	8.2
Atyrauskaya	0.0	0.0	0.1	0.0	0.1	0.0
West Kazakhstan	7.2	6.7	6.7	6.6	6.8	7.0
Mangistauskaya	0.0	0.0	0.0	0.0	0.0	0.0
Others	15.5	15.0	14.9	14.6	15.1	15.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Annu:All Kazakh						
Aktyubinskaya		-1.5	-3.8	-3.3	1.9	-17.6
Atyrauskaya		-1.4	26.3	-10.4	20.5	-75.6
West Kazakhstan		-2.9	-2.1	-1.9	1.8	-15.1
Mangistauskaya			0.0	-100.0		
Others		-2.1	-3.0	-2.7	1.9	-16.7
Total		-1.5	-2.6	-0.7	-1.5	-17.6

Source : 1995 Annual Statistics

Annex 13 Future Socio-Economic Indices Estimate

District	1995			2000			2010		
	Population	GRDP	Vehicle Total	Population	GRDP	Vehicle Total	Population	GRDP	Vehicle Total
Aktyubinskaya	752.7	77,481	85,933	780.9	105,437	96,525	900.7	192,645	132,218
Aktyubinsk City	261.4	39,292	36,780	263.0	56,272	43,818	288.1	98,819	66,645
1 Martukskiji	28.8	2,202	2,623	31.0	2,229	2,825	37.7	5,802	3,657
2 Aktyubinskiji	36.1	1,302	3,916	38.8	2,909	4,332	47.2	1,990	5,184
3 Leninskiji	18.7	1,261	3,257	19.6	1,349	3,419	23.1	3,337	4,177
4 Isataiskiji	15.1	810	1,560	16.2	716	1,670	19.8	2,112	2,094
5 Hobdinskiji	21.3	1,795	2,578	22.7	1,821	2,775	27.6	4,857	3,560
6 Alginskiji	36.8	3,468	5,253	38.4	5,340	5,663	44.7	9,595	7,071
7 Khromtauskiji	48.1	6,715	6,738	50.0	8,570	7,221	57.8	13,121	8,962
8 Bogetkolskiji	26.4	1,828	1,895	28.4	1,937	2,042	34.6	4,331	2,596
9 Aitekebinskiji	19.5	1,127	1,475	21.0	1,559	1,601	25.5	2,913	1,992
10 Uilskiji	23.9	1,337	1,973	25.7	1,361	2,123	31.3	3,627	2,692
11 Temirskiji	40.0	2,661	2,170	41.3	4,092	2,298	47.4	7,231	2,781
12 Oktiabrskiji	42.6	4,333	5,101	43.8	5,380	5,341	50.0	8,040	6,373
13 Baiganinskiji	29.0	1,650	2,772	31.2	1,698	2,985	38.0	4,643	3,831
14 Mugodzharskiji	30.6	2,189	1,415	31.7	2,126	1,464	36.5	6,218	1,811
15 Irgizskiji	18.2	1,312	1,075	19.6	1,444	1,161	23.8	3,652	1,466
16 Chelkarskiji	56.4	4,200	5,352	58.5	6,632	5,787	67.6	12,358	7,326
West Kazakhstan	669.7	41,148	58,859	705.5	97,543	77,656	837.9	141,877	102,076
Uralsk City	245.6	20,193	29,783	253.9	56,807	46,153	288.0	78,833	62,828
1 Taskalinskiji	21.8	912	1,520	23.3	1,283	1,636	28.5	2,733	2,054
2 Zelenovskiji	27.6	1,470	2,642	29.5	2,430	2,874	36.0	4,152	3,615
3 Priuralayi	35.5	1,747	1,880	37.8	3,580	2,069	46.4	6,328	2,662
4 Terektinskiji	28.4	1,439	2,862	30.3	2,355	3,105	37.1	3,496	3,880
5 Burlinskiji	48.7	3,024	6,049	51.0	2,469	6,272	59.7	4,101	7,557
6 Chingirlauskiji	27.9	1,404	1,860	29.8	7,625	2,213	36.4	11,488	2,874
7 Dzhanybekskiji	21.5	1,168	1,480	22.9	2,430	1,613	28.1	4,163	2,041
8 Kaztalovskiji	19.1	998	1,258	20.4	2,015	1,369	24.9	2,837	1,696
9 Zhalpaktalskiji	22.7	1,005	1,711	24.2	2,008	1,857	29.6	2,661	2,299
10 Chapaerskiji	27.6	1,230	1,236	29.5	3,045	1,365	36.0	3,495	1,679
11 Akzhaikskiji	17.5	1,075	997	18.7	2,173	1,087	22.9	2,764	1,345
12 Syrymskiji	35.1	1,551	1,736	37.5	2,455	1,885	45.8	3,764	2,357
13 Urdinskiji	19.2	877	894	20.5	1,237	961	25.1	2,410	1,202
14 Dzhangalinskiji	23.0	1,043	1,159	24.5	2,039	1,257	30.0	2,861	1,562
15 Taipakskiji	25.4	1,104	982	27.1	2,254	1,070	33.2	3,188	1,333
16 Karatobinskiji	23.1	907	810	24.6	1,339	870	30.2	2,603	1,092
Atyrauskaya	459.5	62,457	41,149	511.1	66,903	47,266	677.0	140,890	75,597
Atyrau City	154.0	32,560	15,777	167.4	44,232	19,492	213.0	80,018	33,906
1 Inderskiji	30.6	2,403	3,554	35.2	1,698	4,036	49.1	5,354	6,004
2 Kzylkoginskiji	33.8	1,348	1,657	38.8	1,589	1,911	54.3	4,210	2,802
3 Kurmangazinskiji	54.1	2,729	4,151	62.2	2,565	4,759	86.8	7,361	7,212
4 Isataiskiji	20.9	566	1,986	24.0	673	2,285	33.6	2,038	3,280
5 Mahambetskiji	26.1	4,317	2,125	30.0	3,106	2,391	41.9	7,486	3,599
6 Makatskiji	26.9	235	1,268	29.2	493	1,383	37.2	1,444	1,793
7 Balykshinskiji	49.0	3,826	3,273	54.6	3,130	3,603	72.4	7,286	5,129
8 Zhylyoiskiji	64.1	14,472	7,358	69.7	9,417	7,406	88.7	25,693	11,872
Mangistauskaya	324.5	57,343	28,124	327.1	62,560	28,150	357.4	75,768	32,830
Aktau City	170.9	35,398	18,090	167.9	34,553	17,612	175.6	46,980	21,027
1 Beyneuskiji	25.6	1,703	1,036	28.5	2,469	1,170	36.0	2,384	1,475
2 Tupkaraganskiji	13.9	2,680	660	14.4	2,567	682	16.5	3,389	793
3 Mangistauskiji	29.8	4,066	1,436	33.0	5,642	1,634	41.3	5,168	2,028
4 Karakijanskiji	27.2	4,341	2,699	27.3	6,086	2,792	29.4	5,693	2,986
5 Zhanaozen	57.1	9,156	4,203	56.0	11,243	4,260	58.6	12,154	4,521
Total	2,206.4	238,429	214,065	2,324.6	332,443	249,597	2,773.0	551,180	342,721

APPENDIX II-1

Road Inventory Data

Appendix II-1 : Road Inventory Data

Definition for Road Inventory Items

(1) STA : Station of inventory data
(2) DIS : The origin to destination distance including the length between intervals
(3) CARRIAGEWAY :
Carriageway data on type of pavement, number of lane, width of the carriageway and pavement condition (IRI)
(4) S'DE : Data on both shoulder's type and width
G : Gravel E : Earth H : Hard (AC or CC or DB)
(5) F'ON : Data on type of roadway formation and embankment height or cutting depth
FL : Fill CF : Balanced cut and fill CT : Cut
SC : Side cut TN : Following terrain
(6) LAND USE : RRE or URE : Rural or urban residential area
RIN or UIN : Rural or urban industrial area
RNA or UNA : Rural or urban national reserved area
RAG : Rural agricultured area
(7) TERRAIN : F : Flat R : Rolling M : Mountainous
(8) REMARK :

Appendix Table II : Updated Road Inventory Data (1/26)

STATE NAME : Aktyubinskaya
FROM : Aktyubinsk TO : Karabutak
LINK FUNCTION CLASSIFICATION : International Highway

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 1

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
750	0	AC	2	7.0	6	E	5.0	FL	3.0	-	F	
752	2	AC	4	14.1	7	E	6.0	FL	3.0	-	R	
755	5	AC	4	9 x 2	6	E	6.0	FL	2.0	-	R	Mediam 4.0
760	10	AC	4	9 x 2	6	E	6.0	FL	2.0	-	R	Mediam 3.0
765	15	AC	4	9 x 2	7	E	6.0	FL	2.0	-	R	Mediam 3.0
767	17	AC	4	9 x 2	7	E	6.0	FL	2.0	-	R	Mediam 3.0
770	20	AC	4	9 x 2	7	E	6.0	FL	2.0	-	R	
773	23	AC	2	10.2	7	E	6.0	FL	2.5	-	R	
785	35	AC	2	8.3	9	E	5.0	FL	2.0	-	R	
795	45	AC	2	7.5	10	E	5.0	FL	3.0	-	R	
800	50	AC	2	7.5	9	E	5.5	FL	3.0	-	R	
810	60	AC	2	5.0	9	E	1.0	FL	2.5	-	R	Railway Crossing
815	65	AC	2	7.0	8	E	4.0	FL	3.0	-	R	
825	75	AC	2	7.3	9	E	4.0	FL	3.0	-	R	
830	80	AC	2	6.8	8	E	4.0	FL	2.0	-	R	
845	95	AC	2	7.2	9	E	4.0	FL	2.0	-	R	Kromtau(836N)
850	100	AC	2	7.2	9	E	4.0	FL	2.0	-	R	
860	110	AC	2	7.2	10	E	4.0	FL	3.0	-	F	
870	120	AC	2	7.2	10	E	4.0	FL	3.0	-	F	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (2/26)

STATE NAME : Aktyubinskaya
FROM : Aktyubinsk TO : Karabutak
LINK FUNCTION CLASSIFICATION : International Highway

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 1

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
875	125	AC	2	7.3	10	E	5.0	FL	3.0	-	R	
890	140	AC	2	7.3	9	E	5.0	FL	3.0	URE	F	
900	150	AC	2	7.8	8	E	6.0	FL	2.5	-	F	
910	160	AC	2	8.0	10	E	6.0	FL	2.5	-	F	
920	170	AC	2	7.9	9	E	5.5	FL	2.0	-	R	
940	190	AC	2	6.5	11	E	5.0	FL	2.5	-	F	
950	200	AC	2	6.4	12	E	5.0	FL	2.0	URE	F	
960	210	AC	2	7.2	9	E	5.0	FL	2.0	-	F	Karabutak

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (3/26)

STATE NAME : Aktyubinskaya
FROM : Karabutak TO : Kurglys
LINK FUNCTION CLASSIFICATION : International Highway

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 2

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
965	0	AC	2	7.1	10	E	5.0	FL	2.0	-	F	Karabutak
970	5	AC	2	5.6	10	E	5.0	FL	2.0	-	F	
980	15	AC	2	6.0	11	E	5.0	FL	2.0	-	R	
990	25	AC	2	7.9	11	E	5.0	FL	2.0	-	F	
1000	35	AC	2	7.3	11	E	5.0	FL	2.0	-	F	
↓		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
1160	195	AC	2	7.0	11	E	5.0	FL	2.0	-	F	Irguz
1230	265	E	2	7.0	11	E	5.0	FL	1.5	-	F	
1240	275	AC	2	7.0	11	E	5.0	FL	1.5	-	F	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (4/26)

STATE NAME : Aktyubinskaya
FROM : Aktyubinsk TO : Novoaiekseevka
LINK FUNCTION CLASSIFICATION : International Highway

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 4

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
726	0	AC	2	7.6	6	E	6.0	FL	2.0	-	F	
720	6	AC	2	7.3	7	E	6.0	FL	2.0	-	R	
710	16	AC	2	7.3	7	E	6.0	FL	2.0	-	R	
690	36	AC	2	7.0	7	E	5.0	FL	2.0	-	R	
670	56	AC	2	6.7	7	E	5.0	FL	2.0	-	R	
660	66	AC	2	6.7	8	E	5.0	FL	2.0	-	R	
630	96	AC	2	5.3	7	E	5.0	FL	2.0	-	R	
620	106	AC	2	7.0	7	E	5.0	FL	2.0	URE	F	Novoaickseervka
600	126	AC	2	6.8	7	E	5.0	FL	2.0	-	R	
580	146	AC	2	7.0	8	E	5.0	FL	2.0	-	R	
560	166	AC	2	7.0	7	E	5.0	FL	2.0	-	R	
540	186	AC	2	7.0	8	E	5.0	FL	2.0	-	R	
520	206	AC	2	7.0	8	E	5.0	FL	2.0	-	R	
						Border of Aktyubinskaya State						

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (5/26)

STATE NAME : Aktyubinskaya
FROM : Karabuta TO : Araltobe
LINK FUNCTION CLASSIFICATION : National Highway

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 2

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
0	0	AC	2	7.0	8	E	4.0	FL	3.0	-	F	
6	6	AC	2	6.9	12	E	4.0	FL	2.0	-	F	
10	10	AC	2	6.4	11	E	4.0	FL	2.0	-	F	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (6/26)

STATE NAME : Aktyubinskaya
FROM : Oktyabrisk TO : Pokrovka
LINK FUNCTION CLASSIFICATION : National Highway

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Oct. / 31

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
From Act. 100		AC	2	7.2	7	E	6.0	FL	2.0	-	F	From Act.

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (7/26)

STATE NAME : Aktyubinskaya
FROM : Aktyubinsk TO : Oktyabrisk
LINK FUNCTION CLASSIFICATION : National Highway

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Oct. / 31

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
0	0	AC	2	7.6	6	E	4.0	FL	3.0	-	R	
4	4	AC	2	11.7	6	E	4.0	FL	3.0	-	F	
10	10	AC	2	12.2	6	E	4.0	FL	0.0	URE	F	
15	15	AC	2	7.2	6	E	3.0	FL	3.0	-	F	
19	19	AC	2	7.3	7	E	3.0	FL	3.0	-	F	
24	24	AC	2	7.6	7	E	6.0	FL	4.0	-	F	
30	30	AC	2	6.9	7	E	5.0	FL	3.0	-	F	
35	35	AC	2	6.8	7	E	4.0	FL	2.0	-	F	
39	39	AC	2	7.3	7	E	4.0	FL	2.0	-	F	
45	45	AC	2	7.0	6	E	3.0	FL	0.0	URE	F	Alga, Railway
50	50	AC	2	6.6	6	E	6.0	FL	2.0	-	R	
55	55	AC	2	7.6	7	E	6.0	FL	2.0	-	R	
68	68	AC	2	6.9	7	E	6.0	FL	2.0	-	R	
75	75	AC	2	7.4	7	E	6.0	FL	2.0	-	F	
80	80	AC	2	6.7	8	E	5.0	FL	2.0	-	R	
85	85	AC	2	8.2	6	E	6.0	FL	2.0	-	R	
95	95	AC	2	7.4	6	E	5.0	FL	2.0	-	R	

Data Source : 1) Field survey data : JICA study, 1995

Appendix Table II : Updated Road Inventory Data (8/26)

STATE NAME : Aktyubinskaya
FROM : Aktyubinsk TO : Martuk
LINK FUNCTION CLASSIFICATION : Local Road

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 4

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
0	0	AC	2	7.0	7	E	2.0	FL	1.5	-	R	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (9/26)

STATE NAME : Aktyubinskaya
FROM : Aktyubinsk TO : Petvopavlovka
LINK FUNCTION CLASSIFICATION : Local Road

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Oct. / 30

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
0	0	AC	2	7.5	7	F	4.0	FL	1.5	AT	F	
10	10	AC	2	7.6	7	E	4.0	FL	1.5	AT	F	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (10/26)

STATE NAME : Aktyubinskaya
FROM : Aktyubinsk TO : Martuk
LINK FUNCTION CLASSIFICATION : Local Road

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Oct. / 30

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
0	0	AC	4	7.5	6	-	3.0	FL	4.0	URE	F	
6	6	AC	2	7.5	7	E	4.0	FL	1.5	-	R	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (11/26)

STATE NAME : Aktyubinskaya
FROM : Alga TO : Kainar
LINK FUNCTION CLASSIFICATION : Local Road

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Oct. / 31

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
0	0	E	2	7.0	8	E	2.0	TN	0.0	URE	F	
2	2	AC	2	7.0	7	E	2.0	FL	2.0	-	F	

Data Source : 1) Field survey data : JICA study, 1995

Appendix Table II : Updated Road Inventory Data (12/26)

STATE NAME : Aktyubinskaya
FROM : Alga TO : Bessarka
LINK FUNCTION CLASSIFICATION : Local Road

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Oct. / 31

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
0		AC	2	6.0	7	E	4	FL	2.0	-	R	
↓												
↓												
Novoserg		AC	2	6.0	7	E	4	FL	1.5	-	R	
↓												
↓												
↓												
Balogarskiy		GA	2	6.0	8	E	4	FL	2.0	-	R	

Data Source : 1) Field survey data : JICA study, 1995

Appendix Table II : Updated Road Inventory Data (13/26)

STATE NAME : Aktyubinskaya
FROM : Aktyubinsk TO : Vil
LINK FUNCTION CLASSIFICATION : Local Road

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 4

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
0	0	AC	2	6.0	7	E	3.0	FL	2.0	-	F	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (14/26)

STATE NAME : Aktyubinskaya
FROM : Aktyubinsk TO : Solletsk
LINK FUNCTION CLASSIFICATION : Local Road

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 4

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
0	0	AC	2	5.5	7	E	2.0	FL	2	-	F	

Data Source : 1) Field survey data : JICA study, 1995

Appendix Table II : Updated Road Inventory Data (15/26)

STATE NAME : Aktyubinskaya
FROM : Okyabrisk TO : Emba
LINK FUNCTION CLASSIFICATION : Local Road

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Oct. / 31

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
0	0	AC	2	7.1	6.0	E	6.0	EL	2.0	-	R	
7	7	AC	2	7.0	6.0	E	4.0	EL	2.0	-	R	
10	10	AC	2	7.3	7.0	E	4.0	EL	2.0	-	R	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (16/26)

STATE NAME : Uralsk
FROM : Uralsk TO : Dzhombaity
LINK FUNCTION CLASSIFICATION : International Highway

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 7

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
260	0	AC	2	8.6	6	E	4.0	FL	2.0	URE	F	
275	15	AC	2	6.7	6	E	3.0	FL	2.0	-	F	
280	20	AC	2	8.9	6	E	4.0	FL	2.0	-	R	
295	35	AC	2	8.9	6	E	4.0	FL	2.0	-	F	
320	60	AC	2	8.9	6	E	4.0	FL	2.0	-	F	
325	65	AC	2	8.9	6	E	4.0	FL	2.0	-	F	
340	80	AC	2	6.0	8	E	4.0	FL	2.0	-	F	
360	100	AC	2	6.2	8	E	4.0	FL	2.0	-	F	
380	120	AC	2	5.5	8	E	4.0	FL	2.0	-	F	IV Class
396	136	AC	2	5.5	8	E	3.0	FL	2.0	URE	F	Dzhombaity

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (17/26)

STATE NAME : Uralsk
FROM : Dzhombaity TO : Border of Uralsk
LINK FUNCTION CLASSIFICATION : International Highway

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 7

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
396	136	AC	2	5.5	9	E	3.0	FL	2.0	URE	F	
415	155	AC	2	6.4	7	E	3.5	FL	2.0	-	F	
440	180	AC	2	5.3	8	E	3.5	FL	2.0	-	F	
450	190	AC	2	5.5	8	E	4.0	FL	2.0	-	F	
460	200	AC	2	6.0	8	E	4.0	FL	2.0	-	F	
480	220	AC	2	5.4	7	E	4.0	FL	2.0	-	F	
510	250	AC	2	5.0	8	E	4.0	FL	2.0	-	F	
520	260	AC	2	5.6	10	E	4.0	FL	2.0	-	F	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (18/26)

STATE NAME : Uralsk
FROM : Uralsk TO : Border of Rossia
LINK FUNCTION CLASSIFICATION : International Highway

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 10

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
251	0	AC	4	17.2	6	E	3.0	FL	1.5	-	F	
248	3	AC	2	7.0	7	E	4.0	FL	2.0	-	R	Class III
235	16	AC	2	6.7	7	E	4.0	FL	1.5	-	R	ÅV
220	31	AC	2	6.0	7	E	4.0	FL	2.0	-	R	
200	51	AC	2	6.2	7	E	3.0	FL	2.0	-	R	Class IV
195	56	AC	2	7.4	7	E	3.0	FL	2.0	-	R	Boder of Russia

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (19/26)

STATE NAME : Uralsk
FROM : Uralsk TO : Budarino
LINK FUNCTION CLASSIFICATION : National Highway

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 8

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
3	0	AC	4	18.0	5	E	2.0	URE	0.0	-	F	
25	22	AC	2	7.3	7	E	3.0	FL	2.0	-	F	
35	32	AC	2	6.6	7	E	3.0	FL	2.0	-	F	
47	44	AC	2	6.7	6	E	4.0	FL	2.0	-	F	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (20/26)

STATE NAME : Uralsk
FROM : Peremethoe TO : Uralsk
LINK FUNCTION CLASSIFICATION : Local Road

COMPLETED BY : A. KITAYAMA

DATE : 1995 / Nov. / 8

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
32	0	AC	2	7.3	6	E	3.0	FL	1.5	-	F	
28	4	AC	2	6.0	6	E	3.0	FL	1.5	-	F	
10	22	AC	2	6.3	6	E	4.0	FL	1.5	-	F	
0	32	AC	2	10.5	7	E	4.0	TN	0	-	F	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (21/26)

STATE NAME : Aktyubinskaya state
FROM : Atyrau TO : Kulsary
LINK FUNCTION CLASSIFICATION : International Highway

COMPLETED BY : Kohsaka
DATE : 1995 / Nov. / 2 ~ 3

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
287	0	AC	4	16.0	7	E	8.0	FL	2.0	RIN	F	Atyrau
294	7	AC	4	16.0	7	E	8.0	FL	2.0	RIN	F	
299	12	AC	2	7.0	7	G	6.0	FL	1.0	RAG	F	
330	43	AC	2	7.0	7	G	6.0	FL	2.0	RAG	F	
362	75	AC	2	7.0	8	G	6.0	FL	2.0	RAG	F	
373	86	AC	2	7.0	7	G	6.0	FL	2.0	RAG	F	Dossor (379)
385	98	AC	2	7.0	7	G	6.0	FL	2.0	RAG	F	
394	107	AC	2	7.0	7	G	6.0	FL	2.0	RAG	F	
402	115	AC	2	7.0	7	G	6.0	FL	2.0	RAG	F	
418	131	AC	2	7.0	7	G	6.0	FL	2.0	RAG	F	
430	143	AC	2	7.0	7	G	6.0	FL	2.0	RAG	F	
449	162	AC	2	7.0	7	G	6.0	FL	2.0	RAG	F	
485	198	AC	2	7.0	7	G	6.0	FL	2.0	RAG	F	
489	202	AC	2	7.0	7	G	6.0	FL	2.0	RAG	F	
497	210	AC	2	7.0	7	G	6.0	FL	2.0	RAG	F	Kulsary City
↓		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
601	323	E	2	6.0	9	E	6.0	TN	0.0	-	F	State border

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (22/26)

STATE NAME : Aktyubinskaya state
FROM : Atyrau TO : Makhambo
LINK FUNCTION CLASSIFICATION : International Highway

COMPLETED BY : Kohsaka

DATE : 1995 / Nov. / 1

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
0	0	AC	2	7.0	7	G	5.0	FL	2.5	URE	F	
9.5	9.5	AC	2	7.4	8	G	5.0	FL	1.5	RAG	F	
17.0	17.0	AC	2	7.0	9	G	6.0	FL	1.5	RAG	F	
31.0	31.0	AC	2	7.0	9	G	6.0	FL	1.5	RAG	F	
37.0	37.0	AC	2	6.0	7	G	6.0	FL	1.5	RAG	F	
42.0	42.0	AC	2	6.0	7	G	6.0	FL	1.5	RAG	F	
44.0	44.0	AC	2	6.0	9	G	6.0	FL	1.5	RAG	F	
60.0	60.0	AC	2	6.0	6	G	6.0	FL	1.5	RAG	F	
62.0	62.0	AC	2	6.5	7	E	6.0	FL	1.5	RAG	F	
72.0	72.0	AC	2	6.5	7	E	6.0	FL	1.5	RAG	F	Makhambo

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (23/26)

STATE NAME : Aktyubinskaya state
FROM : Atyrau TO : Akkytan
LINK FUNCTION CLASSIFICATION : International Highway

COMPLETED BY : Kohsaka
DATE : 1995 / Nov. / 2 ~ 3

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
591.0	0	AC	2	7	7	F	6.0	FL	2		F	Atyrau
593.0	2.0	AC	2	7	7	E	6.0	FL	2		F	
595.2	4.2	AC	2	7	7	E	6.0	FL	2	-	F	
597.7	6.7	AC	2	7	7	E	6.0	FL	1.5	-	F	
598.5	7.5	AC	2	7	7	E	6.0	FL	1.5	-	F	
600	9.0	AC	2	7	7	E	6.0	FL	1.5	-	F	
609	18.0	AC	2	7	7	E	6.0	FL	1.5	-	F	
609.3	18.3	AC	2	7	14	E	6.0	FL	1.5	-	F	
611	20.0	AC	2	7	7	E	6.0	FL	1.5	-	F	
612	21.0	AC	2	7	11	E	6.0	FL	1.5	-	F	
616.5	25.5	AC	2	7	11	E	6.0	FL	1.5	-	F	
617	26.0	AC	2	7	11	E	6.0	FL	1.5	-	F	
620	29.0	AC	2	7	11	E	6.0	FL	1.5	-	F	
624	33.0	AC	2	6	7	E	6.0	FL	1.0	-	F	
626	35.0	AC	2	6	7	G	6.0	FL	1.0	-	F	
628	37.0	AC	2	7	5	G	6.0	FL	1.0	-	F	
629	38.0	AC	2	6	5	G	6.0	FL	1.0	-	F	
637	46.0	AC	2	7	9	G	6.0	FL	1.0	-	F	
638	47.0	AC	2	7	9	G	6.0	FL	1.0	-	F	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (24/26)

STATE NAME : Aktyubinskaya state
FROM : Atyrau TO : Akkytan
LINK FUNCTION CLASSIFICATION : International Highway

COMPLETED BY : Kohsaka

DATE : 1995 / Nov. / 2 ~ 3

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
639	48.0	AC	2	7.0	7	G	6.0	FL	1.0	-	F	
645.2	54.2	AC	2	7.0	9	G	6.0	FL	1.0	-	F	
646	55.0	AC	2	7.0	7	G	6.0	FL	1.0	-	F	
649	58.0	AC	2	7.0	7	G	6.0	FL	1.0	-	F	
650	59.0	AC	2	6.0	7	G	7.0	FL	1.0	-	F	
660	69.0	AC	2	6.0	7	G	6.0	FL	1.0	-	F	
663	72.0	AC	2	6.0	7	G	6.0	FL	1.0	-	F	
666	75.0	AC	2	6.0	7	G	6.0	FL	1.0	-	F	
668	77.0	AC	2	6.0	7	G	6.0	FL	1.0	-	F	Akkystan

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (25/26)

STATE NAME : Mangistauskaya state
FROM : Aktau TO : Sai-Utes
LINK FUNCTION CLASSIFICATION : National Highway

COMPLETED BY : Kohsaka

DATE : 1995 / Nov. / 2 ~ 3

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER.	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
0	0	AC	2	7	6	G	5.0	FL	0.0	URE	F	Aktau
3.0	3.0	AC	2	7	6	G	5.0	FL	2.5	URE	F	
6.0	6.0	AC	2	7	6	G	5.0	FL	2.5	UIN	F	
13.0	13.0	AC	2	6	6	G	4.0	FL	2.0	UIN	F	
18.0	18.0	AC	2	4	10	G	4.0	FL	2.0	UIN	F	
20.0	20.0	ACÄ`ST	2	6	8	G	4.0	FL	2.0	RIN	F	
30.0	30.0	AC	2	7	6	G	5.0	FL	2.0	RIN	F	
34.0	34.0	ST	2	4	10	G	4.0	FL	2.0	RIN	F	
46.0	46.0	AC	2	9	6	G	4.0	FL	2.0	RIN	F	
58.0	58.0	AC	2	7	6	G	5.0	FL	2.0	RIN	R	
82.0	82.0	AC	2	7	6	G	5.0	FL	2.0	RIN	F	Muhaishy
100.0	100.0	AC	2	7	7	G	5.0	FL	2.0	-	F	
128.0	128.0	AC	2	7	7	G	5.0	FL	2.0	-	F	
137.0	137.0	AC	2	7	7	G	5.0	FL	2.0	-	F	
158.0	158.0	AC	2	7	7	G	5.0	FL	2.0	-	F	Shetpe
161.0	161.0	AC	2	7	7	G	5.0	FL	2.0	-	F	
175.0	175.0	AC	2	7	7	G	5.0	FL	2.0	-	F	
188.0	188.0	AC	2	7	7	G	5.0	FL	2.0	-	F	
203.0	203.0	AC	2	7	7	G	5.0	FL	2.0	-	F	

Data Source : 1) Field survey data ; JICA study, 1995

Appendix Table II : Updated Road Inventory Data (26/26)

STATE NAME : Mangistauskaya state
FROM : Sai-Utes TO : State border
LINK FUNCTION CLASSIFICATION : International Road

COMPLETED BY : Kohsaka

DATE : '95 / Nov. / 1

STA (KM)	DIS (KM)	CARRIAGEWAY (3)				S' DE (4)		F' ON (5)		LAND USE	TER	REMARK
(1)	(2)	PAV. TYPE	No. of Lanes	WIDTH (M)	PAV.CON.(IRI)	TYPE	WIDTH (M)	TYPE	HE/DE	(6)	(7)	(8)
203.0	203.0	AC	2	7	7	G	5.0	FL	2.0	-	F	Sai-Utes
276.0	276.0	G	2	6	10	G	5.0	FL	2.0	-	F	
289.0	289.0	AC	2	6	7	G	5.0	FL	2.0	-	F	
429.0	429.0	G	2	6	10	G	5.0	FL	2.0	-	F	
470.0	470.0	AC	2	6	7	G	5.0	FL	2.0	-	F	
495.0	495.0	AC	2	6	7	G	5.0	FL	2.0	-	F	
510.0	510.0	G	2	6	10	G	5.0	FL	2.0	-	F	
569.0	569.0	E	2	6	7	G	5.0	FL	2.0	-	F	
580.0	580.0	G	2	6	10	G	5.0	FL	2.0	-	F	
581.0	581.0	AC	2	6	7	G	5.0	FL	2.0	-	F	
592.0	592.0	E	2	6	10	G	5.0	FL	2.0	-	F	State border

Data Source : 1) Field survey data ; JICA study, 1995

APPENDIX II-2

Results of Visual Road Inspection

Table Results of Road Visual Inspection

Section km	Driving comfort	Types and volumes of deformations, %														Patching,% volume, % value
		Longitudinal and transverse crack		Aligator cracking	Rutting				Edge	Saggings	Waviness		Bleeding	Pot. holes		
		<5mm	>5mm		<1cm	<5cm	<10cm	>10cm			<2cm	>2cm		<5cm	<10cm	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Samara-Shymkent Road (Karabutak-Kzyl Orda Border Road Section)																
965	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
966	5	100	-	-	-	30	5	-	-	100	100	-	-	-	-	-
967	5	-	-	100	-	100	-	-	100	-	-	-	-	5	-	-
968	6	-	-	100	-	-	-	-	100	-	-	-	-	10	-	-
969	5	-	-	100	-	-	-	-	100	-	-	-	-	5	-	-
970	5	-	-	-	-	-	-	-	-	-	90	-	-	5	-	-
971	5	-	-	10	-	10	-	-	-	-	-	-	-	1	-	-
972	3	-	-	-	-	-	-	-	-	-	30	-	-	0.5	-	-
973	5	-	-	-	-	-	20	-	50	-	-	-	-	1	-	-
974	5	-	-	-	-	70	30	-	30	100	-	-	-	-	-	-
975	5	-	-	-	-	10	-	-	70	-	-	10	-	2	-	-
976	5	-	-	-	-	-	-	-	60	-	10	-	-	0.5	-	-
977	3	-	-	-	-	-	-	-	30	-	-	-	-	0.5	-	-
978	5	80	-	15	-	-	-	-	10	-	-	-	-	-	-	-
979	5	100	-	-	-	-	-	-	60	-	-	-	-	2	-	-
980	3	100	-	-	-	-	-	-	-	-	10	-	-	0.5	-	-
981	5	100	-	5	-	-	-	-	100	-	-	-	-	2	-	-
982	5	-	-	-	-	-	-	-	100	-	-	-	-	2	-	-
983	5	100	-	100	-	-	10	-	50	-	-	-	-	3	-	-
984	5	-	-	-	-	10	-	-	100	-	-	-	-	1	-	-
985	5	-	-	10	-	-	-	-	50	-	-	-	-	2	-	-
986	5	-	100	5	-	-	-	-	50	-	-	-	-	0.5	-	-
987	5	-	-	30	-	10	-	-	50	-	20	-	-	1	-	-
988	5	-	-	40	-	-	-	-	100	-	-	-	-	1	-	-
989	5	-	-	100	-	-	-	-	100	100	-	-	-	-	-	-
990	5	-	-	100	-	-	-	-	100	-	-	-	-	1	-	-
991	5	-	-	-	-	-	-	-	50	100	-	-	-	2	-	-

992	5	-	-	-	-	-	-	-	50	100	-	-	-	2	-	-
993	5	-	-	50	-	-	-	-	100	-	-	-	-	5	-	+.2%.bad
994	5	-	-	-	-	-	-	-	80	-	-	-	-	5	-	+.2%.bad
995	4	100	-	-	-	-	-	-	-	-	-	-	-	0.1	-	+.0.1%.bad
996	4	-	-	-	-	-	-	-	-	50	-	-	-	0.1	-	+.0.1%.bad
997	4	100	-	-	-	-	-	-	-	50	-	-	-	-	-	+.0.1%.bad
998	4	-	-	-	-	-	-	-	-	50	-	-	-	-	-	+.0.5%.bad
999	4	-	-	-	-	-	-	-	-	100	1	-	-	-	-	+.0.5%.bad
1000	4	-	-	-	-	-	-	-	10	50	-	-	-	1	-	-
1001	4	-	-	50	-	-	-	-	-	-	-	-	-	0.5	-	-
1002	4	-	-	-	-	-	-	-	-	10	-	-	-	0.5	-	-
1003	6	15	-	-	-	-	-	-	50	10	-	-	-	5	-	-
1004	6	-	-	80	-	50	-	-	50	10	-	-	-	2	-	-
1005	6	-	-	-	-	50	-	-	50	-	-	-	-	10	-	-
1006	5	-	-	10	-	-	-	-	-	-	-	-	-	7	-	-
1007	4	-	-	10	-	-	-	-	10	10	-	-	-	1	-	-
1008	4	-	-	10	-	-	8	-	10	10	-	-	-	1	-	-
1009	6	-	-	15	-	10	-	-	30	-	-	-	-	0.5	-	-
1010	4	-	-	-	-	-	-	-	-	15	-	-	-	0.1	-	-
1011	3	10	-	-	-	-	-	-	-	10	-	-	-	-	-	-
1012	3	-	-	-	-	-	-	-	-	10	-	-	-	0.05	-	-
1013	3	-	-	-	-	-	-	-	10	10	-	-	-	-	-	-
1014	3	-	-	-	-	-	-	-	-	10	-	-	-	0.1	-	-
1015	3	-	-	-	-	-	-	-	5	-	-	-	-	0.1	-	-
1016	3	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-
1017	4	-	-	-	-	-	-	-	30	-	-	-	-	3	-	-
1018	3	-	-	-	-	-	-	-	10	-	-	-	-	1.5	-	-
1019	3	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
1020	3	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-
1021	3	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-
1022	3	-	-	-	-	-	-	-	5	-	-	-	-	-	0.5	-
1023	6	-	-	-	-	-	-	-	40	50	-	-	-	-	4	-
1024	6	-	-	-	-	-	-	-	80	50	-	-	-	-	7	-
1025	6	-	-	-	-	-	-	-	10	-	-	-	-	-	10	-
1026	5	-	-	-	-	-	-	-	-	15	-	-	-	-	5	-

1027	5	-	-	-	-	-	-	-	-	15	-	-	-	-	5	-
1028	3	-	-	-	-	-	-	-	-	20	-	-	-	-	0.5	-
1029	3	-	-	-	-	-	-	-	-	20	-	-	-	-	0.1	-
1030	3	-	-	-	-	-	-	-	-	-	5	-	5	-	0.1	-
1031	4	-	-	-	-	-	-	-	15	-	-	-	-	-	3	-
1032	5	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-
1033	3	100	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-
1034	3	100	-	-	-	-	-	-	-	10	10	-	-	-	-	-
1035	3	100	-	-	-	-	-	-	-	10	10	-	-	-	-	-
1036	5	-	-	0	-	-	-	-	0	-	30	-	-	-	100*	-
1037	5	-	-	-	-	-	-	-	-	10	-	-	-	-	2	+,5%,bad
1038	5	100	-	100	-	-	-	-	-	-	-	-	-	-	5	-
1039	5	100	-	100	-	-	-	-	-	-	-	-	-	-	5	-
1040	5	100	-	100	-	-	-	-	-	-	-	5	-	-	1	+,10%,bad
1041	5	100	-	100	-	-	-	-	100	-	-	-	-	-	1	+,1%,bad
1042	5	100	-	100	-	-	-	-	100	-	-	-	-	-	5	-
1043	6	-	-	-	-	100	-	-	100	-	-	-	-	-	7	-
1044	5	100	-	100	-	-	-	-	-	-	-	-	-	-	1	-
1045	6	100	-	100	-	-	-	-	100	-	-	-	-	-	10	-
1046	5	100	-	100	-	100	-	-	-	-	-	-	-	-	1	-
1047	4	100	-	100	-	-	-	-	-	-	-	-	-	-	1	-
1048	4	-	100	100	-	-	-	-	-	-	-	-	-	-	1	-
1049	6	-	-	-	-	-	-	-	-	-	50	-	-	-	80*	-
1050	5	100	-	100	-	100	-	-	-	-	100	-	-	-	-	-
1051	missing of the stations			-	-	-	-	-	-	-	-	-	-	-	-	-
1052	missing of the stations			-	-	-	-	-	-	-	-	-	-	-	-	-
1053	missing of the stations			-	-	-	-	-	-	-	-	-	-	-	-	-
1054	missing of the stations			-	-	-	-	-	-	-	-	-	-	-	-	-
1055	5	100	-	100	-	-	-	-	100	-	-	-	-	-	-	-
1056	5	100	-	100	-	-	-	-	-	-	-	-	-	-	3	-
1057	5	100	-	100	-	-	-	-	100	-	-	-	-	-	2	-
1058	5	100	-	-	-	100	-	-	-	-	-	-	-	-	1	-
1059	5	100	-	100	-	-	-	-	-	-	-	-	-	-	2	-
1060	5	100	-	40	-	-	10	-	-	-	-	-	-	-	2	+,1%,bad
1061	4	-	-	100	-	-	4	-	-	-	-	-	-	-	-	-

1062	4	-	-	100	-	25	-	-	-	-	-	-	-	-	0.5	-
1063	5	100	-	100	-	7	-	-	-	-	-	-	-	-	10	-
1064	6	-	-	-	-	-	5	-	-	100	80	-	-	-	80*	-
1065	6	-	-	-	-	-	-	-	-	-	50	-	-	-	100*	-
1066	6	-	-	100	-	-	-	-	-	-	50	-	-	-	50*	-
1067	6	-	-	-	-	-	-	-	-	-	50	-	-	-	80*	-
1068	6	-	20	20	-	-	-	-	-	-	50	-	-	-	80*	-
1069	6	-	100	100	-	-	-	-	-	-	50	-	-	-	50*	-
1070	6	100	-	100	-	-	-	-	40	-	-	-	-	-	3	-
1071	5	20	-	20	-	-	-	-	-	-	30	-	-	-	80*	-
1072	5	-	-	40	-	-	-	-	-	-	40	-	-	-	60*	-
1073	5	-	-	-	-	-	-	-	-	-	100	-	-	-	100*	-
1074	5	70	-	30	-	-	-	-	-	-	-	-	-	-	30*	-
1075	4	100	-	30	-	-	-	-	-	-	-	-	-	-	1	-
1076	5	30	-	-	-	-	-	-	-	-	70	-	-	-	70*	-
1077	5	-	-	20	-	-	-	-	-	-	80	-	-	-	80*	-
1078	5	-	-	-	-	-	-	-	-	-	70	-	-	70	-	-
1079	5	-	-	-	-	-	-	-	-	-	70	-	-	70	-	-
1080	5	-	-	60	-	60	-	-	-	-	40	-	-	40	-	-
1081	5	-	-	60	-	-	-	-	-	-	-	-	-	40	-	-
1082	3	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-
1083	3	-	-	-	15	-	-	-	-	-	-	-	5	0.1	-	-
1084	3	-	-	-	-	20	-	-	-	-	10	-	1	0.1	-	-
1085	3	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1086	3	-	-	-	-	-	-	-	-	-	2	-	-	0.01	-	-
1087	5	-	-	-	-	-	-	40	-	-	-	-	-	10	-	-
1088	5	-	-	-	-	-	-	-	-	-	100	-	-	100	-	-
1089	5	15	-	-	-	-	-	-	15	-	10	-	10	0.01	-	-
1090	4	-	100	100	10	-	-	-	-	-	-	-	-	0.01	-	+.5%.bad
1091	5	-	50	50	-	-	-	-	-	-	-	-	-	50	-	-
1092	4	-	100	100	-	100	-	-	-	-	-	-	-	-	-	-
1093	5	-	100	100	-	10	-	-	-	-	-	-	-	2	-	-
1094	4	100	-	100	-	-	-	-	-	-	-	-	-	1	-	-
1095	4	-	100	100	-	-	-	-	-	-	-	-	-	-	-	-
1096	3	100	-	-	20	-	-	-	-	-	15	-	-	-	-	-

1097	5	100	-	100	-	-	-	-	-	-	-	-	-	10	-	-
1098	5	100	-	20	-	15	-	-	30	100	-	-	-	1.5	-	-
1099	5	30	-	35	-	15	5	-	30	-	-	-	-	1.5	-	-
1100	4	-	-	-	-	-	90	-	-	-	10	-	-	-	-	-
1101	4	100	-	50	10	-	-	-	-	10	-	-	-	0.1	-	-
1102	4	-	-	-	-	-	15	-	-	-	30	-	20	-	-	-
1103	3	100	-	-	-	-	5	-	-	10	-	-	-	-	-	-
1104	4	100	-	-	-	-	-	-	10	-	-	-	-	10	-	-
1105	4	-	-	5	-	5	-	-	-	-	30	-	-	0.05	-	-
1106	5	100	-	15	-	5	-	-	10	-	-	-	30	0.1	-	+,0.5%,bad
1107	5	-	-	20	-	-	40	-	15	-	-	-	10	0.1	-	-
1108	6	100	-	100	-	-	5	-	100	-	-	-	-	10	-	-
1109	6	-	-	100	-	-	10	5	-	10	-	-	-	100	-	+,0.5%,bad
1110	5	100	-	-	-	-	10	-	60	20	-	-	10	2	-	-
1111	5	-	-	30	-	50	-	-	-	1	10	-	50	-	-	+,0.1%,bad
1112	4	-	-	45	-	-	-	-	-	5	-	-	-	-	-	+,15%,bad
1113	3	-	-	10	30	-	-	-	-	-	-	-	30	-	-	-
1114	3	-	-	10	-	-	-	-	-	-	-	-	-	-	-	+,1%,bad
1115	4	-	-	10	-	-	-	-	50	10	-	-	-	-	-	-
1116	3	-	-	-	-	-	-	-	-	-	10	-	100	-	-	+,0.5%,bad
1117	3	-	-	15	-	-	15	-	-	15	-	-	30	-	-	-
1118	3	100	-	100	-	-	-	-	15	-	-	-	-	-	-	+,0.1%,bad
1119	3	-	-	100	-	-	-	-	-	-	-	-	100	-	-	+,0.1%,bad
1120	3	-	-	-	30	-	-	-	-	-	-	-	100	0.05	-	-
1121	3	-	-	100	100	-	-	-	-	-	-	-	100	-	-	-
1122	4	-	-	100	-	-	-	-	10	1	10	-	50	0.2	-	-
1123	4	-	-	100	-	-	-	-	-	-	15	-	10	-	-	more than 2% bad
1124	4	-	-	20	-	-	-	-	-	-	15	-	100	-	-	+,10%,bad
1125	4	-	-	-	-	15	-	-	-	-	15	-	40	-	-	-
1126	4	-	-	-	-	5	-	-	-	1	20	-	50	-	-	-
1127	3	100	-	-	-	-	-	-	-	-	-	-	50	-	-	-
1128	3	50	-	-	10	-	-	-	-	-	-	-	50	-	-	-
1129	3	-	-	-	-	-	-	-	-	0.1	-	-	100	-	-	-
1130	3	-	-	100	-	-	-	-	-	1	-	-	-	-	-	-
1131	3	100	-	-	-	10	-	-	-	-	-	-	-	-	-	+,5%,bad

1132	3	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-
1133	3	-	-	2	-	-	10	-	-	-	-	-	-	-	-	+,1%,bad
1134	3	-	-	-	-	-	10	-	-	-	-	-	-	-	-	+,10%,bad
1135	3	-	-	-	-	-	20	-	-	-	-	-	-	-	-	+,10%,bad
1136	5	-	-	100	-	-	-	-	-	10	-	20	-	-	-	+,10%,bad
1137	5	-	-	100	-	-	-	-	-	10	-	20	-	-	-	+,10%,bad
1138	6	-	-	5	-	-	50	-	-	-	-	50	-	-	-	-
1139	5	-	-	60	-	-	-	-	60	-	-	-	-	-	-	-
1140	5	-	-	60	-	30	-	-	-	10	30	-	-	-	-	-
1141	5	-	-	30	-	15	-	-	-	-	15	-	-	-	-	-
1142	5	-	-	40	-	20	-	-	-	-	30	-	-	-	-	+,40%,bad
1143	4	-	-	100	-	-	-	-	-	-	-	-	100	-	-	-
1144	4	-	-	-	10	-	-	-	-	-	40	-	-	-	-	-
1145	4	-	-	10	-	40	-	-	-	-	-	-	100	-	-	-
1146	4	-	-	-	-	-	-	-	-	-	-	30	100	-	-	-
1147	4	-	-	-	-	70	-	-	-	-	30	-	10	-	-	-
1148	4	-	-	-	-	90	-	-	-	20	-	-	10	-	-	-
1149	4	-	-	-	-	50	-	-	-	-	-	-	100	-	-	-
1150	4	-	-	2	-	-	60	-	-	2	-	-	100	-	-	-
1151	4	-	-	-	-	20	-	-	-	-	-	-	100	-	-	-
1152	5	-	-	-	-	80	20	-	-	-	-	-	50	-	-	-
1153	4	-	-	100	-	100	-	-	100	-	-	-	-	-	-	-
1154	6	-	-	-	-	100	-	-	-	10	-	-	-	-	-	-
1155	6	-	-	-	-	100	-	-	-	10	-	-	-	-	-	-
1156	6	-	-	-	-	100	-	-	-	10	-	-	-	-	-	-
1157	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1158	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1159	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1160	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1161	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1162	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1163	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1164	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1165	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1166	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-

1167	6	-	-	-	-	-	100	-	-	10	100	-	-	-	-	-
1168	6	-	-	-	-	100	-	-	-	10	100	-	-	-	1	-
1169	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1170	6	-	-	-	-	-	100	-	-	10	100	-	-	-	-	-
1171	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1172	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1173	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1174	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1175	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1176	6	-	-	-	-	100	-	-	-	10	100	-	-	-	-	-
1177	4	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-
1178	4	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-
1179	4	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-
1180	7	under repair		-	-	-	-	-	-	-	-	-	-	-	-	-
1181	7	under repair		-	-	-	-	-	-	-	-	-	-	-	-	-
1182	7	under repair		-	-	-	-	-	-	-	-	-	-	-	-	-
1183	4	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-
1184	4	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-
1185	4	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-
1186	4	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-
1187	4	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-
1188	4	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-
1189	4	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-
1190	4	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-
1191	7	under repair		-	-	-	-	-	-	-	-	-	-	-	-	-
1192	7	under repair		-	-	-	-	-	-	-	-	-	-	-	-	-
1193	7	under repair		-	-	-	-	-	-	-	-	-	-	-	-	-
1194	7	under repair		-	-	-	-	-	-	-	-	-	-	-	-	-
1195	7	-	-	-	-	-	-	100	-	-	-	-	-	-	10	-
1196	7	-	-	-	-	-	100	-	-	10	-	100	-	-	-	-
1197	7	-	-	-	-	-	100	-	-	10	-	100	-	-	0.5	-
1198	7	-	-	-	-	100	-	-	-	10	-	100	-	-	-	-
1199	7	-	-	-	-	-	90	10	-	10	-	100	-	-	-	-
1200	7	-	-	-	-	-	80	5	-	10	-	80	-	-	-	-
1201	7	-	-	-	-	70	-	-	-	5	-	100	-	-	-	-

1202	7	-	-	-	-	100	-	-	-	10	-	100	-	-	-	-
1203	7	-	-	-	-	100	-	-	-	50	-	100	-	-	-	-
1204	7	-	-	-	-	100	-	-	-	50	-	100	-	-	-	-
1205	7	-	-	-	-	100	-	-	-	5	-	100	-	-	-	-
1206	7	-	-	-	-	100	-	-	-	5	-	100	-	-	-	-
1207	7	-	-	-	-	-	100	-	-	10	-	100	-	-	-	-
1208	7	-	-	-	-	-	100	-	-	10	-	100	-	-	-	-
1209	7	-	-	-	-	100	-	-	-	5	50	50	-	-	-	-
1210	7	-	-	-	-	100	-	-	-	1	50	50	-	-	-	-
1211	7	-	-	-	-	100	-	-	-	5	50	50	-	-	-	-
1212	7	-	-	-	-	-	100	-	-	5	-	100	-	-	-	-
1213	7	-	-	-	-	-	100	-	-	2	-	100	-	-	-	-
1214	7	-	-	-	-	-	100	-	-	2	-	100	-	-	-	-
1215	7	-	-	-	-	-	100	-	-	2	-	100	-	-	-	-
1216	7	-	-	-	-	-	100	-	-	25	-	50	-	-	-	-
1217	7	-	-	-	-	-	-	100	-	2	100	-	-	-	1	-
1218	7	-	-	-	-	-	100	-	-	10	-	100	-	-	0.5	-
1219	7	-	-	-	-	-	100	-	-	10	-	100	-	-	0.5	-
1220	7	-	-	-	-	-	100	-	-	5	100	-	-	-	-	-
1221	7	-	-	-	-	-	100	-	-	-	100	-	-	-	0.5	-
1222	7	-	-	-	-	100	-	-	-	-	-	100	-	-	0.5	-
1223	7	-	-	-	-	-	100	-	-	0.5	100	-	-	-	0.2	-
1224	6	-	-	-	-	100	-	-	-	-	90	-	-	-	-	-
1225	6	-	-	-	-	-	40	-	-	-	30	-	-	-	-	-
1226	3	-	-	-	-	40	-	-	-	-	-	-	-	3	-	-
1227	3	-	-	-	-	100	-	-	-	-	-	-	-	0.3	-	-
1228	2	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-
1229	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1230	6	-	-	-	-	100	-	-	-	-	-	-	-	-	1	-
1231	7	-	-	-	-	80	-	-	-	-	-	-	-	-	1	-
1232	7	-	-	-	-	-	-	-	-	-	-	-	-	50	-	-
1233	5	-	-	-	-	-	25	-	-	-	-	-	-	0.1	-	-
1234	5	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-
1235	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1236	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

1237	3	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1238	3	-	-	-	40	-	-	-	-	-	-	-	-	-	-	-
1239	5	100	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-
1240	5	30	-	-	-	20	-	-	-	-	2	-	-	-	-	-
Atyrau-Uralsk Road (Atyrau-Mahambet Road Section)																
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	2	100	-	-	-	-	-	-	-	-	100	-	-	-	-	-
3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	3	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	3	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	4	100	-	100	-	-	-	-	50	10	100	-	-	-	-	-
8	4	100	-	10	-	-	-	-	10	5	100	-	-	-	-	-
9	4	100	-	10	-	-	-	-	10	5	100	-	-	-	-	-
10	4	100	-	10	-	-	-	-	10	5	100	-	-	-	-	-
11	4	100	-	10	-	-	-	-	-	-	100	100	-	-	-	-
12	5	100	-	50	-	-	-	-	-	-	-	-	-	-	-	-
13	5	100	-	-	-	10	-	-	-	100	50	50	-	-	-	-
14	5	100	-	100	-	-	-	-	-	100	100	-	-	-	-	-
15	5	100	-	100	-	-	-	-	-	100	20	-	-	-	-	-
16	5	100	-	-	-	-	-	-	-	100	100	-	-	-	-	-
17	5	100	-	-	-	-	-	-	-	100	100	-	-	-	-	-
18	5	100	-	-	-	-	-	-	-	100	100	-	100	-	-	+,5%,fair
19	5	100	-	100	-	-	-	-	-	100	-	-	100	-	-	-
20	5	100	-	100	-	-	-	-	100	100	-	-	100	-	-	-
21	5	100	-	100	-	-	-	-	10	100	100	-	-	-	-	-
22	5	100	-	100	-	-	-	-	100	100	100	-	5	-	-	-
23	5	100	-	100	-	15	-	-	-	100	100	-	-	-	-	-
24	4	100	-	50	-	-	-	-	-	100	-	20	-	-	-	-
25	4	100	-	50	-	-	-	-	-	100	-	-	-	-	-	-
26	5	100	-	70	-	-	5	-	-	100	100	-	-	-	-	-
27	5	100	-	50	-	20	-	-	50	100	100	-	-	-	-	-
28	4	100	-	100	-	-	-	-	100	-	10	-	-	-	-	-
29	5	100	-	-	10	-	-	-	-	100	15	-	-	-	-	+,5%,bad
30	4	100	-	50	10	-	-	-	-	100	100	-	5	-	-	-

31	4	100	-	100	-	15	-	-	-	-	-	-	-	-	-	-
32	4	100	-	50	-	-	-	-	-	-	100	-	-	-	-	-
33	4	100	-	100	20	-	-	-	-	-	15	-	-	-	-	-
34	4	100	-	10	30	-	-	-	-	-	100	-	-	-	-	-
35	4	100	-	-	30	-	-	-	-	-	100	-	-	-	-	-
36	4	100	-	100	-	-	-	-	-	-	-	-	-	-	-	-
37	4	100	-	100	-	-	-	-	-	100	-	-	-	-	-	+,< 0.5%,bad
38	6	100	-	100	-	-	-	-	-	100	-	-	-	-	-	-
39	6	100	-	-	25	-	-	-	-	100	-	-	-	-	-	-
40	6	100	-	100	-	-	-	-	-	100	-	-	-	-	-	+,< 0.5%,bad
41	5	100	-	100	-	-	-	-	-	100	-	-	-	-	-	+,< 0.5%,fair
42	4	100	-	20	-	-	-	-	-	100	-	-	-	-	-	+,< 0.5%,fair
43	4	100	-	100	-	-	-	-	-	100	10	-	-	-	-	-
44	4	100	-	-	10	-	-	-	-	100	-	-	-	-	-	+,< 10%,fair
45	5	-	-	100	-	-	-	-	-	-	10	-	-	-	-	+,< 1%,fair
46	5	-	-	100	-	-	-	-	-	100	-	-	-	-	-	+,< 1%,fair
47	5	-	-	-	-	-	-	-	-	100	-	-	-	-	-	+,< 1%,fair
48	5	-	-	100	-	-	-	-	-	100	-	-	-	-	-	+,< 1%,fair
49	5	-	-	100	-	-	-	-	-	100	-	-	-	-	-	+,< 10%,fair
50	6	100	-	100	-	-	-	-	-	100	-	-	-	-	-	+,< 1%,fair
51	5	100	-	100	-	-	-	-	-	100	-	-	-	-	-	-
52	5	100	-	100	-	-	-	-	-	100	-	-	-	-	-	-
53	5	100	-	100	-	-	-	-	-	100	-	-	-	-	-	+,< 1%,fair
54	5	100	-	100	-	-	-	-	-	100	100	-	-	-	-	+,< 1%,bad
55	5	100	-	100	-	-	-	-	-	-	-	-	-	-	-	-
56	5	100	-	100	-	-	-	-	-	100	-	-	-	-	-	-
57	5	100	-	100	-	-	-	-	-	100	-	-	-	-	-	+,< 10%,fair
58	5	100	-	20	10	-	-	-	-	100	10	-	-	-	-	-
59	5	100	-	100	-	-	-	-	-	100	-	-	-	-	-	-
60	5	100	-	100	-	-	-	-	-	100	-	-	-	-	-	-
61	4	100	-	-	-	-	-	-	-	100	100	-	-	-	-	-
62	4	100	-	-	100	-	-	-	-	-	-	-	-	-	-	-
63	4	100	-	100	-	10	-	-	-	-	100	-	-	-	-	-
64	4	100	-	100	-	-	-	-	-	-	100	-	-	-	-	-
65	4	100	-	30	-	-	-	-	-	-	100	-	-	-	-	+,< 1%,fair

66	3	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
67	4	100	-	100	-	-	-	-	-	-	100	-	-	-	-	-
68	3	100	-	-	-	-	-	-	-	-	-	-	-	-	-	+,< 1%,fair
69	3	100	-	-	10	-	-	-	-	-	100	-	-	-	-	-
70	3	100	-	-	15	-	-	-	-	-	-	-	-	-	-	+,< 1%,fair
71	4	100	-	-	-	-	-	-	80	70	100	-	-	-	-	-
72	4	100	-	-	-	-	-	-	80	60	100	-	-	-	-	-
73	4	100	-	-	-	-	-	-	70	70	100	-	-	-	-	-
74	4	100	-	-	-	-	-	-	60	50	100	-	-	-	-	-
75	4	100	-	-	-	-	-	-	80	70	100	-	-	-	-	-
76	3	100	-	-	-	-	-	-	90	80	100	-	-	-	-	-
77	3	100	-	-	5	-	-	-	90	80	-	-	-	-	-	-
78	3	100	-	30	-	-	-	-	100	100	-	-	-	-	-	-
79	3	100	-	-	10	-	-	-	100	100	-	-	-	-	-	-
80	3	100	-	-	-	-	-	-	100	100	-	-	-	-	-	-
81	3	100	-	20	-	-	-	-	90	80	-	-	-	-	-	-
82	3	100	-	-	-	-	-	-	80	70	-	-	-	-	-	-
83	3	100	-	-	10	-	-	-	80	70	-	-	-	-	-	-
84	3	100	-	10	-	-	-	-	80	70	-	-	-	-	-	-
85	3	100	-	-	5	-	-	-	80	70	-	-	-	-	-	-

Note : 1. (*) indicate percentage of the pavement area destroyed by pot holes
2. Percentage of transverse cracks surveyed at 5Å`10m is length, are estimated.

APPENDIX II-3

Results of Pavement Roughness Assessment

Table Results of Road Pavement Roughness Assesment

km	Roughness indices								
	Right direction			Reverse direction			Average		
	BI index S,cm/km	IRI	Condition category	BI index S,cm/km	IRI	Condition category	IRI	Condition category	Speed, V, km/h
1	2	3	4	5	6	7	8	9	10
1. "Samara-Shymkent" motor road. "Karabutak-Irgiz" section 965-1153km. Surface type-black stone, 965-1153km.									
965	393	16.2	v.poor	460	17.8	v.poor	17.0	v.poor	36
966	349	15.2	v.poor	389	16.1	v.poor	15.7	v.poor	39
967	353	15.3	v.poor	378	15.9	v.poor	15.6	v.poor	39
968	307	14.2	v.poor	336	14.9	v.poor	14.6	v.poor	42
969	284	13.8	v.poor	303	14.1	v.poor	14.0	v.poor	44
970	318	14.4	v.poor	335	14.8	v.poor	14.6	v.poor	41
971	160	9.2	v.poor	170	9.7	v.poor	9.5	v.poor	58
972	129	7.5	poor	136	7.9	poor	7.7	poor	64
973	188	10.5	v.poor	201	11.1	v.poor	10.8	v.poor	53
974	184	10.4	v.poor	200	11.0	v.poor	10.7	v.poor	54
975	199	11.0	v.poor	209	11.4	v.poor	11.2	v.poor	52
976	261	13.2	v.poor	267	13.4	v.poor	13.3	v.poor	46
977	308	14.2	v.poor	301	14.0	v.poor	14.1	v.poor	43
978	210	11.4	v.poor	200	11.0	v.poor	11.2	v.poor	52
979	237	12.4	v.poor	232	12.2	v.poor	12.3	v.poor	49
980	143	8.3	poor	140	8.2	poor	8.3	poor	62
981	331	14.7	v.poor	347	15.1	v.poor	14.9	v.poor	41
982	297	14.0	v.poor	307	14.2	v.poor	14.1	v.poor	43
983	266	13.3	v.poor	295	14.0	v.poor	13.7	v.poor	45
984	312	14.3	v.poor	334	14.8	v.poor	14.6	v.poor	42
985	191	10.7	v.poor	218	11.7	v.poor	11.2	v.poor	52
986	184	10.4	v.poor	228	12.1	v.poor	11.3	v.poor	52
987	200	11.0	v.poor	222	11.9	v.poor	11.5	v.poor	51
988	278	13.7	v.poor	330	14.7	v.poor	14.2	v.poor	43
989	221	11.8	v.poor	234	12.3	v.poor	12.1	v.poor	49
990	284	13.8	v.poor	310	14.2	v.poor	14.0	v.poor	43
991	253	12.9	v.poor	273	13.5	v.poor	13.2	v.poor	46
992	288	13.9	v.poor	301	14.0	v.poor	14.0	v.poor	44
993	210	11.4	v.poor	211	11.4	v.poor	11.4	v.poor	51
994	200	11.0	v.poor	203	11.1	v.poor	11.1	v.poor	52
995	133	7.7	poor	115	6.6	fair	7.2	poor	66
996	197	10.9	v.poor	199	11.0	v.poor	11.0	v.poor	53
997	215	11.6	v.poor	198	10.9	v.poor	11.3	v.poor	52
998	228	12.1	v.poor	210	11.4	v.poor	11.8	v.poor	50
999	197	10.9	v.poor	176	10.0	v.poor	10.5	v.poor	54
1000	195	10.8	v.poor	173	9.9	v.poor	10.4	v.poor	55
1001	203	11.1	v.poor	177	10.1	v.poor	10.6	v.poor	54
1002	212	11.5	v.poor	239	12.5	v.poor	12.0	v.poor	49
1003	284	13.8	v.poor	305	14.1	v.poor	14.0	v.poor	44
1004	226	12.0	v.poor	241	12.5	v.poor	12.3	v.poor	49
1005	277	13.6	v.poor	283	13.8	v.poor	13.7	v.poor	45
1006	197	10.9	v.poor	154	8.9	poor	9.9	v.poor	56
1007	135	7.9	poor	140	8.2	poor	8.1	poor	63
1008	163	9.4	v.poor	182	10.3	v.poor	9.9	v.poor	56

1009	240	12.5	v.poor	258	13.1	v.poor	12.8	v.poor	47
1010	197	10.9	v.poor	187	10.5	v.poor	10.7	v.poor	54
1011	182	10.3	v.poor	151	8.8	poor	9.6	v.poor	57
1012	169	9.7	v.poor	147	8.6	poor	9.2	v.poor	59
1013	170	9.7	v.poor	176	10.0	v.poor	9.9	v.poor	56
1014	135	7.9	poor	101	5.6	fair	6.8	fair	68
1015	113	6.4	fair	102	5.7	fair	6.1	fair	71
1016	124	7.2	poor	124	7.2	poor	7.2	poor	66
1017	167	9.6	v.poor	175	1.0	v.poor	9.8	v.poor	57
1018	120	6.9	fair	119	6.8	fair	6.9	fair	67
1019	136	7.9	poor	101	5.6	fair	6.8	fair	67
1020	97	5.3	fair	91	4.8	fair	5.1	fair	75
1021	114	6.5	fair	135	7.9	poor	7.2	poor	66
1022	135	7.9	poor	217	11.7	v.poor	9.8	v.poor	56
1023	130	7.6	poor	144	8.4	poor	8.0	poor	63
1024	369	15.7	v.poor	360	15.4	v.poor	15.6	v.poor	39
1025	326	14.6	v.poor	310	14.2	v.poor	14.4	v.poor	42
1026	360	15.4	v.poor	342	15.0	v.poor	15.2	v.poor	40
1027	300	14.0	v.poor	352	15.2	v.poor	14.6	v.poor	42
1028	123	7.1	poor	90	4.8	fair	6.0	fair	71
1029	127	7.4	poor	115	6.6	fair	7.0	poor	67
1030	242	12.6	v.poor	270	13.5	v.poor	13.1	v.poor	47
1031	517	19.2	v.poor	555	20.1	v.poor	19.7	v.poor	33
1032	276	13.6	v.poor	281	13.6	v.poor	13.6	v.poor	45
1033	121	7.0	poor	79	3.9	good	5.5	fair	73
1034	297	14.0	v.poor	323	14.5	v.poor	14.3	v.poor	43
1035	266	13.3	v.poor	279	13.7	v.poor	13.5	v.poor	45
1036	491	18.6	v.poor	531	19.6	v.poor	19.1	v.poor	33
1037	257	13.1	v.poor	280	13.7	v.poor	13.4	v.poor	46
1038	199	11.0	v.poor	186	10.4	v.poor	10.7	v.poor	53
1039	220	11.8	v.poor	236	12.4	v.poor	12.1	v.poor	49
1040	330	14.7	v.poor	320	14.5	v.poor	14.6	v.poor	42
1041	286	13.8	v.poor	301	14.0	v.poor	13.9	v.poor	44
1042	354	15.3	v.poor	382	16.0	v.poor	15.7	v.poor	39
1043	428	17.1	v.poor	487	18.5	v.poor	17.8	v.poor	35
1044	272	13.5	v.poor	290	13.9	v.poor	13.7	v.poor	45
1045	299	14.0	v.poor	294	13.9	v.poor	14.0	v.poor	43
1046	197	10.9	v.poor	193	10.7	v.poor	10.8	v.poor	53
1047	381	15.9	v.poor	399	16.4	v.poor	16.2	v.poor	38
1048	143	8.3	poor	132	7.7	poor	8.0	poor	63
1049	306	14.1	v.poor	329	14.7	v.poor	14.4	v.poor	42
1050	349	15.2	v.poor	330	14.7	v.poor	15.0	v.poor	41
1055	347	15.1	v.poor	341	15.0	v.poor	15.1	v.poor	40
1056	369	15.7	v.poor	358	15.4	v.poor	15.6	v.poor	39
1057	259	13.1	v.poor	267	13.4	v.poor	13.3	v.poor	46
1058	131	7.6	poor	115	6.6	fair	7.1	poor	66
1059	155	9.0	v.poor	154	8.9	poor	9.0	v.poor	59
1060	121	7.0	poor	116	6.6	fair	6.8	fair	67
1061	106	5.9	fair	94	5.1	fair	5.5	fair	73
1062	65	2.9	good	50	1.8	good	2.4	good	95
1063	91	4.8	fair	107	6.0	fair	5.4	fair	74
1064	416	16.8	v.poor	402	16.4	v.poor	16.6	v.poor	37
1065	353	15.3	v.poor	390	16.2	v.poor	15.8	v.poor	39
1066	363	15.5	v.poor	368	15.6	v.poor	15.6	v.poor	39

1067	370	15.7	v.poor	350	15.2	v.poor	15.5	v.poor	40
1068	276	13.6	v.poor	259	13.1	v.poor	13.4	v.poor	46
1069	237	12.4	v.poor	251	12.9	v.poor	12.7	v.poor	48
1070	140	8.2	poor	164	9.4	v.poor	8.8	poor	60
1071	228	12.1	v.poor	276	13.6	v.poor	12.9	v.poor	47
1072	385	16.0	v.poor	384	16.0	v.poor	16.0	v.poor	38
1073	420	16.9	v.poor	471	18.1	v.poor	17.5	v.poor	36
1074	278	13.7	v.poor	279	13.7	v.poor	13.7	v.poor	45
1075	117	6.7	fair	96	5.2	fair	6.0	fair	71
1076	383	16.0	v.poor	407	16.6	v.poor	16.3	v.poor	38
1077	203	11.1	v.poor	214	11.6	v.poor	11.4	v.poor	51
1078	441	17.4	v.poor	421	16.9	v.poor	17.2	v.poor	36
1079	460	17.8	v.poor	466	18.0	v.poor	17.9	v.poor	35
1080	366	15.4	v.poor	350	15.2	v.poor	15.4	v.poor	40
1081	128	7.4	poor	114	6.5	fair	7.0	poor	67
1082	69	3.2	good	42	1.3	good	2.3	good	97
1083	116	6.6	fair	85	4.4	fair	5.5	fair	73
1084	101	5.6	fair	71	3.3	good	4.5	fair	79
1085	68	3.1	good	34	0.9	good	2.0	good	101
1086	79	3.9	good	50	1.8	good	2.9	good	90
1087	668	22.9	v.poor	652	22.5	v.poor	22.7	v.poor	30
1088	662	22.7	v.poor	652	22.5	v.poor	22.6	v.poor	30
1089	167	9.6	v.poor	189	10.6	v.poor	10.1	v.poor	56
1090	219	11.8	v.poor	231	12.2	v.poor	12.0	v.poor	50
1091	479	18.3	v.poor	498	18.8	v.poor	18.6	v.poor	34
1092	188	10.5	v.poor	176	10.0	v.poor	10.3	v.poor	55
1093	178	10.1	v.poor	166	9.5	v.poor	9.8	v.poor	56
1094	93	5.0	fair	75	3.6	good	4.3	fair	80
1095	73	3.5	good	71	3.3	good	3.4	good	86
1096	129	7.5	poor	124	7.2	poor	7.4	poor	65
1097	139	8.1	poor	152	8.8	poor	8.5	poor	61
1098	126	7.3	poor	122	7.0	poor	7.2	poor	66
1099	209	11.4	v.poor	214	11.6	v.poor	11.5	v.poor	51
1100	165	9.5	v.poor	177	10.1	v.poor	9.8	v.poor	57
1101	131	7.6	poor	151	8.8	poor	8.2	poor	62
1102	118	6.8	fair	127	7.4	poor	7.1	poor	66
1103	228	12.1	poor	219	11.8	v.poor	12.0	v.poor	50
1104	122	7.0	poor	137	8.0	poor	7.5	poor	65
1105	134	7.8	poor	136	7.9	poor	7.9	poor	63
1106	148	8.6	poor	162	9.3	v.poor	9.0	v.poor	59
1107	183	10.3	v.poor	196	10.9	v.poor	10.6	v.poor	54
1108	399	16.4	v.poor	410	16.6	v.poor	16.5	v.poor	37
1109	134	7.8	poor	136	7.9	poor	7.9	poor	63
1110	119	6.8	good	105	5.9	good	6.4	good	69
1111	110	6.2	fair	104	5.8	fair	6.0	fair	71
1112	127	7.4	fair	130	7.6	fair	7.5	fair	65
1113	73	3.5	good	61	good	excel	3.1	good	89
1114	149	8.7	poor	135	7.9	poor	8.3	poor	62
1115	146	8.5	poor	133	7.7	poor	7.1	poor	62
1116	117	6.7	fair	140	8.2	poor	7.5	poor	65
1117	69	3.2	good	76	3.7	good	3.5	good	85
1118	99	5.4	fair	120	6.9	fair	6.2	fair	70
1119	86	4.5	fair	93	5.0	fair	4.8	fair	77
1120	101	5.6	fair	119	6.8	fair	6.2	fair	70

1121	71	3.3	good	70	3.2	good	3.3	good	86
1122	82	4.1	fair	87	4.5	fair	4.3	fair	79
1123	175	10.0	v.poor	180	10.2	v.poor	10.1	v.poor	56
1124	127	7.4	poor	100	5.5	fair	6.5	fair	69
1125	72	3.4	good	60	2.5	good	3.0	good	89
1126	116	6.6	fair	120	6.9	fair	6.8	fair	68
1127	81	4.1	fair	100	5.5	fair	4.8	fair	77
1128	76	3.7	good	81	4.1	fair	3.9	good	82
1129	81	4.1	fair	85	4.4	fair	4.3	fair	80
1130	174	9.9	v.poor	185	10.4	v.poor	10.2	v.poor	55
1131	87	4.5	fair	94	5.1	fair	4.8	fair	77
1132	91	4.8	fair	105	5.9	fair	5.4	fair	74
1133	87	4.5	fair	99	5.4	fair	5.0	fair	76
1134	96	5.2	fair	102	5.7	fair	5.5	fair	74
1135	219	11.8	v.poor	228	12.1	v.poor	12.0	v.poor	50
1136	102	5.7	fair	81	4.1	fair	4.9	fair	76
1137	111	6.3	fair	98	5.4	fair	5.9	fair	72
1138	268	13.4	v.poor	286	13.8	v.poor	13.6	v.poor	45
1139	175	10.0	v.poor	171	9.8	v.poor	9.9	v.poor	56
1140	184	10.4	v.poor	174	9.9	v.poor	10.2	v.poor	55
1141	148	8.6	poor	140	8.2	poor	8.4	poor	61
1142	142	8.3	poor	134	7.8	poor	8.1	poor	63
1143	146	8.5	poor	137	8.0	poor	8.3	poor	62
1144	84	4.3	fair	96	5.2	fair	4.8	fair	77
1145	142	8.3	poor	164	9.4	v.poor	8.9	poor	60
1146	148	8.6	poor	152	8.8	poor	8.7	poor	60
1147	152	8.8	poor	145	8.4	poor	8.6	poor	60
1148	122	7.0	poor	113	6.4	fair	6.7	fair	68
1149	198	10.9	v.poor	211	11.4	v.poor	11.1	v.poor	52
1150	112	6.4	fair	101	5.6	fair	6.0	fair	71
1151	86	4.5	fair	92	4.9	fair	4.7	fair	77
1152	176	10.0	v.poor	174	9.9	v.poor	10.0	v.poor	56
1153	134	7.8	poor	138	8.0	poor	7.9	poor	63
2. "Samara-Shymkent" motor road. "Irgiz-borden of Kzyl-Ordinskaua obl." section 1154-1240km. Surface type-gravel, 1154-1225km.									
1154	547	19.9	v.poor	577	20.7	v.poor	20.3	v.poor	32
1155	455	17.7	v.poor	467	18.0	v.poor	17.9	v.poor	35
1156	663	22.7	v.poor	706	13.8	v.poor	23.3	v.poor	29
1157	574	20.6	v.poor	560	20.3	v.poor	20.5	v.poor	32
1158	544	19.9	v.poor	558	20.2	v.poor	20.1	v.poor	32
1159	605	21.3	v.poor	626	21.8	v.poor	21.6	v.poor	31
1160	574	20.6	v.poor	588	20.9	v.poor	20.8	v.poor	31
1161	653	22.5	v.poor	704	23.7	v.poor	23.1	v.poor	29
1162	462	17.9	v.poor	490	18.6	v.poor	18.3	v.poor	35
1163	742	24.6	v.poor	779	25.5	v.poor	25.1	v.poor	28
1164	575	20.6	v.poor	583	20.8	v.poor	20.7	v.poor	32
1165	497	18.7	v.poor	530	19.5	v.poor	19.1	v.poor	33
1166	443	17.4	v.poor	460	17.8	v.poor	17.6	v.poor	35
1167	674	23.0	v.poor	682	23.2	v.poor	23.1	v.poor	29
1168	642	22.2	v.poor	670	22.9	v.poor	22.6	v.poor	30
1169	412	16.7	v.poor	434	17.2	v.poor	17.0	v.poor	37
1170	584	20.8	v.poor	566	20.4	v.poor	20.6	v.poor	32
1171	554	20.1	v.poor	585	20.9	v.poor	20.6	v.poor	32
1172	600	21.2	v.poor	609	21.4	v.poor	21.3	v.poor	31

1173	588	20.9	v.poor	593	21.1	v.poor	21.0	v.poor	31
1174	419	16.9	v.poor	442	17.4	v.poor	17.2	v.poor	36
1175	753	24.9	v.poor	797	26.0	v.poor	25.5	v.poor	27
1176	625	21.8	v.poor	618	21.7	v.poor	21.8	v.poor	30
1177	494	18.7	v.poor	528	19.5	v.poor	19.1	v.poor	33
1178	260	13.0	v.poor	272	13.3	v.poor	13.2	v.poor	46
1179	372	15.7	v.poor	364	15.5	v.poor	15.6	v.poor	39
1180	1683	47.3	v.poor	1768	49.4	v.poor	48.4	v.poor	19
1181	492	18.6	v.poor	522	19.3	v.poor	19.0	v.poor	34
1182	417	16.8	v.poor	451	17.6	v.poor	17.2	v.poor	36
1183	370	15.7	v.poor	384	16.0	v.poor	15.8	v.poor	39
1184	478	18.3	v.poor	481	18.4	v.poor	18.4	v.poor	34
1185	410	16.6	v.poor	439	17.3	v.poor	16.9	v.poor	37
1186	376	15.8	v.poor	394	16.3	v.poor	16.1	v.poor	38
1187	364	15.5	v.poor	375	15.8	v.poor	15.7	v.poor	39
1188	221	12.1	v.poor	236	12.4	v.poor	12.2	v.poor	49
1189	228	12.3	v.poor	234	12.4	v.poor	12.4	v.poor	49
1190	269	13.2	v.poor	274	13.4	v.poor	13.3	v.poor	45
1191	580	20.7	v.poor	596	21.1	v.poor	20.9	v.poor	31
1192	990	30.6	v.poor	1051	32.1	v.poor	31.4	v.poor	24
1193	923	29.0	v.poor	984	30.5	v.poor	29.8	v.poor	25
1194	1424	41.1	v.poor	1560	44.4	v.poor	42.7	v.poor	20
1195	834	26.9	v.poor	894	28.3	v.poor	27.6	v.poor	26
1196	698	23.6	v.poor	706	23.8	v.poor	23.7	v.poor	29
1197	831	26.8	v.poor	855	27.4	v.poor	27.1	v.poor	26
1198	847	27.1	v.poor	859	27.5	v.poor	27.3	v.poor	26
1199	895	28.3	v.poor	952	29.7	v.poor	29.2	v.poor	25
1200	831	26.8	v.poor	847	27.2	v.poor	27.0	v.poor	26
1201	869	27.7	v.poor	888	28.2	v.poor	27.9	v.poor	26
1202	798	26.0	v.poor	806	26.2	v.poor	26.1	v.poor	27
1203	722	24.2	v.poor	747	24.8	v.poor	24.6	v.poor	28
1204	844	27.1	v.poor	859	27.5	v.poor	27.3	v.poor	26
1205	1192	35.5	v.poor	1269	37.3	v.poor	26.4	v.poor	22
1206	1083	32.9	v.poor	1110	33.5	v.poor	33.2	v.poor	23
1207	961	29.9	v.poor	969	30.1	v.poor	30.0	v.poor	25
1208	846	27.1	v.poor	856	27.4	v.poor	27.2	v.poor	26
1209	548	20.0	v.poor	554	20.1	v.poor	20.1	v.poor	32
1210	532	19.6	v.poor	551	20.0	v.poor	19.8	v.poor	33
1211	641	22.2	v.poor	654	22.5	v.poor	22.4	v.poor	30
1212	985	30.5	v.poor	1007	31.0	v.poor	30.8	v.poor	24
1213	754	24.9	v.poor	768	25.3	v.poor	25.2	v.poor	28
1214	694	23.5	v.poor	703	23.7	v.poor	23.6	v.poor	29
1215	823	25.6	v.poor	835	26.9	v.poor	26.2	v.poor	27
1216	994	30.7	v.poor	1046	32.0	v.poor	31.4	v.poor	24
1217	507	19.0	v.poor	532	19.6	v.poor	19.3	v.poor	33
1218	811	26.3	v.poor	847	27.2	v.poor	26.8	v.poor	27
1219	951	29.7	v.poor	967	30.1	v.poor	29.9	v.poor	25
1220	641	22.2	v.poor	666	22.8	v.poor	22.5	v.poor	30
1221	595	21.1	v.poor	628	21.9	v.poor	21.5	v.poor	31
1222	597	21.1	v.poor	615	21.6	v.poor	21.4	v.poor	31
1223	600	21.2	v.poor	663	22.7	v.poor	22.0	v.poor	30
1224	782	25.6	v.poor	811	26.3	v.poor	26.0	v.poor	27
1225	724	24.2	v.poor	726	24.3	v.poor	24.3	v.poor	28
Surface type-black stone, 1226-1229km									

1226	77	3.8	good	75	3.6	good	3.7	good	84
1227	119	6.8	fair	112	6.4	fair	6.6	fair	68
1228	53	2.0	good	42	1.3	good	1.7	good	104
1229	56	2.2	good	54	2.1	good	2.2	good	98
Surface type-gravel,1230-1232km									
1230	579	20.7	v.poor	588	20.9	v.poor	20.8	v.poor	31
1231	509	19.0	v.poor	521	19.3	v.poor	19.2	v.poor	33
1232	516	19.2	v.poor	530	19.5	v.poor	19.4	v.poor	33
Surface type-black stone, 1233-1240km									
1233	109	6.2	fair	121	7.0	poor	6.6	fair	68
1234	149	8.7	poor	155	9.0	v.poor	8.9	poor	60
1235	70	3.2	good	74	3.5	good	3.4	good	86
1236	48	1.7	good	49	1.7	good	1.7	good	103
1237	63	2.7	good	65	2.9	good	2.8	good	91
1238	104	5.8	fair	109	6.2	fair	6.0	fair	71
1239	98	5.4	fair	101	5.6	fair	5.5	fair	73
1240	207	11.3	v.poor	203	11.1	v.poor	11.2	v.poor	52
3. "Atyray-Uralsk" motor road, "Atyrau-Makhambet" section 0-83km. Surface type-black stone, 0-83km.									
1	195	10.8	v.poor	214	11.6	v.poor	11.2	v.poor	52
2	254	13.0	v.poor	268	13.4	v.poor	13.2	v.poor	46
3	215	11.6	v.poor	226	12.0	v.poor	11.8	v.poor	50
4	231	12.2	v.poor	242	12.6	v.poor	12.4	v.poor	48
5	232	12.2	v.poor	246	12.7	v.poor	12.5	v.poor	48
6	289	13.9	v.poor	445	17.5	v.poor	15.7	v.poor	39
7	405	16.5	v.poor	413	16.7	v.poor	16.6	v.poor	37
8	264	13.3	v.poor	303	14.1	v.poor	13.7	v.poor	44
9	303	14.1	v.poor	357	15.4	v.poor	14.8	v.poor	41
10	316	14.4	v.poor	305	14.1	v.poor	14.3	v.poor	42
11	306	14.1	v.poor	340	15.0	v.poor	14.6	v.poor	42
12	297	14.0	v.poor	379	15.9	v.poor	15.0	v.poor	41
13	178	10.1	v.poor	398	16.4	v.poor	13.3	v.poor	44
14	272	13.5	v.poor	310	14.2	v.poor	13.9	v.poor	44
15	399	16.4	v.poor	421	16.9	v.poor	16.7	v.poor	37
16	266	13.3	v.poor	342	15.0	v.poor	14.2	v.poor	43
17	497	18.7	v.poor	501	18.8	v.poor	18.8	v.poor	34
18	285	13.8	v.poor	363	15.5	v.poor	14.7	v.poor	42
19	212	11.5	v.poor	253	12.9	v.poor	12.2	v.poor	49
20	182	10.3	v.poor	415	16.8	v.poor	13.6	v.poor	43
21	290	13.9	v.poor	278	13.7	v.poor	13.8	v.poor	44
22	309	14.2	v.poor	268	13.8	v.poor	14.0	v.poor	43
23	295	14.0	v.poor	312	14.3	v.poor	14.2	v.poor	43
24	339	14.9	v.poor	355	15.3	v.poor	15.1	v.poor	40
25	273	13.5	v.poor	292	13.9	v.poor	13.7	v.poor	44
26	277	13.6	v.poor	341	15.0	v.poor	14.3	v.poor	43
27	239	12.5	v.poor	220	11.8	v.poor	12.2	v.poor	49
28	251	12.9	v.poor	387	16.1	v.poor	14.5	v.poor	42
29	357	15.4	v.poor	351	15.2	v.poor	15.3	v.poor	40
30	367	15.6	v.poor	378	15.9	v.poor	15.8	v.poor	39
31	204	11.2	v.poor	212	11.5	v.poor	11.4	v.poor	52
32	154	8.9	poor	241	12.5	v.poor	10.7	v.poor	53
33	223	11.9	v.poor	162	9.3	v.poor	10.6	v.poor	53
34	176	10.0	v.poor	263	13.3	v.poor	11.7	v.poor	50
35	144	8.4	poor	190	10.6	v.poor	9.5	v.poor	57
36	175	10.0	v.poor	179	10.1	v.poor	10.1	v.poor	56

37	138	8.0	poor	186	10.4	v.poor	9.2	v.poor	58
38	223	11.9	v.poor	166	9.5	v.poor	10.7	v.poor	53
39	364	15.5	v.poor	234	12.3	v.poor	13.9	v.poor	
40	351	15.2	v.poor	355	15.3	v.poor	15.3	v.poor	40
41	345	15.1	v.poor	443	17.4	v.poor	16.3	v.poor	38
42	330	14.7	v.poor	321	14.5	v.poor	14.6	v.poor	42
43	333	14.8	v.poor	261	13.2	v.poor	14.0	v.poor	43
44	165	9.5	v.poor	166	9.5	v.poor	9.5	v.poor	57
45	248	12.8	v.poor	283	13.8	v.poor	13.3	v.poor	46
46	346	15.1	v.poor	468	18.0	v.poor	16.6	v.poor	37
47	330	14.7	v.poor	405	16.5	v.poor	15.6	v.poor	39
48	328	14.7	v.poor	261	13.2	v.poor	14.0	v.poor	44
49	353	15.3	v.poor	421	16.9	v.poor	16.1	v.poor	38
50	332	14.8	v.poor	419	16.9	v.poor	15.9	v.poor	38
51	388	16.1	v.poor	432	17.2	v.poor	16.7	v.poor	37
52	321	14.5	v.poor	343	15.0	v.poor	14.8	v.poor	41
53	329	14.7	v.poor	355	15.3	v.poor	15.0	v.poor	41
54	278	13.7	v.poor	368	15.6	v.poor	14.7	v.poor	42
55	234	12.3	v.poor	273	13.5	v.poor	12.9	v.poor	47
56	305	14.1	v.poor	230	12.2	v.poor	13.2	v.poor	46
57	189	10.6	v.poor	220	11.8	v.poor	11.2	v.poor	52
58	340	15.0	v.poor	180	10.2	v.poor	12.6	v.poor	46
59	210	11.4	v.poor	349	15.2	v.poor	13.3	v.poor	45
60	219	11.8	v.poor	214	11.6	v.poor	11.7	v.poor	50
61	209	11.4	v.poor	215	11.6	v.poor	11.5	v.poor	51
62	278	13.7	v.poor	301	11.6	v.poor	13.9	v.poor	44
63	266	13.3	v.poor	280	14.0	v.poor	13.5	v.poor	45
64	279	13.7	v.poor	345	13.7	v.poor	14.4	v.poor	42
65	253	12.9	v.poor	257	15.1	v.poor	13.0	v.poor	47
66	314	14.3	v.poor	229	13.1	v.poor	13.2	v.poor	45
67	188	10.5	v.poor	233	12.1	v.poor	11.4	v.poor	51
68	313	14.3	v.poor	312	12.3	v.poor	14.3	v.poor	42
69	164	9.4	v.poor	125	14.3	v.poor	8.3	v.poor	61
70	304	14.1	v.poor	322	14.5	v.poor	14.3	v.poor	42
71	180	10.2	v.poor	184	10.4	v.poor	10.3	v.poor	55
72	158	9.1	v.poor	155	9.0	v.poor	9.1	v.poor	59
73	318	14.4	v.poor	309	14.2	v.poor	14.3	v.poor	42
74	223	11.9	v.poor	220	11.8	v.poor	11.9	v.poor	50
75	347	15.1	v.poor	336	14.9	v.poor	15.0	v.poor	41
76	334	14.8	v.poor	326	14.6	v.poor	14.7	v.poor	41
77	238	12.4	v.poor	234	12.3	v.poor	12.4	v.poor	48
78	286	13.9	v.poor	279	13.7	v.poor	13.8	v.poor	44
79	292	13.9	v.poor	296	14.0	v.poor	14.0	v.poor	44
80	183	10.3	v.poor	189	10.6	v.poor	10.5	v.poor	54
81	221	11.8	v.poor	226	12.0	v.poor	11.9	v.poor	50
82	349	15.2	v.poor	346	15.1	v.poor	15.2	v.poor	40
83	351	15.2	v.poor	344	15.1	v.poor	15.2	v.poor	40