

GEORGIA
ROADS DEPARTMENT OF THE MINISTRY OF
REGIONAL DEVELOPMENT AND INFRASTRUCTURE



SECOND SECONDARY AND LOCAL ROADS PROJECT
(SLRP II)

DESIGN DOCUMENTATION

REHABILITATION OF THE SECONDARY ROAD

Agara - Kornisi - Tskinali

km 1 - km 4; km 9 - km 16

VOLUME IV.

ECONOMIC ANALYSIS

CONTRACT #: SLRP II/CS/QCBS-04



KOCKS
ENGINEERS

TBILISI 2014

Design composition

Volume I - Explanatory note, Tables of volumes of works

Volume II - Drawings

Volume II- I – Drawings. Cross Sections

Volume III - Confidential cost estimates

Volume IV - Economic analysis

Volume V - Environmental Management Plan

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ABBREVIATIONS AND ACRONYMS

AADT	Average Annual Daily Traffic
ADT	Average Daily Traffic
GDP	Gross Domestic Product
RUC	Road User Costs
VOC	Vehicle Operation Cost
TTC	Travel Time Cost
IRR	Internal Rate of Return
NPV	Net Present Value

1) Introduction

Following report is dedicated to the evaluation of Agara-Kornisi km1-km4 and km9-km16 road sections rehabilitation Project. Report describes the existing situation, traffic flow, cost and benefit identification process and summarizes the methodological framework used in the evaluation process.

Development of road infrastructure is one of the top priority for the government of Georgia, providing better mobility and accessibility to road users in villages supports agriculture which in turn forms an important basis for sustainable economic development of the country.

Agara-Kornisi km1-km4 and km9-km16 road sections rehabilitation Project financed by World Bank is parallel to other road infrastructure improvement projects in Georgia.

2) Methodology

The main factor for economic evaluation is decrease in road user costs due to improvements in road surface and geometry.

The inputs to the HDM-4 model are divided into:

- Analysis assumptions,
- Parameters describing the existing conditions & traffic and
- Data characterizing the project alternatives.

Analysis assumptions

- Period of Analysis - is 20 years
- Fleet characteristics – six vehicle categories previously shown on tables xxx

Parameters of the Existing Conditions

- Definition – section name, section ID, speed flow, traffic flow pattern, climatic zone, road class, surface class, pavement characteristics, length, carriageway width, shoulder width, n° of lanes, AADT for motorized traffic, initial composition and growth by vehicle type, year the AADT's refer to, flow direction.
- Geometry – rise & fall, horizontal curvature, speed limit, altitude
- Pavement – surface type, structural number of asphalt pavement
- Pavement condition – roughness, other deterioration characteristics, drainage conditions
- Environment – Climatic zone

The model, through its built-in algorithms, analyses the road pavements deterioration as a consequence of several factors, most notably: the effect of traffic loading on the road structure in conjunction with the environmental weathering and drainage conditions. The rate of pavement deterioration is directly affected by the standards of maintenance applied to repair defects on the pavement surface such as cracking, raveling, potholes, etc., or to preserve the structural integrity of the pavement (surface treatments, overlays, etc.), thereby permitting the road to carry traffic in accordance with its design function. The overall long-term condition of road pavements directly depends on the maintenance or improvement standards applied to the road. The pavement performance represented by the riding quality is often measured in terms of the

international roughness index (IRI). When a maintenance standard is defined, it imposes a limit to the level of deterioration that a pavement is permitted to attain. Consequently, in addition to the capital costs of road construction, the total costs that are incurred by road agencies will depend on the standards of maintenance and improvement applied to road networks. The impact of the road condition, as well as the road design standards, on road users are measured in terms of Road User Costs. Road user costs comprise: vehicle operation costs (fuel, tyres, oil, spare parts consumption; vehicle depreciation and utilization, etc.) and costs of travel time, for both passengers and cargo. Economic benefits from road investments are then determined by comparing the total cost streams for various road construction alternatives against a base case (without project) representing the minimum standard of road maintenance.

3) Traffic Flow

There is no historic traffic data available for A section. Details on pavement conditions are specified in detail design document, current traffic volume and composition has been determined by 3 day manual counts as shown in the tables below.

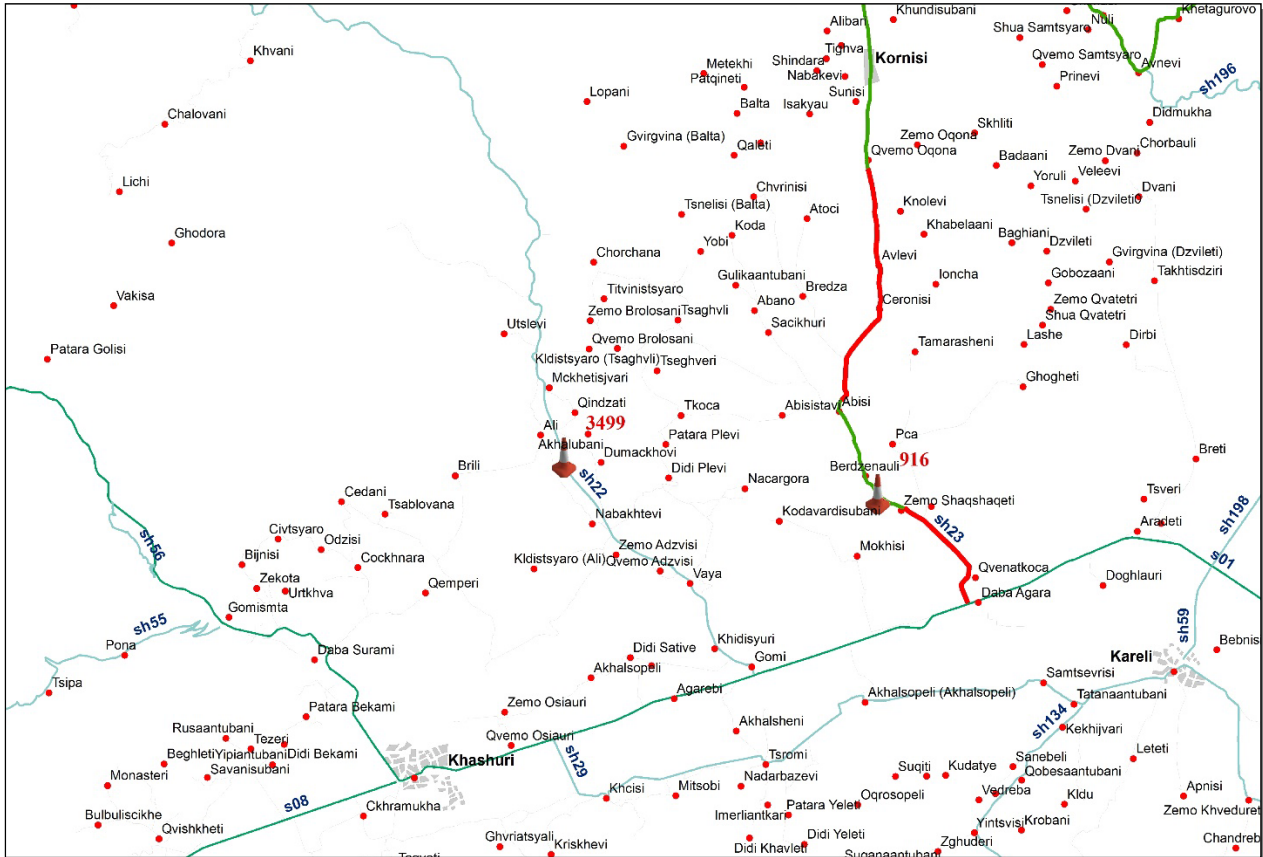


Table 3-1

დღე	Agara-Kornisi km1-km4, km9-km16				
	Car	Mini bus	Truck	Articulate	Total
პირველი დღე	502	124	41	12	679
მეორე დღე	497	137	35	8	677
მესამე დღე	456	105	32	10	603
საშუალო	485	122	36	10	653

Traffic measure points

Map 3.1



3.1. Traffic growth projection

For lifecycle cost benefit analysis we need a 20 year traffic projection to cover the study period. As mentioned before there is no historic data available for modeling reasonable trend nor do the macroeconomic data provide stable enough details to estimate future transportation needs Table-3-2.

Table 3-2 Statistics of GDP per capita for last 5 years

Year	GDP Per Capita	%*
2008	4,353	

2009	4,101	-6%
2010	4,676	14%
2011	5,447	16%
2012	5,818	7%
2013	5,983	3%

Source: Statistics Department of Georgia

* Last year Growth

Due to unstable patterns it was considered more reasonable to calculate Compound Annual Growth Rate (CAGR) to apply first year growth rate separately for Passenger and Freight Vehicles based on last few year Traffic history of geographically closest road where road rehabilitation work has been carried out and such data is available.

Table 3-6 Last 4 year Traffic composition Data on Gomi-Sachkhere-Chiatura-Zestaponi km10

	Car	Minibus	Truck	Trailer	Total	Growth %
2010	1167	441	141	42	1791	
2011	1196	402	106	38	1742	-3%
2012	917	227	128	37	1309	-25%
2013	1836	213	13	1	2063	58%

The compound annual growth rate is calculated by taking the nth root of the total percentage growth rate, where n is the number of years in the period being considered.

Table 3-7 Calculation of CAGR –4 year Period

Category	2009	2013	CAGR*
Passenger Vehicles	1,608	2,564	12.4%
Freight Vehicles	183	935	50.3%

*Compound Annual Growth Rate (CAGR)

Considering that study road is a Secondary road with very low composition of freight vehicles first year annual growth rate has been assumed to be lower, it's been assumed that these growth rates will decrease over time and reach steady value.

Table 3-8

Growth Rate	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Passenger	8%	7%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%
Goods	5%	5%	5%	4%	4%	4%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%

Table 3-9

Year	Agara-Kornisi km1-km4, km9-km16				
	Car	Minibus	Truck	Trailer	Total
2014	485	122	36	10	653
2015	524	132	38	11	704
2016	560	141	40	11	752
2017	588	148	42	12	790
2018	618	155	43	12	829
2019	649	163	45	13	870
2020	681	171	47	13	913
2021	715	180	48	13	957
2022	744	187	50	14	995
2023	774	195	51	14	1034
2024	805	202	53	15	1074
2025	837	210	54	15	1117
2026	870	219	56	16	1161
2027	905	228	57	16	1206
2028	941	237	58	16	1252
2029	979	246	59	17	1301
2030	1008	254	61	17	1339
2031	1039	261	62	17	1379
2032	1070	269	63	18	1419
2033	1102	277	64	18	1461
2034	1135	285	66	18	1504

4) Costs

The cost side of the cost-benefit calculation includes two costs:

1) The “capital costs” of construction

Capital Cost - includes all funds relative to the planning, design, and construction.

2) The annual road operation cost

Recurrent Cost - scheduled and responsive maintenance costs.

Next table represent costs of construction project for four different alternatives.

Table 4-1 Base input data of the project

Technical Parameters:		
Alternative1	Base(stabilized)	180mm
	Wearing	50mm
	(SNP) Structural Number	4.3
	(IRI) International Roughness Index km1-km4	Base - 4.6 By Project - 2.0
	(IRI) International Roughness Index km9-km16	Base - 16 By Project - 2.0
Alternative2	Base(gravel)	180 00
	Wearing	10000
	(SNP) Structural Number	4.3
	(IRI) International Roughness Index km1-km4	Base - 4.6 By Project - 2.0
	(IRI) International Roughness Index km9-km16	Base - 16 By Project - 2.0
Geometry	Road Length	11.57 km
	Avarage Travel Speed	base - 40 km/h, 30km/h by project - 60 km/h
	Carragaway	6-7m
	Shoulder (m)	1-1.25m
Cost	Alt1 1 – km Construction (estimated cost)	Financial: 489 154 GEL Economic: 391 323 GEL
	Alt2 1 – km Construction (estimated cost)	Financial: 533 233 GEL Economic: 426 587 GEL

Each of the considered alternatives has been compared to the alternative zero (Base) representing the existing route with respective road maintenance **Table 4-2**

Table 4-2 Maintenance Standard

Elementary Operation	Schedule/Responsive	Financial Cost	Economic Cost
Shoulders, drainage and snow removal	Schedule each year	400 GEL/km	320 GEL/km
Patching	> 4 per/km	23.4 GEL/m2	18.75 GEL/m2
Crack Sealing	> 10%	9.4 GEL/m2	7.5 GEL/m2

The sources describing different economic costs of input data for HDM-4

1-New vehicle market price: the average vehicle representative of its category has been based on international prices since in Georgia the market for new vehicles is very limited and the large part of the fleet is composed by used vehicles. Since HDM takes for elaborating operating costs (specially for spares) the cost of new vehicles, is less then real market price.

2-New tire market price: It has been based on recent studies conducted in Georgia; the updated market values have been obtained through investigation with local tire dealers.

3-Market maintenance labor: updated market values have been obtained through investigation with local workshops.

4-Fuel & lubricant: It has been updated through investigation with the fuel dealers.

5-Average km driven per year: It has been based on recent studies conducted in Georgia and by investigation with local transport companies.

Table 4-3 Vehicle Fleet Characteristic (Economic Values)

Items	Car	Mini Bus	Truck	Articulated Truck
1 - New vehicle market price (GEL)	21600	32000	56000	160000
2 - New tyre market price (GEL)	120	200	640	800
3 - Maintenance labour per hour (GEL/hour)	1.6	2.3	3	3
4 - Market crew wages per hour (GEL/hour)	3.6	3.6	1.92	2.6
5 - Fuel (GEL/liter)	1.65	1.65	1.65	1.65
6 - Lubricant (GEL/liter)	13.6	13.6	13.6	13.6
7 - Avarage km driven per year	23000	30000	40000	86000
8 - Avarage annual utilization (hour/year)	550	750	1200	2000
9 - Avarage Number of passengers	2	15	0	0
10 - Avarage operation Weight (tones)	1.2	2.2	8	28
11 - Avarage service life (year)	10	8	12	14

5) Benefits

Life Cycle Benefit/Cost Approach

In a 20-year construction period life cycle method sums the constant GEL value of all costs and benefits by the year they were incurred and discounts them by discount rate of %12.0 percent. The results are then presented by a number of economic indicators that include:

- Vehicle Operation Cost (VOC)

Vehicle operating costs. The costs of owning and operating vehicles are affected by a project due to the changes that it causes in speeds, traffic congestion, pavement surface, and other conditions that affect vehicle fuel, tire, spare parts consumption and wear.

- Travel Time Cost (TTC)

Operation of vehicles is affected by a project due to the changes that it causes in speeds and traffic congestion, such delays in time are represented in monetary terms and decrease of such delays affects project benefits.

- Road Users Cost (RUC)

RUC comprise Vehicle Operating Costs (VOC) and Travel Time Cost (TTC) for the traffic using the road; RUC are function of road conditions and their difference (RUC[^] without improvement” minus RUC” with improvement”) are the motorized traffic benefits that together with other possible benefits are compared to the cost (investment and recurrent) for improving the existing conditions.

$$RUC=VOC+TTC$$

- Net Present Value (NPV)

Net present value. The future stream of benefits and costs converted into equivalent values today. This is done by assigning monetary values to benefits and costs, discounting future benefits and costs using an appropriate discount rate, and subtracting the sum total of discounted costs from the sum total of discounted benefits

$$NPV=RUC-RAC$$

RAC (Road Agency Cost)

- Internal Rate of Return (IRR)

Internal rate of return. The discount rate at which the present value of the future cash flows of an investment equals the cost of the investment.

Table 5-1 Project Economic Indicators

	Agara-Kornisi km1 -km4, km9-km16	
	IRR %	NPV (12% discounted) mln. GEL
Alt1	26.4	5.324
Alt2	24.3	4.855

6) Sensitivity Analysis

Sensitivity Analysis has been conducted for Project Alternatives to allow investigating the impact of variations in key parameters on the analysis results. These key parameters cover

- Capital Costs
- Traffic Volume

Sensitivity Analysis Scenarios include +-20% of key parameters which are shown in the tables below.

Table 6-1

	Agara-Kornisi km1 -km4, km9-km16	
	IRR %	NPV
Alt1	26.4	5.324
Cost +20%	22.3	4.424
Cost -20%	32.3	6.224
Traffic +20%	31.1	7.323
Traffic -20%	21.4	3.337
Traffic -20% Cost +20%	17.9	2.437
Alt2	24.3	4.855
Cost +20%	20.4	3.874
Cost -20%	29.8	5.836
Traffic +20%	28.8	6.854
Traffic -20%	19.6	2.870
Traffic -20% Cost +20%	16.3	1.889

It should be noted that only benefits associated to the vehicle operating cost savings between the two scenarios and the time savings for both passengers and freights transiting on the road sections were considered in economic evaluation. Therefore no other benefits were considered, such as environmental benefits (air and noise pollution, quality of life of crossed urban areas, etc.), social and economic benefits (road safety, severance effect, disturbance to local traffic and activities, etc)

Other nonmonetary benefits that are expected after project implementation:

Economic Development - Road improvement sometimes remove an impediment to economic development. Reduced transportation costs and/or better access can enable a region to better compete for economic activities, meaning that business activity is expanded.

Roadside Service Industries - The road improvement may induce traffic (trips that otherwise would not be made), which will increase local revenues of roadside businesses such as gasoline stations, motels, restaurants and others.

Tourism – Most likely road improvement will cause additional visitors to be attracted to the region, the area's income and general prosperity will rise.

Social Benefits Not Examined – For example, the project most likely will increase access to health care, education, cultural amenities and otherwise improved access to other social needs. These types of access benefits cannot be measured in economic terms and therefore are not included in this study.

Economic Indicators Summary

Study Name: **Agara-Kornisi km1-km4, km9-km16**

Run Date: **28-08-2014**

Currency: **Lari (millions)**

Discount Rate: **12.00%**

Sensitivity: Base Sensitivity Scenario

Alternative	Present Value of Total Agency Costs (RAC)	Present Value of Agency Capital Costs (CAP)	Increase in Agency Costs (C)	Decrease in User Costs (B)	Net Exogenous Benefits (E)	Net Present Value (NPV = B+E-C)	NPV/Cost Ratio (NPV/RAC)	NPV/Cost Ratio (NPV/CAP)	Internal Rate of Return (IRR)
Base	0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Alt1 Rehabilitation	4.531	4.500	4.494	9.818	0.000	5.324	1.175	1.183	26.4 (1)
Alt2 Rehabilitation	4.994	4.906	4.957	9.812	0.000	4.855	0.972	0.990	24.3 (1)

Figure in brackets is number of IRR solutions in range -90 to +900

Sensitivity: Cost +20%

Alternative	Present Value of Total Agency Costs (RAC)	Present Value of Agency Capital Costs (CAP)	Increase in Agency Costs (C)	Decrease in User Costs (B)	Net Exogenous Benefits (E)	Net Present Value (NPV = B+E-C)	NPV/Cost Ratio (NPV/RAC)	NPV/Cost Ratio (NPV/CAP)	Internal Rate of Return (IRR)
Base	0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Alt1 Rehabilitation	4.531	4.500	5.394	9.818	0.000	4.424	0.976	0.983	22.3 (1)
Alt2 Rehabilitation	4.994	4.906	5.938	9.812	0.000	3.874	0.776	0.790	20.4 (1)

Figure in brackets is number of IRR solutions in range -90 to +900

Sensitivity: Cost +20% and Traffic -20%

Alternative	Present Value of Total Agency Costs (RAC)	Present Value of Agency Capital Costs (CAP)	Increase in Agency Costs (C)	Decrease in User Costs (B)	Net Exogenous Benefits (E)	Net Present Value (NPV = B+E-C)	NPV/Cost Ratio (NPV/RAC)	NPV/Cost Ratio (NPV/CAP)	Internal Rate of Return (IRR)
Base	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Alt1 Rehabilitation	4.531	4.500	5.395	7.832	0.000	2.437	0.538	0.542	17.9 (1)
Alt2 Rehabilitation	4.994	4.906	5.939	7.828	0.000	1.889	0.378	0.385	16.3 (1)

Figure in brackets is number of IRR solutions in range -90 to +900

Sensitivity: Cost -20%

Alternative	Present Value of Total Agency Costs (RAC)	Present Value of Agency Capital Costs (CAP)	Increase in Agency Costs (C)	Decrease in User Costs (B)	Net Exogenous Benefits (E)	Net Present Value (NPV = B+E-C)	NPV/Cost Ratio (NPV/RAC)	NPV/Cost Ratio (NPV/CAP)	Internal Rate of Return (IRR)
Base	0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Alt1 Rehabilitation	4.531	4.500	3.594	9.818	0.000	6.224	1.374	1.383	32.3 (1)
Alt2 Rehabilitation	4.994	4.906	3.976	9.812	0.000	5.836	1.169	1.190	29.8 (1)

Figure in brackets is number of IRR solutions in range -90 to +900

Sensitivity: Traffic +20%

Alternative	Present Value of Total Agency Costs (RAC)	Present Value of Agency Capital Costs (CAP)	Increase in Agency Costs (C)	Decrease in User Costs (B)	Net Exogenous Benefits (E)	Net Present Value (NPV = B+E-C)	NPV/Cost Ratio (NPV/RAC)	NPV/Cost Ratio (NPV/CAP)	Internal Rate of Return (IRR)
Base	0.038	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Alt1 Rehabilitation	4.531	4.500	4.493	11.817	0.000	7.323	1.616	1.627	31.1 (1)
Alt2 Rehabilitation	4.994	4.906	4.956	11.810	0.000	6.854	1.372	1.397	28.8 (1)

Figure in brackets is number of IRR solutions in range -90 to +900

Sensitivity: Traffic -20%

Alternative	Present Value of Total Agency Costs (RAC)	Present Value of Agency Capital Costs (CAP)	Increase in Agency Costs (C)	Decrease in User Costs (B)	Net Exogenous Benefits (E)	Net Present Value (NPV = B+E-C)	NPV/Cost Ratio (NPV/RAC)	NPV/Cost Ratio (NPV/CAP)	Internal Rate of Return (IRR)
Base	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Alt1 Rehabilitation	4.531	4.500	4.495	7.832	0.000	3.337	0.737	0.742	21.4 (1)
Alt2 Rehabilitation	4.994	4.906	4.958	7.828	0.000	2.870	0.575	0.585	19.6 (1)

Figure in brackets is number of IRR solutions in range -90 to +900

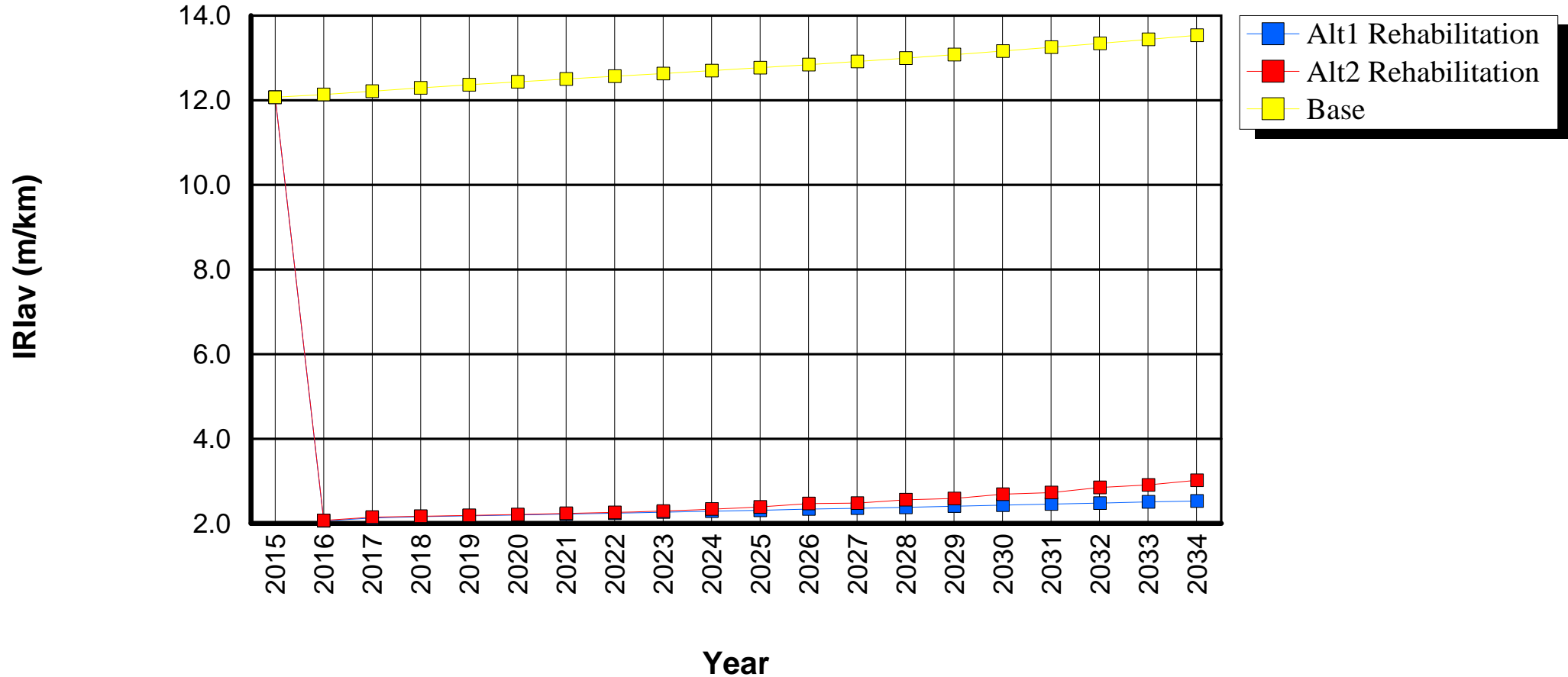
Average Roughness by Project (Graph)

Study Name: **Agara-Kornisi km1-km4, km9-km16**

Run Date: **28-08-2014**

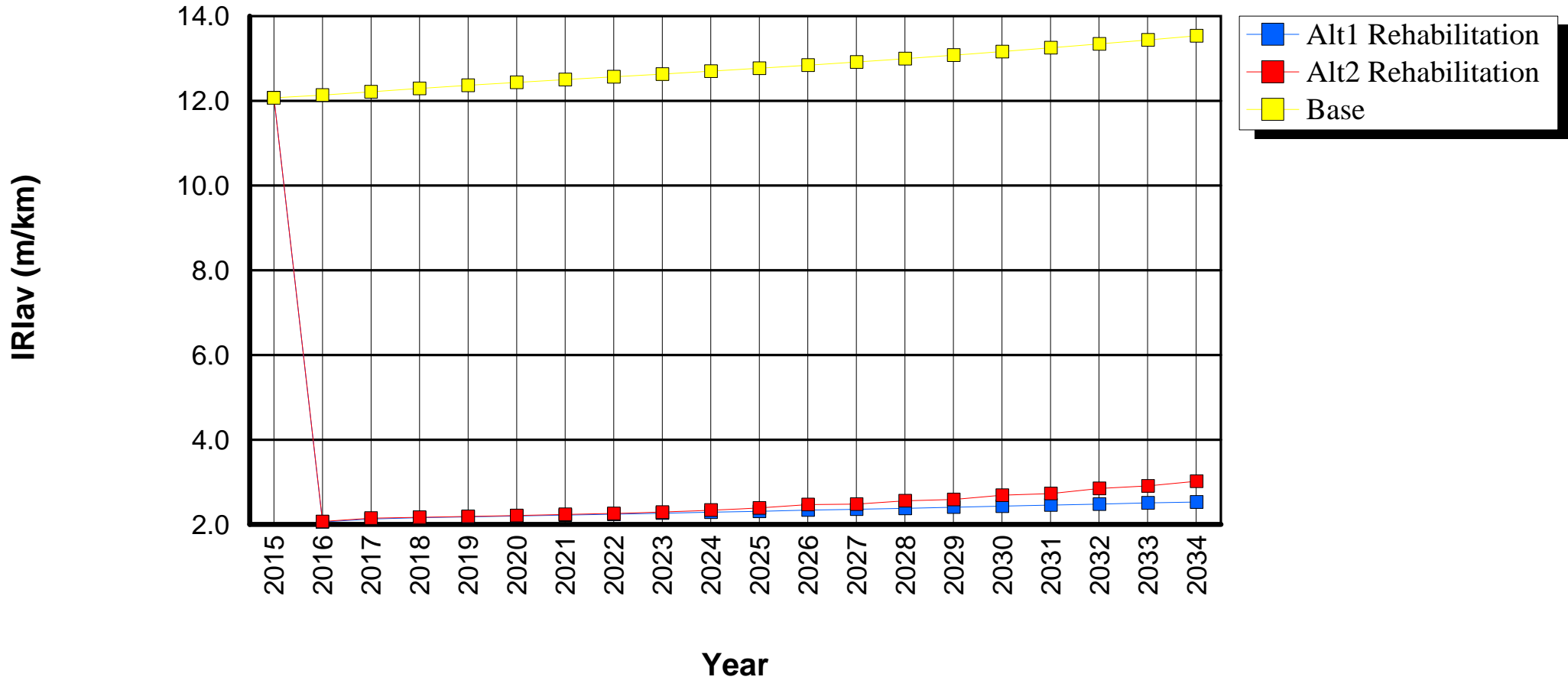
Sensitivity: Base Sensitivity Scenario

Average Roughness (IRlav) for Project (weighted by section length)



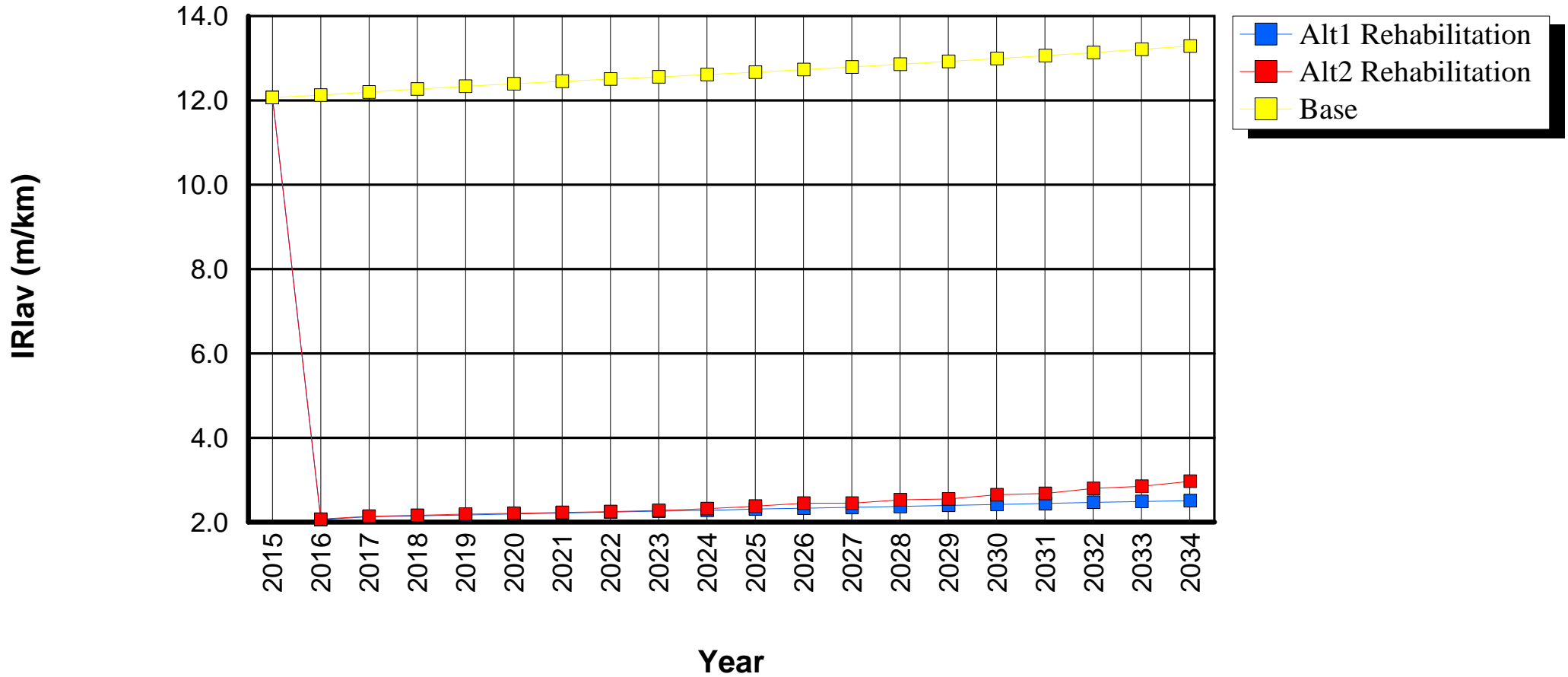
Sensitivity: Cost +20%

Average Roughness (IRI_{lav}) for Project (weighted by section length)



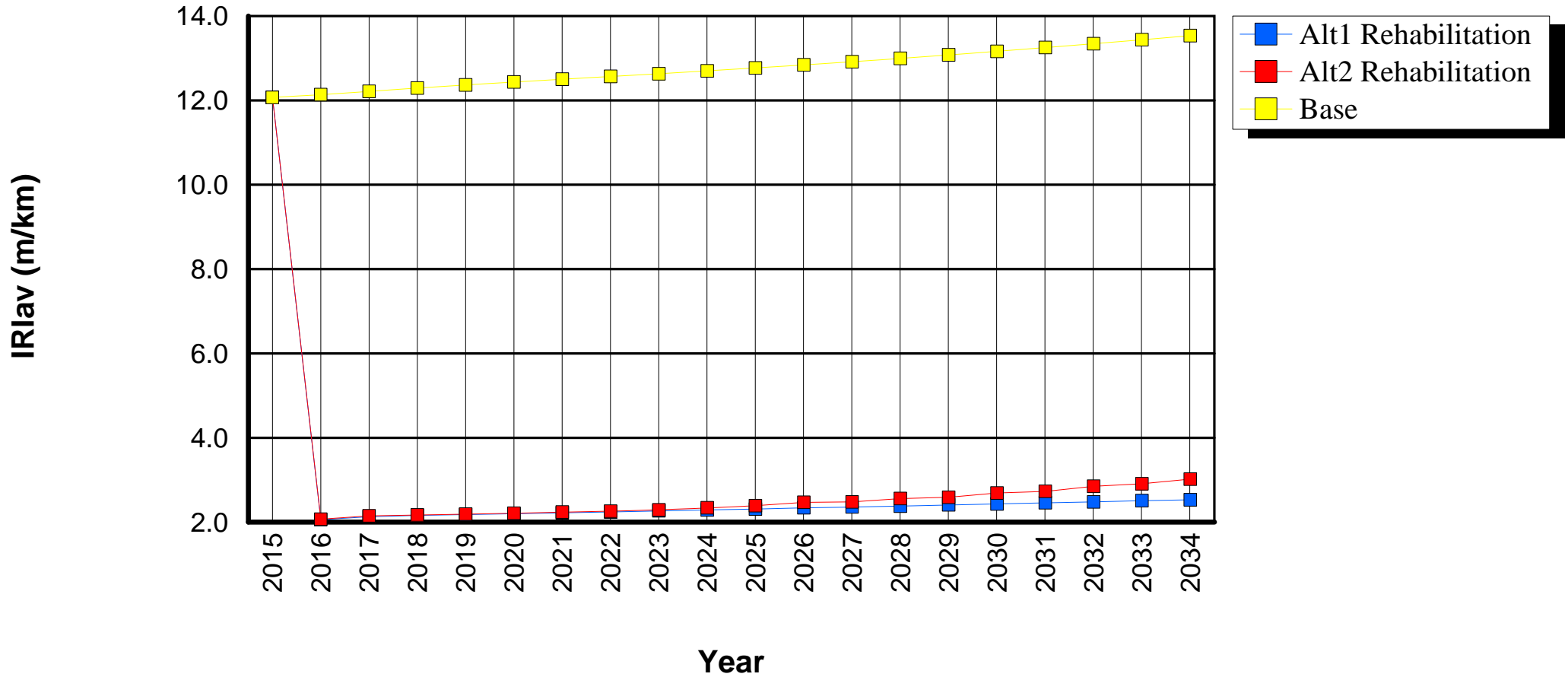
Sensitivity: Cost +20% and Traffic -20%

Average Roughness (IRI_{lav}) for Project (weighted by section length)



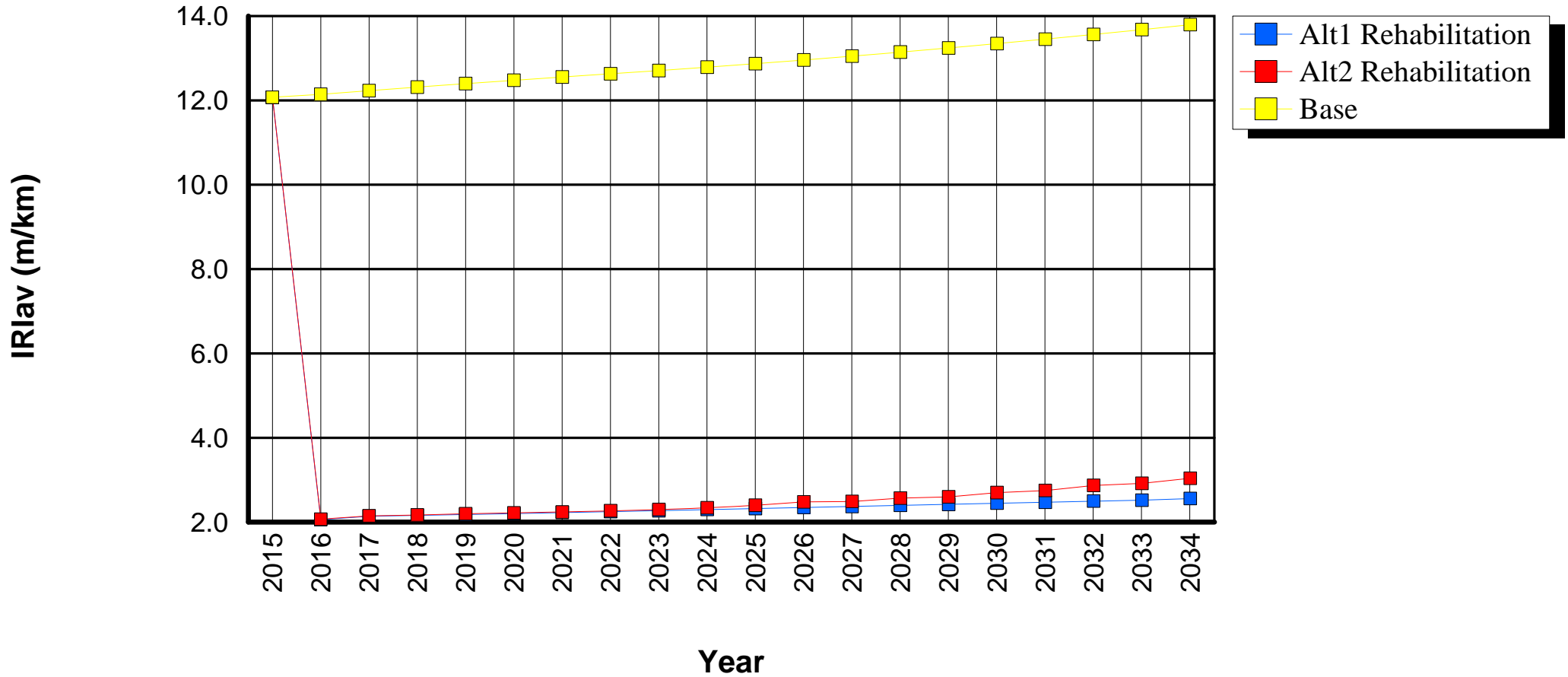
Sensitivity: Cost -20%

Average Roughness (IRI_{lav}) for Project (weighted by section length)



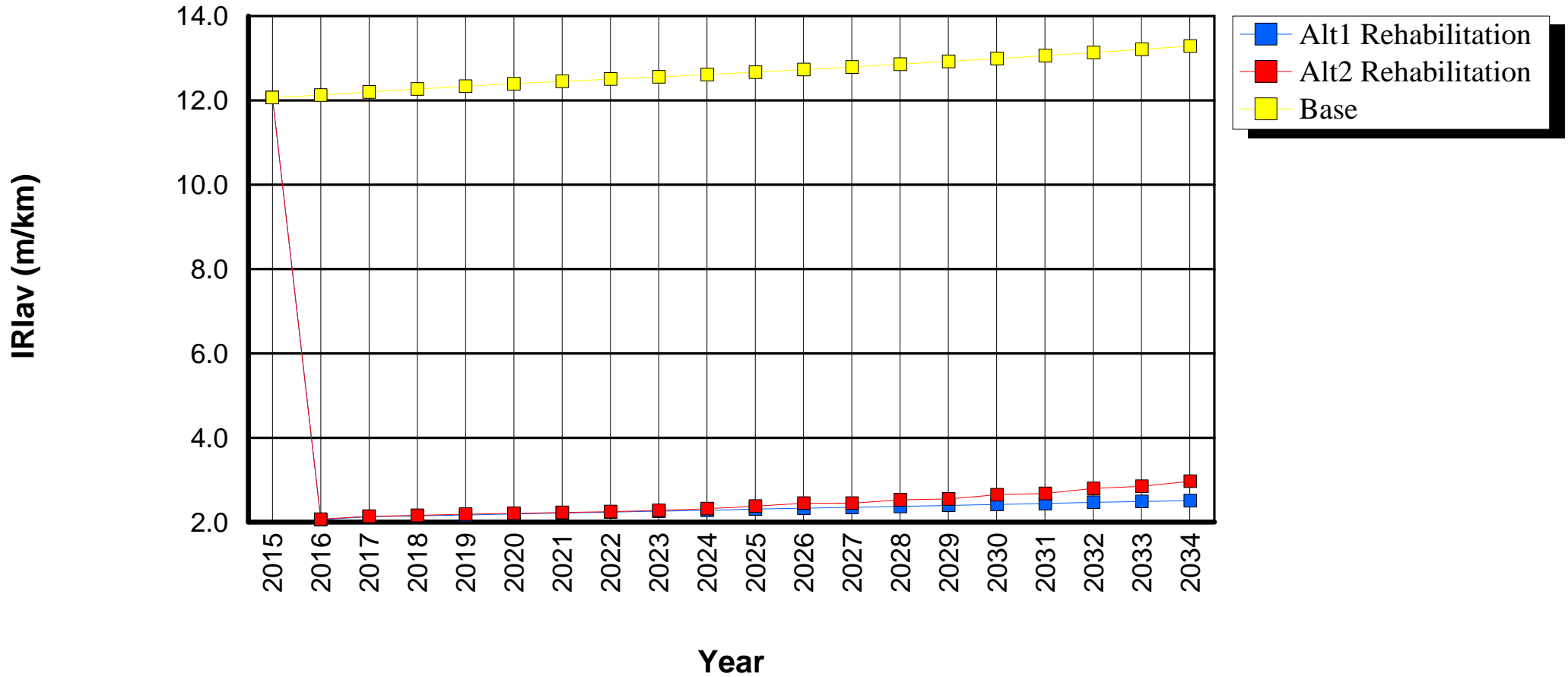
Sensitivity: Traffic +20%

Average Roughness (IRlav) for Project (weighted by section length)



Sensitivity: Traffice -20%

Average Roughness (IRlav) for Project (weighted by section length)



Report Key

in each cell:

1st row = Normal (& Diverted) traffic

2nd row = Generated traffic

3rd row = Total traffic

Section: Agara-Kornisi km1-4

Alternative: Alt1 Rehabilitation

Sensitivity: Base Sensitivity Scenario

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161

HDM-4 AADT Details for Section Alternatives (Graph)

	Articulated Truck	Cars	Mini Bus	Truck	Total
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km1-4
Alternative: Alt1 Rehabilitation
Sensitivity: Cost +20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

HDM-4 AADT Details for Section Alternatives (Graph)

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km1-4
Alternative: Alt1 Rehabilitation
Sensitivity: Cost +20% and Traffice -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	8 0 8	419 0 419	105 0 105	30 0 30	563 0 563
2016	9 0 9	448 0 448	113 0 113	32 0 32	602 0 602
2017	9 0 9	471 0 471	118 0 118	33 0 33	632 0 632
2018	10 0 10	494 0 494	124 0 124	35 0 35	663 0 663
2019	10 0 10	519 0 519	131 0 131	36 0 36	696 0 696
2020	10 0 10	545 0 545	137 0 137	38 0 38	730 0 730
2021	11 0 11	572 0 572	144 0 144	39 0 39	766 0 766
2022	11 0 11	595 0 595	150 0 150	40 0 40	796 0 796
2023	11 0 11	619 0 619	156 0 156	41 0 41	827 0 827
2024	12 0 12	644 0 644	162 0 162	42 0 42	860 0 860
2025	12 0 12	669 0 669	168 0 168	43 0 43	893 0 893
2026	12 0 12	696 0 696	175 0 175	45 0 45	929 0 929
2027	13 0 13	724 0 724	182 0 182	46 0 46	965 0 965
2028	13 0 13	753 0 753	189 0 189	47 0 47	1,002 0 1,002
2029	13 0 13	783 0 783	197 0 197	48 0 48	1,041 0 1,041
2030	13 0 13	807 0 807	203 0 203	48 0 48	1,072 0 1,072

HDM-4 AADT Details for Section Alternatives (Graph)

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	14	831	209	49	1,103
	0	0	0	0	0
	14	831	209	49	1,103
2032	14	856	215	50	1,135
	0	0	0	0	0
	14	856	215	50	1,135
2033	14	881	222	51	1,169
	0	0	0	0	0
	14	881	222	51	1,169
2034	15	908	228	52	1,203
	0	0	0	0	0
	15	908	228	52	1,203
Total	235	13,235	3,329	845	17,645
	0	0	0	0	0
	235	13,235	3,329	845	17,645

Section: Agara-Kornisi km1-4
Alternative: Alt1 Rehabilitation
Sensitivity: Cost -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km1-4
Alternative: Alt1 Rehabilitation
Sensitivity: Traffice +20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	13	629	158	45	845
	0	0	0	0	0
	13	629	158	45	845
2016	13	673	169	48	903
	0	0	0	0	0
	13	673	169	48	903
2017	14	706	178	50	948
	0	0	0	0	0
	14	706	178	50	948
2018	14	742	187	52	994
	0	0	0	0	0
	14	742	187	52	994
2019	15	779	196	54	1,044
	0	0	0	0	0
	15	779	196	54	1,044
2020	16	818	206	56	1,095
	0	0	0	0	0
	16	818	206	56	1,095
2021	16	858	216	58	1,148
	0	0	0	0	0
	16	858	216	58	1,148
2022	17	893	225	60	1,194
	0	0	0	0	0
	17	893	225	60	1,194
2023	17	928	234	61	1,241
	0	0	0	0	0
	17	928	234	61	1,241
2024	18	966	243	63	1,289
	0	0	0	0	0
	18	966	243	63	1,289
2025	18	1,004	253	65	1,340
	0	0	0	0	0
	18	1,004	253	65	1,340
2026	19	1,044	263	67	1,393
	0	0	0	0	0
	19	1,044	263	67	1,393
2027	19	1,086	273	69	1,447
	0	0	0	0	0
	19	1,086	273	69	1,447
2028	19	1,130	284	70	1,503
	0	0	0	0	0
	19	1,130	284	70	1,503
2029	20	1,175	296	71	1,561
	0	0	0	0	0
	20	1,175	296	71	1,561
2030	20	1,210	304	73	1,607
	0	0	0	0	0
	20	1,210	304	73	1,607

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	21	1,246	314	74	1,655
	0	0	0	0	0
	21	1,246	314	74	1,655
2032	21	1,284	323	76	1,703
	0	0	0	0	0
	21	1,284	323	76	1,703
2033	21	1,322	333	77	1,753
	0	0	0	0	0
	21	1,322	333	77	1,753
2034	22	1,362	343	79	1,805
	0	0	0	0	0
	22	1,362	343	79	1,805
Total	352	19,853	4,994	1,268	26,467
	0	0	0	0	0
	352	19,853	4,994	1,268	26,467

Section: Agara-Kornisi km1-4
Alternative: Alt1 Rehabilitation
Sensitivity: Traffice -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	8 0 8	419 0 419	105 0 105	30 0 30	563 0 563
2016	9 0 9	448 0 448	113 0 113	32 0 32	602 0 602
2017	9 0 9	471 0 471	118 0 118	33 0 33	632 0 632
2018	10 0 10	494 0 494	124 0 124	35 0 35	663 0 663
2019	10 0 10	519 0 519	131 0 131	36 0 36	696 0 696
2020	10 0 10	545 0 545	137 0 137	38 0 38	730 0 730
2021	11 0 11	572 0 572	144 0 144	39 0 39	766 0 766
2022	11 0 11	595 0 595	150 0 150	40 0 40	796 0 796
2023	11 0 11	619 0 619	156 0 156	41 0 41	827 0 827
2024	12 0 12	644 0 644	162 0 162	42 0 42	860 0 860
2025	12 0 12	669 0 669	168 0 168	43 0 43	893 0 893
2026	12 0 12	696 0 696	175 0 175	45 0 45	929 0 929
2027	13 0 13	724 0 724	182 0 182	46 0 46	965 0 965
2028	13 0 13	753 0 753	189 0 189	47 0 47	1,002 0 1,002
2029	13 0 13	783 0 783	197 0 197	48 0 48	1,041 0 1,041
2030	13 0 13	807 0 807	203 0 203	48 0 48	1,072 0 1,072

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	14	831	209	49	1,103
	0	0	0	0	0
	14	831	209	49	1,103
2032	14	856	215	50	1,135
	0	0	0	0	0
	14	856	215	50	1,135
2033	14	881	222	51	1,169
	0	0	0	0	0
	14	881	222	51	1,169
2034	15	908	228	52	1,203
	0	0	0	0	0
	15	908	228	52	1,203
Total	235	13,235	3,329	845	17,645
	0	0	0	0	0
	235	13,235	3,329	845	17,645

Section: Agara-Kornisi km1-4
Alternative: Alt2 Rehabilitation
Sensitivity: Base Sensivity Scenario

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km1-4
Alternative: Alt2 Rehabilitation
Sensitivity: Cost +20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km1-4
Alternative: Alt2 Rehabilitation
Sensitivity: Cost +20% and Traffice -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	8 0 8	419 0 419	105 0 105	30 0 30	563 0 563
2016	9 0 9	448 0 448	113 0 113	32 0 32	602 0 602
2017	9 0 9	471 0 471	118 0 118	33 0 33	632 0 632
2018	10 0 10	494 0 494	124 0 124	35 0 35	663 0 663
2019	10 0 10	519 0 519	131 0 131	36 0 36	696 0 696
2020	10 0 10	545 0 545	137 0 137	38 0 38	730 0 730
2021	11 0 11	572 0 572	144 0 144	39 0 39	766 0 766
2022	11 0 11	595 0 595	150 0 150	40 0 40	796 0 796
2023	11 0 11	619 0 619	156 0 156	41 0 41	827 0 827
2024	12 0 12	644 0 644	162 0 162	42 0 42	860 0 860
2025	12 0 12	669 0 669	168 0 168	43 0 43	893 0 893
2026	12 0 12	696 0 696	175 0 175	45 0 45	929 0 929
2027	13 0 13	724 0 724	182 0 182	46 0 46	965 0 965
2028	13 0 13	753 0 753	189 0 189	47 0 47	1,002 0 1,002
2029	13 0 13	783 0 783	197 0 197	48 0 48	1,041 0 1,041
2030	13 0 13	807 0 807	203 0 203	48 0 48	1,072 0 1,072

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	14	831	209	49	1,103
	0	0	0	0	0
	14	831	209	49	1,103
2032	14	856	215	50	1,135
	0	0	0	0	0
	14	856	215	50	1,135
2033	14	881	222	51	1,169
	0	0	0	0	0
	14	881	222	51	1,169
2034	15	908	228	52	1,203
	0	0	0	0	0
	15	908	228	52	1,203
Total	235	13,235	3,329	845	17,645
	0	0	0	0	0
	235	13,235	3,329	845	17,645

Section: Agara-Kornisi km1-4
Alternative: Alt2 Rehabilitation
Sensitivity: Cost -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km1-4
Alternative: Alt2 Rehabilitation
Sensitivity: Traffice +20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	13	629	158	45	845
	0	0	0	0	0
	13	629	158	45	845
2016	13	673	169	48	903
	0	0	0	0	0
	13	673	169	48	903
2017	14	706	178	50	948
	0	0	0	0	0
	14	706	178	50	948
2018	14	742	187	52	994
	0	0	0	0	0
	14	742	187	52	994
2019	15	779	196	54	1,044
	0	0	0	0	0
	15	779	196	54	1,044
2020	16	818	206	56	1,095
	0	0	0	0	0
	16	818	206	56	1,095
2021	16	858	216	58	1,148
	0	0	0	0	0
	16	858	216	58	1,148
2022	17	893	225	60	1,194
	0	0	0	0	0
	17	893	225	60	1,194
2023	17	928	234	61	1,241
	0	0	0	0	0
	17	928	234	61	1,241
2024	18	966	243	63	1,289
	0	0	0	0	0
	18	966	243	63	1,289
2025	18	1,004	253	65	1,340
	0	0	0	0	0
	18	1,004	253	65	1,340
2026	19	1,044	263	67	1,393
	0	0	0	0	0
	19	1,044	263	67	1,393
2027	19	1,086	273	69	1,447
	0	0	0	0	0
	19	1,086	273	69	1,447
2028	19	1,130	284	70	1,503
	0	0	0	0	0
	19	1,130	284	70	1,503
2029	20	1,175	296	71	1,561
	0	0	0	0	0
	20	1,175	296	71	1,561
2030	20	1,210	304	73	1,607
	0	0	0	0	0
	20	1,210	304	73	1,607

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	21	1,246	314	74	1,655
	0	0	0	0	0
	21	1,246	314	74	1,655
2032	21	1,284	323	76	1,703
	0	0	0	0	0
	21	1,284	323	76	1,703
2033	21	1,322	333	77	1,753
	0	0	0	0	0
	21	1,322	333	77	1,753
2034	22	1,362	343	79	1,805
	0	0	0	0	0
	22	1,362	343	79	1,805
Total	352	19,853	4,994	1,268	26,467
	0	0	0	0	0
	352	19,853	4,994	1,268	26,467

Section: Agara-Kornisi km1-4
Alternative: Alt2 Rehabilitation
Sensitivity: Traffice -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	8	419	105	30	563
	0	0	0	0	0
	8	419	105	30	563
2016	9	448	113	32	602
	0	0	0	0	0
	9	448	113	32	602
2017	9	471	118	33	632
	0	0	0	0	0
	9	471	118	33	632
2018	10	494	124	35	663
	0	0	0	0	0
	10	494	124	35	663
2019	10	519	131	36	696
	0	0	0	0	0
	10	519	131	36	696
2020	10	545	137	38	730
	0	0	0	0	0
	10	545	137	38	730
2021	11	572	144	39	766
	0	0	0	0	0
	11	572	144	39	766
2022	11	595	150	40	796
	0	0	0	0	0
	11	595	150	40	796
2023	11	619	156	41	827
	0	0	0	0	0
	11	619	156	41	827
2024	12	644	162	42	860
	0	0	0	0	0
	12	644	162	42	860
2025	12	669	168	43	893
	0	0	0	0	0
	12	669	168	43	893
2026	12	696	175	45	929
	0	0	0	0	0
	12	696	175	45	929
2027	13	724	182	46	965
	0	0	0	0	0
	13	724	182	46	965
2028	13	753	189	47	1,002
	0	0	0	0	0
	13	753	189	47	1,002
2029	13	783	197	48	1,041
	0	0	0	0	0
	13	783	197	48	1,041
2030	13	807	203	48	1,072
	0	0	0	0	0
	13	807	203	48	1,072

HDM-4 AADT Details for Section Alternatives (Graph)

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	14	831	209	49	1,103
	0	0	0	0	0
	14	831	209	49	1,103
2032	14	856	215	50	1,135
	0	0	0	0	0
	14	856	215	50	1,135
2033	14	881	222	51	1,169
	0	0	0	0	0
	14	881	222	51	1,169
2034	15	908	228	52	1,203
	0	0	0	0	0
	15	908	228	52	1,203
Total	235	13,235	3,329	845	17,645
	0	0	0	0	0
	235	13,235	3,329	845	17,645

Section: Agara-Kornisi km1-4
Alternative: Base
Sensitivity: Base Sensitivity Scenario

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km1-4
Alternative: Base
Sensitivity: Cost +20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km1-4
Alternative: Base
Sensitivity: Cost +20% and Traffice -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	8	419	105	30	563
	0	0	0	0	0
	8	419	105	30	563
2016	9	448	113	32	602
	0	0	0	0	0
	9	448	113	32	602
2017	9	471	118	33	632
	0	0	0	0	0
	9	471	118	33	632
2018	10	494	124	35	663
	0	0	0	0	0
	10	494	124	35	663
2019	10	519	131	36	696
	0	0	0	0	0
	10	519	131	36	696
2020	10	545	137	38	730
	0	0	0	0	0
	10	545	137	38	730
2021	11	572	144	39	766
	0	0	0	0	0
	11	572	144	39	766
2022	11	595	150	40	796
	0	0	0	0	0
	11	595	150	40	796
2023	11	619	156	41	827
	0	0	0	0	0
	11	619	156	41	827
2024	12	644	162	42	860
	0	0	0	0	0
	12	644	162	42	860
2025	12	669	168	43	893
	0	0	0	0	0
	12	669	168	43	893
2026	12	696	175	45	929
	0	0	0	0	0
	12	696	175	45	929
2027	13	724	182	46	965
	0	0	0	0	0
	13	724	182	46	965
2028	13	753	189	47	1,002
	0	0	0	0	0
	13	753	189	47	1,002
2029	13	783	197	48	1,041
	0	0	0	0	0
	13	783	197	48	1,041
2030	13	807	203	48	1,072
	0	0	0	0	0
	13	807	203	48	1,072

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	14 0 14	831 0 831	209 0 209	49 0 49	1,103 0 1,103
2032	14 0 14	856 0 856	215 0 215	50 0 50	1,135 0 1,135
2033	14 0 14	881 0 881	222 0 222	51 0 51	1,169 0 1,169
2034	15 0 15	908 0 908	228 0 228	52 0 52	1,203 0 1,203
Total	235 0 235	13,235 0 13,235	3,329 0 3,329	845 0 845	17,645 0 17,645

Section: Agara-Kornisi km1-4
Alternative: Base
Sensitivity: Cost -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km1-4
Alternative: Base
Sensitivity: Traffice +20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	13	629	158	45	845
	0	0	0	0	0
	13	629	158	45	845
2016	13	673	169	48	903
	0	0	0	0	0
	13	673	169	48	903
2017	14	706	178	50	948
	0	0	0	0	0
	14	706	178	50	948
2018	14	742	187	52	994
	0	0	0	0	0
	14	742	187	52	994
2019	15	779	196	54	1,044
	0	0	0	0	0
	15	779	196	54	1,044
2020	16	818	206	56	1,095
	0	0	0	0	0
	16	818	206	56	1,095
2021	16	858	216	58	1,148
	0	0	0	0	0
	16	858	216	58	1,148
2022	17	893	225	60	1,194
	0	0	0	0	0
	17	893	225	60	1,194
2023	17	928	234	61	1,241
	0	0	0	0	0
	17	928	234	61	1,241
2024	18	966	243	63	1,289
	0	0	0	0	0
	18	966	243	63	1,289
2025	18	1,004	253	65	1,340
	0	0	0	0	0
	18	1,004	253	65	1,340
2026	19	1,044	263	67	1,393
	0	0	0	0	0
	19	1,044	263	67	1,393
2027	19	1,086	273	69	1,447
	0	0	0	0	0
	19	1,086	273	69	1,447
2028	19	1,130	284	70	1,503
	0	0	0	0	0
	19	1,130	284	70	1,503
2029	20	1,175	296	71	1,561
	0	0	0	0	0
	20	1,175	296	71	1,561
2030	20	1,210	304	73	1,607
	0	0	0	0	0
	20	1,210	304	73	1,607

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	21	1,246	314	74	1,655
	0	0	0	0	0
	21	1,246	314	74	1,655
2032	21	1,284	323	76	1,703
	0	0	0	0	0
	21	1,284	323	76	1,703
2033	21	1,322	333	77	1,753
	0	0	0	0	0
	21	1,322	333	77	1,753
2034	22	1,362	343	79	1,805
	0	0	0	0	0
	22	1,362	343	79	1,805
Total	352	19,853	4,994	1,268	26,467
	0	0	0	0	0
	352	19,853	4,994	1,268	26,467

Section: Agara-Kornisi km1-4
Alternative: Base
Sensitivity: Traffice -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	8	419	105	30	563
	0	0	0	0	0
	8	419	105	30	563
2016	9	448	113	32	602
	0	0	0	0	0
	9	448	113	32	602
2017	9	471	118	33	632
	0	0	0	0	0
	9	471	118	33	632
2018	10	494	124	35	663
	0	0	0	0	0
	10	494	124	35	663
2019	10	519	131	36	696
	0	0	0	0	0
	10	519	131	36	696
2020	10	545	137	38	730
	0	0	0	0	0
	10	545	137	38	730
2021	11	572	144	39	766
	0	0	0	0	0
	11	572	144	39	766
2022	11	595	150	40	796
	0	0	0	0	0
	11	595	150	40	796
2023	11	619	156	41	827
	0	0	0	0	0
	11	619	156	41	827
2024	12	644	162	42	860
	0	0	0	0	0
	12	644	162	42	860
2025	12	669	168	43	893
	0	0	0	0	0
	12	669	168	43	893
2026	12	696	175	45	929
	0	0	0	0	0
	12	696	175	45	929
2027	13	724	182	46	965
	0	0	0	0	0
	13	724	182	46	965
2028	13	753	189	47	1,002
	0	0	0	0	0
	13	753	189	47	1,002
2029	13	783	197	48	1,041
	0	0	0	0	0
	13	783	197	48	1,041
2030	13	807	203	48	1,072
	0	0	0	0	0
	13	807	203	48	1,072

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	14	831	209	49	1,103
	0	0	0	0	0
	14	831	209	49	1,103
2032	14	856	215	50	1,135
	0	0	0	0	0
	14	856	215	50	1,135
2033	14	881	222	51	1,169
	0	0	0	0	0
	14	881	222	51	1,169
2034	15	908	228	52	1,203
	0	0	0	0	0
	15	908	228	52	1,203
Total	235	13,235	3,329	845	17,645
	0	0	0	0	0
	235	13,235	3,329	845	17,645

Section: Agara-Kornisi km9-km16
Alternative: Alt1 Rehabilitation
Sensitivity: Base Sensitivity Scenario

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km9-km16
Alternative: Alt1 Rehabilitation
Sensitivity: Cost +20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km9-km16
Alternative: Alt1 Rehabilitation
Sensitivity: Cost +20% and Traffice -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	8	419	105	30	563
	0	0	0	0	0
	8	419	105	30	563
2016	9	448	113	32	602
	0	0	0	0	0
	9	448	113	32	602
2017	9	471	118	33	632
	0	0	0	0	0
	9	471	118	33	632
2018	10	494	124	35	663
	0	0	0	0	0
	10	494	124	35	663
2019	10	519	131	36	696
	0	0	0	0	0
	10	519	131	36	696
2020	10	545	137	38	730
	0	0	0	0	0
	10	545	137	38	730
2021	11	572	144	39	766
	0	0	0	0	0
	11	572	144	39	766
2022	11	595	150	40	796
	0	0	0	0	0
	11	595	150	40	796
2023	11	619	156	41	827
	0	0	0	0	0
	11	619	156	41	827
2024	12	644	162	42	860
	0	0	0	0	0
	12	644	162	42	860
2025	12	669	168	43	893
	0	0	0	0	0
	12	669	168	43	893
2026	12	696	175	45	929
	0	0	0	0	0
	12	696	175	45	929
2027	13	724	182	46	965
	0	0	0	0	0
	13	724	182	46	965
2028	13	753	189	47	1,002
	0	0	0	0	0
	13	753	189	47	1,002
2029	13	783	197	48	1,041
	0	0	0	0	0
	13	783	197	48	1,041
2030	13	807	203	48	1,072
	0	0	0	0	0
	13	807	203	48	1,072

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	14	831	209	49	1,103
	0	0	0	0	0
	14	831	209	49	1,103
2032	14	856	215	50	1,135
	0	0	0	0	0
	14	856	215	50	1,135
2033	14	881	222	51	1,169
	0	0	0	0	0
	14	881	222	51	1,169
2034	15	908	228	52	1,203
	0	0	0	0	0
	15	908	228	52	1,203
Total	235	13,235	3,329	845	17,645
	0	0	0	0	0
	235	13,235	3,329	845	17,645

Section: Agara-Kornisi km9-km16
Alternative: Alt1 Rehabilitation
Sensitivity: Cost -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km9-km16
Alternative: Alt1 Rehabilitation
Sensitivity: Traffice +20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	13	629	158	45	845
	0	0	0	0	0
	13	629	158	45	845
2016	13	673	169	48	903
	0	0	0	0	0
	13	673	169	48	903
2017	14	706	178	50	948
	0	0	0	0	0
	14	706	178	50	948
2018	14	742	187	52	994
	0	0	0	0	0
	14	742	187	52	994
2019	15	779	196	54	1,044
	0	0	0	0	0
	15	779	196	54	1,044
2020	16	818	206	56	1,095
	0	0	0	0	0
	16	818	206	56	1,095
2021	16	858	216	58	1,148
	0	0	0	0	0
	16	858	216	58	1,148
2022	17	893	225	60	1,194
	0	0	0	0	0
	17	893	225	60	1,194
2023	17	928	234	61	1,241
	0	0	0	0	0
	17	928	234	61	1,241
2024	18	966	243	63	1,289
	0	0	0	0	0
	18	966	243	63	1,289
2025	18	1,004	253	65	1,340
	0	0	0	0	0
	18	1,004	253	65	1,340
2026	19	1,044	263	67	1,393
	0	0	0	0	0
	19	1,044	263	67	1,393
2027	19	1,086	273	69	1,447
	0	0	0	0	0
	19	1,086	273	69	1,447
2028	19	1,130	284	70	1,503
	0	0	0	0	0
	19	1,130	284	70	1,503
2029	20	1,175	296	71	1,561
	0	0	0	0	0
	20	1,175	296	71	1,561
2030	20	1,210	304	73	1,607
	0	0	0	0	0
	20	1,210	304	73	1,607

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	21	1,246	314	74	1,655
	0	0	0	0	0
	21	1,246	314	74	1,655
2032	21	1,284	323	76	1,703
	0	0	0	0	0
	21	1,284	323	76	1,703
2033	21	1,322	333	77	1,753
	0	0	0	0	0
	21	1,322	333	77	1,753
2034	22	1,362	343	79	1,805
	0	0	0	0	0
	22	1,362	343	79	1,805
Total	352	19,853	4,994	1,268	26,467
	0	0	0	0	0
	352	19,853	4,994	1,268	26,467

Section: Agara-Kornisi km9-km16
Alternative: Alt1 Rehabilitation
Sensitivity: Traffice -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	8	419	105	30	563
	0	0	0	0	0
	8	419	105	30	563
2016	9	448	113	32	602
	0	0	0	0	0
	9	448	113	32	602
2017	9	471	118	33	632
	0	0	0	0	0
	9	471	118	33	632
2018	10	494	124	35	663
	0	0	0	0	0
	10	494	124	35	663
2019	10	519	131	36	696
	0	0	0	0	0
	10	519	131	36	696
2020	10	545	137	38	730
	0	0	0	0	0
	10	545	137	38	730
2021	11	572	144	39	766
	0	0	0	0	0
	11	572	144	39	766
2022	11	595	150	40	796
	0	0	0	0	0
	11	595	150	40	796
2023	11	619	156	41	827
	0	0	0	0	0
	11	619	156	41	827
2024	12	644	162	42	860
	0	0	0	0	0
	12	644	162	42	860
2025	12	669	168	43	893
	0	0	0	0	0
	12	669	168	43	893
2026	12	696	175	45	929
	0	0	0	0	0
	12	696	175	45	929
2027	13	724	182	46	965
	0	0	0	0	0
	13	724	182	46	965
2028	13	753	189	47	1,002
	0	0	0	0	0
	13	753	189	47	1,002
2029	13	783	197	48	1,041
	0	0	0	0	0
	13	783	197	48	1,041
2030	13	807	203	48	1,072
	0	0	0	0	0
	13	807	203	48	1,072

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	14	831	209	49	1,103
	0	0	0	0	0
	14	831	209	49	1,103
2032	14	856	215	50	1,135
	0	0	0	0	0
	14	856	215	50	1,135
2033	14	881	222	51	1,169
	0	0	0	0	0
	14	881	222	51	1,169
2034	15	908	228	52	1,203
	0	0	0	0	0
	15	908	228	52	1,203
Total	235	13,235	3,329	845	17,645
	0	0	0	0	0
	235	13,235	3,329	845	17,645

Section: Agara-Kornisi km9-km16
Alternative: Alt2 Rehabilitation
Sensitivity: Base Sensitivity Scenario

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km9-km16
Alternative: Alt2 Rehabilitation
Sensitivity: Cost +20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km9-km16
Alternative: Alt2 Rehabilitation
Sensitivity: Cost +20% and Traffice -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	8	419	105	30	563
	0	0	0	0	0
	8	419	105	30	563
2016	9	448	113	32	602
	0	0	0	0	0
	9	448	113	32	602
2017	9	471	118	33	632
	0	0	0	0	0
	9	471	118	33	632
2018	10	494	124	35	663
	0	0	0	0	0
	10	494	124	35	663
2019	10	519	131	36	696
	0	0	0	0	0
	10	519	131	36	696
2020	10	545	137	38	730
	0	0	0	0	0
	10	545	137	38	730
2021	11	572	144	39	766
	0	0	0	0	0
	11	572	144	39	766
2022	11	595	150	40	796
	0	0	0	0	0
	11	595	150	40	796
2023	11	619	156	41	827
	0	0	0	0	0
	11	619	156	41	827
2024	12	644	162	42	860
	0	0	0	0	0
	12	644	162	42	860
2025	12	669	168	43	893
	0	0	0	0	0
	12	669	168	43	893
2026	12	696	175	45	929
	0	0	0	0	0
	12	696	175	45	929
2027	13	724	182	46	965
	0	0	0	0	0
	13	724	182	46	965
2028	13	753	189	47	1,002
	0	0	0	0	0
	13	753	189	47	1,002
2029	13	783	197	48	1,041
	0	0	0	0	0
	13	783	197	48	1,041
2030	13	807	203	48	1,072
	0	0	0	0	0
	13	807	203	48	1,072

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	14 0 14	831 0 831	209 0 209	49 0 49	1,103 0 1,103
2032	14 0 14	856 0 856	215 0 215	50 0 50	1,135 0 1,135
2033	14 0 14	881 0 881	222 0 222	51 0 51	1,169 0 1,169
2034	15 0 15	908 0 908	228 0 228	52 0 52	1,203 0 1,203
Total	235 0 235	13,235 0 13,235	3,329 0 3,329	845 0 845	17,645 0 17,645

Section: Agara-Kornisi km9-km16
Alternative: Alt2 Rehabilitation
Sensitivity: Cost -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km9-km16
Alternative: Alt2 Rehabilitation
Sensitivity: Traffice +20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	13	629	158	45	845
	0	0	0	0	0
	13	629	158	45	845
2016	13	673	169	48	903
	0	0	0	0	0
	13	673	169	48	903
2017	14	706	178	50	948
	0	0	0	0	0
	14	706	178	50	948
2018	14	742	187	52	994
	0	0	0	0	0
	14	742	187	52	994
2019	15	779	196	54	1,044
	0	0	0	0	0
	15	779	196	54	1,044
2020	16	818	206	56	1,095
	0	0	0	0	0
	16	818	206	56	1,095
2021	16	858	216	58	1,148
	0	0	0	0	0
	16	858	216	58	1,148
2022	17	893	225	60	1,194
	0	0	0	0	0
	17	893	225	60	1,194
2023	17	928	234	61	1,241
	0	0	0	0	0
	17	928	234	61	1,241
2024	18	966	243	63	1,289
	0	0	0	0	0
	18	966	243	63	1,289
2025	18	1,004	253	65	1,340
	0	0	0	0	0
	18	1,004	253	65	1,340
2026	19	1,044	263	67	1,393
	0	0	0	0	0
	19	1,044	263	67	1,393
2027	19	1,086	273	69	1,447
	0	0	0	0	0
	19	1,086	273	69	1,447
2028	19	1,130	284	70	1,503
	0	0	0	0	0
	19	1,130	284	70	1,503
2029	20	1,175	296	71	1,561
	0	0	0	0	0
	20	1,175	296	71	1,561
2030	20	1,210	304	73	1,607
	0	0	0	0	0
	20	1,210	304	73	1,607

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	21	1,246	314	74	1,655
	0	0	0	0	0
	21	1,246	314	74	1,655
2032	21	1,284	323	76	1,703
	0	0	0	0	0
	21	1,284	323	76	1,703
2033	21	1,322	333	77	1,753
	0	0	0	0	0
	21	1,322	333	77	1,753
2034	22	1,362	343	79	1,805
	0	0	0	0	0
	22	1,362	343	79	1,805
Total	352	19,853	4,994	1,268	26,467
	0	0	0	0	0
	352	19,853	4,994	1,268	26,467

Section: Agara-Kornisi km9-km16
Alternative: Alt2 Rehabilitation
Sensitivity: Traffice -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	8	419	105	30	563
	0	0	0	0	0
	8	419	105	30	563
2016	9	448	113	32	602
	0	0	0	0	0
	9	448	113	32	602
2017	9	471	118	33	632
	0	0	0	0	0
	9	471	118	33	632
2018	10	494	124	35	663
	0	0	0	0	0
	10	494	124	35	663
2019	10	519	131	36	696
	0	0	0	0	0
	10	519	131	36	696
2020	10	545	137	38	730
	0	0	0	0	0
	10	545	137	38	730
2021	11	572	144	39	766
	0	0	0	0	0
	11	572	144	39	766
2022	11	595	150	40	796
	0	0	0	0	0
	11	595	150	40	796
2023	11	619	156	41	827
	0	0	0	0	0
	11	619	156	41	827
2024	12	644	162	42	860
	0	0	0	0	0
	12	644	162	42	860
2025	12	669	168	43	893
	0	0	0	0	0
	12	669	168	43	893
2026	12	696	175	45	929
	0	0	0	0	0
	12	696	175	45	929
2027	13	724	182	46	965
	0	0	0	0	0
	13	724	182	46	965
2028	13	753	189	47	1,002
	0	0	0	0	0
	13	753	189	47	1,002
2029	13	783	197	48	1,041
	0	0	0	0	0
	13	783	197	48	1,041
2030	13	807	203	48	1,072
	0	0	0	0	0
	13	807	203	48	1,072

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	14	831	209	49	1,103
	0	0	0	0	0
	14	831	209	49	1,103
2032	14	856	215	50	1,135
	0	0	0	0	0
	14	856	215	50	1,135
2033	14	881	222	51	1,169
	0	0	0	0	0
	14	881	222	51	1,169
2034	15	908	228	52	1,203
	0	0	0	0	0
	15	908	228	52	1,203
Total	235	13,235	3,329	845	17,645
	0	0	0	0	0
	235	13,235	3,329	845	17,645

Section: Agara-Kornisi km9-km16
Alternative: Base
Sensitivity: Base Sensitivity Scenario

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km9-km16
Alternative: Base
Sensitivity: Cost +20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km9-km16
Alternative: Base
Sensitivity: Cost +20% and Traffice -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	8	419	105	30	563
	0	0	0	0	0
	8	419	105	30	563
2016	9	448	113	32	602
	0	0	0	0	0
	9	448	113	32	602
2017	9	471	118	33	632
	0	0	0	0	0
	9	471	118	33	632
2018	10	494	124	35	663
	0	0	0	0	0
	10	494	124	35	663
2019	10	519	131	36	696
	0	0	0	0	0
	10	519	131	36	696
2020	10	545	137	38	730
	0	0	0	0	0
	10	545	137	38	730
2021	11	572	144	39	766
	0	0	0	0	0
	11	572	144	39	766
2022	11	595	150	40	796
	0	0	0	0	0
	11	595	150	40	796
2023	11	619	156	41	827
	0	0	0	0	0
	11	619	156	41	827
2024	12	644	162	42	860
	0	0	0	0	0
	12	644	162	42	860
2025	12	669	168	43	893
	0	0	0	0	0
	12	669	168	43	893
2026	12	696	175	45	929
	0	0	0	0	0
	12	696	175	45	929
2027	13	724	182	46	965
	0	0	0	0	0
	13	724	182	46	965
2028	13	753	189	47	1,002
	0	0	0	0	0
	13	753	189	47	1,002
2029	13	783	197	48	1,041
	0	0	0	0	0
	13	783	197	48	1,041
2030	13	807	203	48	1,072
	0	0	0	0	0
	13	807	203	48	1,072

HDM-4 AADT Details for Section Alternatives (Graph)

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	14	831	209	49	1,103
	0	0	0	0	0
	14	831	209	49	1,103
2032	14	856	215	50	1,135
	0	0	0	0	0
	14	856	215	50	1,135
2033	14	881	222	51	1,169
	0	0	0	0	0
	14	881	222	51	1,169
2034	15	908	228	52	1,203
	0	0	0	0	0
	15	908	228	52	1,203
Total	235	13,235	3,329	845	17,645
	0	0	0	0	0
	235	13,235	3,329	845	17,645

Section: Agara-Kornisi km9-km16
Alternative: Base
Sensitivity: Cost -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	11	524	132	38	704
	0	0	0	0	0
	11	524	132	38	704
2016	11	560	141	40	752
	0	0	0	0	0
	11	560	141	40	752
2017	12	588	148	42	790
	0	0	0	0	0
	12	588	148	42	790
2018	12	618	155	43	829
	0	0	0	0	0
	12	618	155	43	829
2019	13	649	163	45	870
	0	0	0	0	0
	13	649	163	45	870
2020	13	681	171	47	913
	0	0	0	0	0
	13	681	171	47	913
2021	13	715	180	48	957
	0	0	0	0	0
	13	715	180	48	957
2022	14	744	187	50	995
	0	0	0	0	0
	14	744	187	50	995
2023	14	774	195	51	1,034
	0	0	0	0	0
	14	774	195	51	1,034
2024	15	805	202	53	1,074
	0	0	0	0	0
	15	805	202	53	1,074
2025	15	837	211	54	1,117
	0	0	0	0	0
	15	837	211	54	1,117
2026	16	870	219	56	1,161
	0	0	0	0	0
	16	870	219	56	1,161
2027	16	905	228	57	1,206
	0	0	0	0	0
	16	905	228	57	1,206
2028	16	941	237	58	1,253
	0	0	0	0	0
	16	941	237	58	1,253
2029	17	979	246	59	1,301
	0	0	0	0	0
	17	979	246	59	1,301
2030	17	1,008	254	61	1,339
	0	0	0	0	0
	17	1,008	254	61	1,339

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	17	1,039	261	62	1,379
	0	0	0	0	0
	17	1,039	261	62	1,379
2032	18	1,070	269	63	1,419
	0	0	0	0	0
	18	1,070	269	63	1,419
2033	18	1,102	277	64	1,461
	0	0	0	0	0
	18	1,102	277	64	1,461
2034	18	1,135	285	66	1,504
	0	0	0	0	0
	18	1,135	285	66	1,504
Total	294	16,544	4,162	1,057	22,056
	0	0	0	0	0
	294	16,544	4,162	1,057	22,056

Section: Agara-Kornisi km9-km16
Alternative: Base
Sensitivity: Traffice +20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	13	629	158	45	845
	0	0	0	0	0
	13	629	158	45	845
2016	13	673	169	48	903
	0	0	0	0	0
	13	673	169	48	903
2017	14	706	178	50	948
	0	0	0	0	0
	14	706	178	50	948
2018	14	742	187	52	994
	0	0	0	0	0
	14	742	187	52	994
2019	15	779	196	54	1,044
	0	0	0	0	0
	15	779	196	54	1,044
2020	16	818	206	56	1,095
	0	0	0	0	0
	16	818	206	56	1,095
2021	16	858	216	58	1,148
	0	0	0	0	0
	16	858	216	58	1,148
2022	17	893	225	60	1,194
	0	0	0	0	0
	17	893	225	60	1,194
2023	17	928	234	61	1,241
	0	0	0	0	0
	17	928	234	61	1,241
2024	18	966	243	63	1,289
	0	0	0	0	0
	18	966	243	63	1,289
2025	18	1,004	253	65	1,340
	0	0	0	0	0
	18	1,004	253	65	1,340
2026	19	1,044	263	67	1,393
	0	0	0	0	0
	19	1,044	263	67	1,393
2027	19	1,086	273	69	1,447
	0	0	0	0	0
	19	1,086	273	69	1,447
2028	19	1,130	284	70	1,503
	0	0	0	0	0
	19	1,130	284	70	1,503
2029	20	1,175	296	71	1,561
	0	0	0	0	0
	20	1,175	296	71	1,561
2030	20	1,210	304	73	1,607
	0	0	0	0	0
	20	1,210	304	73	1,607

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	21	1,246	314	74	1,655
	0	0	0	0	0
	21	1,246	314	74	1,655
2032	21	1,284	323	76	1,703
	0	0	0	0	0
	21	1,284	323	76	1,703
2033	21	1,322	333	77	1,753
	0	0	0	0	0
	21	1,322	333	77	1,753
2034	22	1,362	343	79	1,805
	0	0	0	0	0
	22	1,362	343	79	1,805
Total	352	19,853	4,994	1,268	26,467
	0	0	0	0	0
	352	19,853	4,994	1,268	26,467

Section: Agara-Kornisi km9-km16
Alternative: Base
Sensitivity: Traffice -20%

	Articulated Truck	Cars	Mini Bus	Truck	Total
2015	8	419	105	30	563
	0	0	0	0	0
	8	419	105	30	563
2016	9	448	113	32	602
	0	0	0	0	0
	9	448	113	32	602
2017	9	471	118	33	632
	0	0	0	0	0
	9	471	118	33	632
2018	10	494	124	35	663
	0	0	0	0	0
	10	494	124	35	663
2019	10	519	131	36	696
	0	0	0	0	0
	10	519	131	36	696
2020	10	545	137	38	730
	0	0	0	0	0
	10	545	137	38	730
2021	11	572	144	39	766
	0	0	0	0	0
	11	572	144	39	766
2022	11	595	150	40	796
	0	0	0	0	0
	11	595	150	40	796
2023	11	619	156	41	827
	0	0	0	0	0
	11	619	156	41	827
2024	12	644	162	42	860
	0	0	0	0	0
	12	644	162	42	860
2025	12	669	168	43	893
	0	0	0	0	0
	12	669	168	43	893
2026	12	696	175	45	929
	0	0	0	0	0
	12	696	175	45	929
2027	13	724	182	46	965
	0	0	0	0	0
	13	724	182	46	965
2028	13	753	189	47	1,002
	0	0	0	0	0
	13	753	189	47	1,002
2029	13	783	197	48	1,041
	0	0	0	0	0
	13	783	197	48	1,041
2030	13	807	203	48	1,072
	0	0	0	0	0
	13	807	203	48	1,072

HDM-4 AADT Details for Section Alternatives (Graph)

	Articulated Truck	Cars	Mini Bus	Truck	Total
2031	14	831	209	49	1,103
	0	0	0	0	0
	14	831	209	49	1,103
2032	14	856	215	50	1,135
	0	0	0	0	0
	14	856	215	50	1,135
2033	14	881	222	51	1,169
	0	0	0	0	0
	14	881	222	51	1,169
2034	15	908	228	52	1,203
	0	0	0	0	0
	15	908	228	52	1,203
Total	235	13,235	3,329	845	17,645
	0	0	0	0	0
	235	13,235	3,329	845	17,645

Road Agency and User Cost Streams (Undiscounted)

Study Name: **Agara-Kornisi km1-km4, km9-km16**

Run Date: **28-08-2014**

Currency: **Lari (millions)**

Section: Agara-Kornisi km1-4
Alternative: Alt1 Rehabilitation
Sensitivity: Base Sensitivity Scenario

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	1.565	0.001	0.000	1.567	0.469	0.253	0.000	0.000	0.722	0.000	2.289
2016	0.000	0.001	0.000	0.001	0.445	0.181	0.000	0.000	0.626	0.000	0.628
2017	0.000	0.001	0.000	0.001	0.467	0.190	0.000	0.000	0.658	0.000	0.659
2018	0.000	0.001	0.000	0.001	0.490	0.200	0.000	0.000	0.690	0.000	0.691
2019	0.000	0.001	0.000	0.001	0.514	0.210	0.000	0.000	0.724	0.000	0.725
2020	0.000	0.001	0.000	0.001	0.539	0.220	0.000	0.000	0.759	0.000	0.760
2021	0.000	0.001	0.000	0.001	0.564	0.231	0.000	0.000	0.795	0.000	0.797
2022	0.000	0.001	0.000	0.001	0.586	0.240	0.000	0.000	0.826	0.000	0.828
2023	0.000	0.001	0.000	0.001	0.609	0.250	0.000	0.000	0.859	0.000	0.860
2024	0.000	0.001	0.000	0.001	0.632	0.260	0.000	0.000	0.892	0.000	0.893
2025	0.000	0.001	0.000	0.001	0.657	0.270	0.000	0.000	0.927	0.000	0.928
2026	0.000	0.001	0.000	0.001	0.682	0.281	0.000	0.000	0.963	0.000	0.964
2027	0.000	0.001	0.000	0.001	0.707	0.292	0.000	0.000	1.000	0.000	1.001
2028	0.000	0.001	0.000	0.001	0.734	0.304	0.000	0.000	1.038	0.000	1.039
2029	0.000	0.001	0.000	0.001	0.761	0.316	0.000	0.000	1.077	0.000	1.078
2030	0.000	0.001	0.000	0.001	0.783	0.325	0.000	0.000	1.108	0.000	1.110
2031	0.000	0.001	0.000	0.001	0.805	0.335	0.000	0.000	1.141	0.000	1.142
2032	0.000	0.001	0.000	0.001	0.829	0.345	0.000	0.000	1.174	0.000	1.175
2033	0.000	0.001	0.000	0.001	0.852	0.356	0.000	0.000	1.208	0.000	1.209

HDM-4 Road Agency and User Cost Streams (Undiscounted)

2034	0.000	0.001	0.000	0.001	0.877	0.366	0.000	0.000	1.243	0.000	1.244
Total:	1.565	0.026	0.000	1.591	13.002	5.428	0.000	0.000	18.430	0.000	20.021

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km1-4
Alternative: Alt1 Rehabilitation
Sensitivity: Cost +20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	1.565	0.001	0.000	1.567	0.469	0.253	0.000	0.000	0.722	0.000	2.289
2016	0.000	0.001	0.000	0.001	0.445	0.181	0.000	0.000	0.626	0.000	0.628
2017	0.000	0.001	0.000	0.001	0.467	0.190	0.000	0.000	0.658	0.000	0.659
2018	0.000	0.001	0.000	0.001	0.490	0.200	0.000	0.000	0.690	0.000	0.691
2019	0.000	0.001	0.000	0.001	0.514	0.210	0.000	0.000	0.724	0.000	0.725
2020	0.000	0.001	0.000	0.001	0.539	0.220	0.000	0.000	0.759	0.000	0.760
2021	0.000	0.001	0.000	0.001	0.564	0.231	0.000	0.000	0.795	0.000	0.797
2022	0.000	0.001	0.000	0.001	0.586	0.240	0.000	0.000	0.826	0.000	0.828
2023	0.000	0.001	0.000	0.001	0.609	0.250	0.000	0.000	0.859	0.000	0.860
2024	0.000	0.001	0.000	0.001	0.632	0.260	0.000	0.000	0.892	0.000	0.893
2025	0.000	0.001	0.000	0.001	0.657	0.270	0.000	0.000	0.927	0.000	0.928
2026	0.000	0.001	0.000	0.001	0.682	0.281	0.000	0.000	0.963	0.000	0.964
2027	0.000	0.001	0.000	0.001	0.707	0.292	0.000	0.000	1.000	0.000	1.001
2028	0.000	0.001	0.000	0.001	0.734	0.304	0.000	0.000	1.038	0.000	1.039
2029	0.000	0.001	0.000	0.001	0.761	0.316	0.000	0.000	1.077	0.000	1.078
2030	0.000	0.001	0.000	0.001	0.783	0.325	0.000	0.000	1.108	0.000	1.110
2031	0.000	0.001	0.000	0.001	0.805	0.335	0.000	0.000	1.141	0.000	1.142
2032	0.000	0.001	0.000	0.001	0.829	0.345	0.000	0.000	1.174	0.000	1.175
2033	0.000	0.001	0.000	0.001	0.852	0.356	0.000	0.000	1.208	0.000	1.209
2034	0.000	0.001	0.000	0.001	0.877	0.366	0.000	0.000	1.243	0.000	1.244
Total:	1.565	0.026	0.000	1.591	13.002	5.428	0.000	0.000	18.430	0.000	20.021

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km1-4
Alternative: Alt1 Rehabilitation
Sensitivity: Cost +20% and Traffice -20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	1.565	0.001	0.000	1.567	0.375	0.202	0.000	0.000	0.578	0.000	2.144
2016	0.000	0.001	0.000	0.001	0.356	0.145	0.000	0.000	0.501	0.000	0.502
2017	0.000	0.001	0.000	0.001	0.374	0.152	0.000	0.000	0.526	0.000	0.528
2018	0.000	0.001	0.000	0.001	0.392	0.160	0.000	0.000	0.552	0.000	0.553
2019	0.000	0.001	0.000	0.001	0.411	0.168	0.000	0.000	0.579	0.000	0.580
2020	0.000	0.001	0.000	0.001	0.431	0.176	0.000	0.000	0.607	0.000	0.609
2021	0.000	0.001	0.000	0.001	0.451	0.185	0.000	0.000	0.636	0.000	0.638
2022	0.000	0.001	0.000	0.001	0.469	0.192	0.000	0.000	0.661	0.000	0.662
2023	0.000	0.001	0.000	0.001	0.487	0.200	0.000	0.000	0.687	0.000	0.688
2024	0.000	0.001	0.000	0.001	0.506	0.208	0.000	0.000	0.714	0.000	0.715
2025	0.000	0.001	0.000	0.001	0.525	0.216	0.000	0.000	0.742	0.000	0.743
2026	0.000	0.001	0.000	0.001	0.545	0.225	0.000	0.000	0.770	0.000	0.772
2027	0.000	0.001	0.000	0.001	0.566	0.234	0.000	0.000	0.800	0.000	0.801
2028	0.000	0.001	0.000	0.001	0.587	0.243	0.000	0.000	0.830	0.000	0.831
2029	0.000	0.001	0.000	0.001	0.609	0.253	0.000	0.000	0.862	0.000	0.863
2030	0.000	0.001	0.000	0.001	0.626	0.260	0.000	0.000	0.887	0.000	0.888
2031	0.000	0.001	0.000	0.001	0.644	0.268	0.000	0.000	0.912	0.000	0.914
2032	0.000	0.001	0.000	0.001	0.663	0.276	0.000	0.000	0.939	0.000	0.940
2033	0.000	0.001	0.000	0.001	0.682	0.284	0.000	0.000	0.966	0.000	0.968
2034	0.000	0.001	0.000	0.001	0.702	0.293	0.000	0.000	0.994	0.000	0.996
Total:	1.565	0.026	0.000	1.591	10.401	4.342	0.000	0.000	14.743	0.000	16.334

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km1-4
Alternative: Alt1 Rehabilitation
Sensitivity: Cost -20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	1.565	0.001	0.000	1.567	0.469	0.253	0.000	0.000	0.722	0.000	2.289
2016	0.000	0.001	0.000	0.001	0.445	0.181	0.000	0.000	0.626	0.000	0.628
2017	0.000	0.001	0.000	0.001	0.467	0.190	0.000	0.000	0.658	0.000	0.659
2018	0.000	0.001	0.000	0.001	0.490	0.200	0.000	0.000	0.690	0.000	0.691
2019	0.000	0.001	0.000	0.001	0.514	0.210	0.000	0.000	0.724	0.000	0.725
2020	0.000	0.001	0.000	0.001	0.539	0.220	0.000	0.000	0.759	0.000	0.760
2021	0.000	0.001	0.000	0.001	0.564	0.231	0.000	0.000	0.795	0.000	0.797
2022	0.000	0.001	0.000	0.001	0.586	0.240	0.000	0.000	0.826	0.000	0.828
2023	0.000	0.001	0.000	0.001	0.609	0.250	0.000	0.000	0.859	0.000	0.860
2024	0.000	0.001	0.000	0.001	0.632	0.260	0.000	0.000	0.892	0.000	0.893
2025	0.000	0.001	0.000	0.001	0.657	0.270	0.000	0.000	0.927	0.000	0.928
2026	0.000	0.001	0.000	0.001	0.682	0.281	0.000	0.000	0.963	0.000	0.964
2027	0.000	0.001	0.000	0.001	0.707	0.292	0.000	0.000	1.000	0.000	1.001
2028	0.000	0.001	0.000	0.001	0.734	0.304	0.000	0.000	1.038	0.000	1.039
2029	0.000	0.001	0.000	0.001	0.761	0.316	0.000	0.000	1.077	0.000	1.078
2030	0.000	0.001	0.000	0.001	0.783	0.325	0.000	0.000	1.108	0.000	1.110
2031	0.000	0.001	0.000	0.001	0.805	0.335	0.000	0.000	1.141	0.000	1.142
2032	0.000	0.001	0.000	0.001	0.829	0.345	0.000	0.000	1.174	0.000	1.175
2033	0.000	0.001	0.000	0.001	0.852	0.356	0.000	0.000	1.208	0.000	1.209
2034	0.000	0.001	0.000	0.001	0.877	0.366	0.000	0.000	1.243	0.000	1.244
Total:	1.565	0.026	0.000	1.591	13.002	5.428	0.000	0.000	18.430	0.000	20.021

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km1-4
Alternative: Alt1 Rehabilitation
Sensitivity: Traffice +20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	1.565	0.001	0.000	1.567	0.563	0.304	0.000	0.000	0.867	0.000	2.433
2016	0.000	0.001	0.000	0.001	0.534	0.218	0.000	0.000	0.752	0.000	0.753
2017	0.000	0.001	0.000	0.001	0.561	0.228	0.000	0.000	0.789	0.000	0.791
2018	0.000	0.001	0.000	0.001	0.588	0.240	0.000	0.000	0.828	0.000	0.829
2019	0.000	0.001	0.000	0.001	0.617	0.252	0.000	0.000	0.868	0.000	0.870
2020	0.000	0.001	0.000	0.001	0.647	0.264	0.000	0.000	0.911	0.000	0.912
2021	0.000	0.001	0.000	0.001	0.677	0.277	0.000	0.000	0.955	0.000	0.956
2022	0.000	0.001	0.000	0.001	0.703	0.289	0.000	0.000	0.992	0.000	0.993
2023	0.000	0.001	0.000	0.001	0.730	0.300	0.000	0.000	1.030	0.000	1.032
2024	0.000	0.001	0.000	0.001	0.759	0.312	0.000	0.000	1.071	0.000	1.072
2025	0.000	0.001	0.000	0.001	0.788	0.324	0.000	0.000	1.112	0.000	1.114
2026	0.000	0.001	0.000	0.001	0.818	0.337	0.000	0.000	1.156	0.000	1.157
2027	0.000	0.001	0.000	0.001	0.849	0.351	0.000	0.000	1.200	0.000	1.201
2028	0.000	0.001	0.000	0.001	0.880	0.365	0.000	0.000	1.245	0.000	1.246
2029	0.000	0.001	0.000	0.001	0.913	0.379	0.000	0.000	1.293	0.000	1.294
2030	0.000	0.001	0.000	0.001	0.940	0.391	0.000	0.000	1.330	0.000	1.331
2031	0.000	0.001	0.000	0.001	0.967	0.402	0.000	0.000	1.369	0.000	1.370
2032	0.000	0.001	0.000	0.001	0.994	0.414	0.000	0.000	1.409	0.000	1.410
2033	0.000	0.001	0.000	0.001	1.023	0.427	0.000	0.000	1.450	0.000	1.451
2034	0.000	0.001	0.000	0.001	1.052	0.439	0.000	0.000	1.492	0.000	1.493
Total:	1.565	0.026	0.000	1.591	15.603	6.513	0.000	0.000	22.116	0.000	23.707

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km1-4
Alternative: Alt1 Rehabilitation
Sensitivity: Traffice -20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	1.565	0.001	0.000	1.567	0.375	0.202	0.000	0.000	0.578	0.000	2.144
2016	0.000	0.001	0.000	0.001	0.356	0.145	0.000	0.000	0.501	0.000	0.502
2017	0.000	0.001	0.000	0.001	0.374	0.152	0.000	0.000	0.526	0.000	0.528
2018	0.000	0.001	0.000	0.001	0.392	0.160	0.000	0.000	0.552	0.000	0.553
2019	0.000	0.001	0.000	0.001	0.411	0.168	0.000	0.000	0.579	0.000	0.580
2020	0.000	0.001	0.000	0.001	0.431	0.176	0.000	0.000	0.607	0.000	0.609
2021	0.000	0.001	0.000	0.001	0.451	0.185	0.000	0.000	0.636	0.000	0.638
2022	0.000	0.001	0.000	0.001	0.469	0.192	0.000	0.000	0.661	0.000	0.662
2023	0.000	0.001	0.000	0.001	0.487	0.200	0.000	0.000	0.687	0.000	0.688
2024	0.000	0.001	0.000	0.001	0.506	0.208	0.000	0.000	0.714	0.000	0.715
2025	0.000	0.001	0.000	0.001	0.525	0.216	0.000	0.000	0.742	0.000	0.743
2026	0.000	0.001	0.000	0.001	0.545	0.225	0.000	0.000	0.770	0.000	0.772
2027	0.000	0.001	0.000	0.001	0.566	0.234	0.000	0.000	0.800	0.000	0.801
2028	0.000	0.001	0.000	0.001	0.587	0.243	0.000	0.000	0.830	0.000	0.831
2029	0.000	0.001	0.000	0.001	0.609	0.253	0.000	0.000	0.862	0.000	0.863
2030	0.000	0.001	0.000	0.001	0.626	0.260	0.000	0.000	0.887	0.000	0.888
2031	0.000	0.001	0.000	0.001	0.644	0.268	0.000	0.000	0.912	0.000	0.914
2032	0.000	0.001	0.000	0.001	0.663	0.276	0.000	0.000	0.939	0.000	0.940
2033	0.000	0.001	0.000	0.001	0.682	0.284	0.000	0.000	0.966	0.000	0.968
2034	0.000	0.001	0.000	0.001	0.702	0.293	0.000	0.000	0.994	0.000	0.996
Total:	1.565	0.026	0.000	1.591	10.401	4.342	0.000	0.000	14.743	0.000	16.334

Section: Agara-Kornisi km1-4
Alternative: Alt2 Rehabilitation
Sensitivity: Base Sensitivity Scenario

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	1.706	0.001	0.000	1.708	0.469	0.253	0.000	0.000	0.722	0.000	2.430
2016	0.000	0.001	0.000	0.001	0.445	0.181	0.000	0.000	0.626	0.000	0.628
2017	0.000	0.001	0.000	0.001	0.467	0.190	0.000	0.000	0.658	0.000	0.659
2018	0.000	0.001	0.000	0.001	0.490	0.200	0.000	0.000	0.690	0.000	0.691
2019	0.000	0.001	0.000	0.001	0.514	0.210	0.000	0.000	0.724	0.000	0.725
2020	0.000	0.001	0.000	0.001	0.539	0.220	0.000	0.000	0.759	0.000	0.760
2021	0.000	0.001	0.000	0.001	0.564	0.231	0.000	0.000	0.795	0.000	0.797
2022	0.000	0.001	0.000	0.001	0.586	0.240	0.000	0.000	0.826	0.000	0.828
2023	0.000	0.001	0.000	0.001	0.609	0.250	0.000	0.000	0.859	0.000	0.860
2024	0.000	0.001	0.000	0.001	0.632	0.260	0.000	0.000	0.892	0.000	0.894
2025	0.000	0.001	0.000	0.001	0.657	0.270	0.000	0.000	0.927	0.000	0.928
2026	0.000	0.024	0.000	0.024	0.682	0.281	0.000	0.000	0.963	0.000	0.988
2027	0.000	0.001	0.000	0.001	0.708	0.292	0.000	0.000	1.000	0.000	1.001
2028	0.000	0.024	0.000	0.024	0.734	0.304	0.000	0.000	1.038	0.000	1.062
2029	0.000	0.001	0.000	0.001	0.762	0.316	0.000	0.000	1.078	0.000	1.079
2030	0.000	0.024	0.000	0.024	0.784	0.325	0.000	0.000	1.109	0.000	1.134
2031	0.000	0.001	0.000	0.001	0.806	0.335	0.000	0.000	1.142	0.000	1.143
2032	0.000	0.024	0.000	0.024	0.830	0.345	0.000	0.000	1.175	0.000	1.200
2033	0.000	0.001	0.000	0.001	0.854	0.356	0.000	0.000	1.210	0.000	1.211
2034	0.000	0.024	0.000	0.024	0.880	0.366	0.000	0.000	1.246	0.000	1.270
Total:	1.706	0.141	0.000	1.847	13.013	5.428	0.000	0.000	18.441	0.000	20.288

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km1-4
Alternative: Alt2 Rehabilitation
Sensitivity: Cost +20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	1.706	0.001	0.000	1.708	0.469	0.253	0.000	0.000	0.722	0.000	2.430
2016	0.000	0.001	0.000	0.001	0.445	0.181	0.000	0.000	0.626	0.000	0.628
2017	0.000	0.001	0.000	0.001	0.467	0.190	0.000	0.000	0.658	0.000	0.659
2018	0.000	0.001	0.000	0.001	0.490	0.200	0.000	0.000	0.690	0.000	0.691
2019	0.000	0.001	0.000	0.001	0.514	0.210	0.000	0.000	0.724	0.000	0.725
2020	0.000	0.001	0.000	0.001	0.539	0.220	0.000	0.000	0.759	0.000	0.760
2021	0.000	0.001	0.000	0.001	0.564	0.231	0.000	0.000	0.795	0.000	0.797
2022	0.000	0.001	0.000	0.001	0.586	0.240	0.000	0.000	0.826	0.000	0.828
2023	0.000	0.001	0.000	0.001	0.609	0.250	0.000	0.000	0.859	0.000	0.860
2024	0.000	0.001	0.000	0.001	0.632	0.260	0.000	0.000	0.892	0.000	0.894
2025	0.000	0.001	0.000	0.001	0.657	0.270	0.000	0.000	0.927	0.000	0.928
2026	0.000	0.024	0.000	0.024	0.682	0.281	0.000	0.000	0.963	0.000	0.988
2027	0.000	0.001	0.000	0.001	0.708	0.292	0.000	0.000	1.000	0.000	1.001
2028	0.000	0.024	0.000	0.024	0.734	0.304	0.000	0.000	1.038	0.000	1.062
2029	0.000	0.001	0.000	0.001	0.762	0.316	0.000	0.000	1.078	0.000	1.079
2030	0.000	0.024	0.000	0.024	0.784	0.325	0.000	0.000	1.109	0.000	1.134
2031	0.000	0.001	0.000	0.001	0.806	0.335	0.000	0.000	1.142	0.000	1.143
2032	0.000	0.024	0.000	0.024	0.830	0.345	0.000	0.000	1.175	0.000	1.200
2033	0.000	0.001	0.000	0.001	0.854	0.356	0.000	0.000	1.210	0.000	1.211
2034	0.000	0.024	0.000	0.024	0.880	0.366	0.000	0.000	1.246	0.000	1.270
Total:	1.706	0.141	0.000	1.847	13.013	5.428	0.000	0.000	18.441	0.000	20.288

Section: Agara-Kornisi km1-4
Alternative: Alt2 Rehabilitation
Sensitivity: Cost +20% and Traffice -20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	1.706	0.001	0.000	1.708	0.375	0.202	0.000	0.000	0.578	0.000	2.285
2016	0.000	0.001	0.000	0.001	0.356	0.145	0.000	0.000	0.501	0.000	0.502
2017	0.000	0.001	0.000	0.001	0.374	0.152	0.000	0.000	0.526	0.000	0.528
2018	0.000	0.001	0.000	0.001	0.392	0.160	0.000	0.000	0.552	0.000	0.553
2019	0.000	0.001	0.000	0.001	0.411	0.168	0.000	0.000	0.579	0.000	0.580
2020	0.000	0.001	0.000	0.001	0.431	0.176	0.000	0.000	0.607	0.000	0.609
2021	0.000	0.001	0.000	0.001	0.451	0.185	0.000	0.000	0.636	0.000	0.638
2022	0.000	0.001	0.000	0.001	0.469	0.192	0.000	0.000	0.661	0.000	0.662
2023	0.000	0.001	0.000	0.001	0.487	0.200	0.000	0.000	0.687	0.000	0.688
2024	0.000	0.001	0.000	0.001	0.506	0.208	0.000	0.000	0.714	0.000	0.715
2025	0.000	0.001	0.000	0.001	0.525	0.216	0.000	0.000	0.742	0.000	0.743
2026	0.000	0.024	0.000	0.024	0.546	0.225	0.000	0.000	0.771	0.000	0.795
2027	0.000	0.001	0.000	0.001	0.566	0.234	0.000	0.000	0.800	0.000	0.801
2028	0.000	0.024	0.000	0.024	0.587	0.243	0.000	0.000	0.830	0.000	0.855
2029	0.000	0.001	0.000	0.001	0.609	0.253	0.000	0.000	0.862	0.000	0.863
2030	0.000	0.024	0.000	0.024	0.627	0.260	0.000	0.000	0.887	0.000	0.912
2031	0.000	0.001	0.000	0.001	0.645	0.268	0.000	0.000	0.913	0.000	0.914
2032	0.000	0.024	0.000	0.024	0.664	0.276	0.000	0.000	0.940	0.000	0.964
2033	0.000	0.001	0.000	0.001	0.683	0.284	0.000	0.000	0.968	0.000	0.969
2034	0.000	0.024	0.000	0.024	0.703	0.293	0.000	0.000	0.996	0.000	1.021
Total:	1.706	0.141	0.000	1.847	10.408	4.342	0.000	0.000	14.751	0.000	16.598

Section: Agara-Kornisi km1-4
Alternative: Alt2 Rehabilitation
Sensitivity: Cost -20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	1.706	0.001	0.000	1.708	0.469	0.253	0.000	0.000	0.722	0.000	2.430
2016	0.000	0.001	0.000	0.001	0.445	0.181	0.000	0.000	0.626	0.000	0.628
2017	0.000	0.001	0.000	0.001	0.467	0.190	0.000	0.000	0.658	0.000	0.659
2018	0.000	0.001	0.000	0.001	0.490	0.200	0.000	0.000	0.690	0.000	0.691
2019	0.000	0.001	0.000	0.001	0.514	0.210	0.000	0.000	0.724	0.000	0.725
2020	0.000	0.001	0.000	0.001	0.539	0.220	0.000	0.000	0.759	0.000	0.760
2021	0.000	0.001	0.000	0.001	0.564	0.231	0.000	0.000	0.795	0.000	0.797
2022	0.000	0.001	0.000	0.001	0.586	0.240	0.000	0.000	0.826	0.000	0.828
2023	0.000	0.001	0.000	0.001	0.609	0.250	0.000	0.000	0.859	0.000	0.860
2024	0.000	0.001	0.000	0.001	0.632	0.260	0.000	0.000	0.892	0.000	0.894
2025	0.000	0.001	0.000	0.001	0.657	0.270	0.000	0.000	0.927	0.000	0.928
2026	0.000	0.024	0.000	0.024	0.682	0.281	0.000	0.000	0.963	0.000	0.988
2027	0.000	0.001	0.000	0.001	0.708	0.292	0.000	0.000	1.000	0.000	1.001
2028	0.000	0.024	0.000	0.024	0.734	0.304	0.000	0.000	1.038	0.000	1.062
2029	0.000	0.001	0.000	0.001	0.762	0.316	0.000	0.000	1.078	0.000	1.079
2030	0.000	0.024	0.000	0.024	0.784	0.325	0.000	0.000	1.109	0.000	1.134
2031	0.000	0.001	0.000	0.001	0.806	0.335	0.000	0.000	1.142	0.000	1.143
2032	0.000	0.024	0.000	0.024	0.830	0.345	0.000	0.000	1.175	0.000	1.200
2033	0.000	0.001	0.000	0.001	0.854	0.356	0.000	0.000	1.210	0.000	1.211
2034	0.000	0.024	0.000	0.024	0.880	0.366	0.000	0.000	1.246	0.000	1.270
Total:	1.706	0.141	0.000	1.847	13.013	5.428	0.000	0.000	18.441	0.000	20.288

Section: Agara-Kornisi km1-4
Alternative: Alt2 Rehabilitation
Sensitivity: Traffice +20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	1.706	0.001	0.000	1.708	0.563	0.304	0.000	0.000	0.867	0.000	2.574
2016	0.000	0.001	0.000	0.001	0.534	0.218	0.000	0.000	0.752	0.000	0.753
2017	0.000	0.001	0.000	0.001	0.561	0.228	0.000	0.000	0.789	0.000	0.791
2018	0.000	0.001	0.000	0.001	0.588	0.240	0.000	0.000	0.828	0.000	0.829
2019	0.000	0.001	0.000	0.001	0.617	0.252	0.000	0.000	0.869	0.000	0.870
2020	0.000	0.001	0.000	0.001	0.647	0.264	0.000	0.000	0.911	0.000	0.912
2021	0.000	0.001	0.000	0.001	0.677	0.277	0.000	0.000	0.955	0.000	0.956
2022	0.000	0.001	0.000	0.001	0.703	0.289	0.000	0.000	0.992	0.000	0.993
2023	0.000	0.001	0.000	0.001	0.730	0.300	0.000	0.000	1.030	0.000	1.032
2024	0.000	0.001	0.000	0.001	0.759	0.312	0.000	0.000	1.071	0.000	1.072
2025	0.000	0.001	0.000	0.001	0.788	0.324	0.000	0.000	1.113	0.000	1.114
2026	0.000	0.024	0.000	0.024	0.819	0.337	0.000	0.000	1.156	0.000	1.180
2027	0.000	0.001	0.000	0.001	0.849	0.351	0.000	0.000	1.200	0.000	1.201
2028	0.000	0.024	0.000	0.024	0.881	0.365	0.000	0.000	1.246	0.000	1.270
2029	0.000	0.001	0.000	0.001	0.914	0.379	0.000	0.000	1.293	0.000	1.295
2030	0.000	0.024	0.000	0.024	0.941	0.391	0.000	0.000	1.331	0.000	1.356
2031	0.000	0.001	0.000	0.001	0.968	0.402	0.000	0.000	1.370	0.000	1.371
2032	0.000	0.024	0.000	0.024	0.996	0.414	0.000	0.000	1.411	0.000	1.435
2033	0.000	0.001	0.000	0.001	1.025	0.427	0.000	0.000	1.452	0.000	1.453
2034	0.000	0.024	0.000	0.024	1.056	0.439	0.000	0.000	1.495	0.000	1.520
Total:	1.706	0.141	0.000	1.847	15.616	6.514	0.000	0.000	22.130	0.000	23.977

Section: Agara-Kornisi km1-4
Alternative: Alt2 Rehabilitation
Sensitivity: Traffice -20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	1.706	0.001	0.000	1.708	0.375	0.202	0.000	0.000	0.578	0.000	2.285
2016	0.000	0.001	0.000	0.001	0.356	0.145	0.000	0.000	0.501	0.000	0.502
2017	0.000	0.001	0.000	0.001	0.374	0.152	0.000	0.000	0.526	0.000	0.528
2018	0.000	0.001	0.000	0.001	0.392	0.160	0.000	0.000	0.552	0.000	0.553
2019	0.000	0.001	0.000	0.001	0.411	0.168	0.000	0.000	0.579	0.000	0.580
2020	0.000	0.001	0.000	0.001	0.431	0.176	0.000	0.000	0.607	0.000	0.609
2021	0.000	0.001	0.000	0.001	0.451	0.185	0.000	0.000	0.636	0.000	0.638
2022	0.000	0.001	0.000	0.001	0.469	0.192	0.000	0.000	0.661	0.000	0.662
2023	0.000	0.001	0.000	0.001	0.487	0.200	0.000	0.000	0.687	0.000	0.688
2024	0.000	0.001	0.000	0.001	0.506	0.208	0.000	0.000	0.714	0.000	0.715
2025	0.000	0.001	0.000	0.001	0.525	0.216	0.000	0.000	0.742	0.000	0.743
2026	0.000	0.024	0.000	0.024	0.546	0.225	0.000	0.000	0.771	0.000	0.795
2027	0.000	0.001	0.000	0.001	0.566	0.234	0.000	0.000	0.800	0.000	0.801
2028	0.000	0.024	0.000	0.024	0.587	0.243	0.000	0.000	0.830	0.000	0.855
2029	0.000	0.001	0.000	0.001	0.609	0.253	0.000	0.000	0.862	0.000	0.863
2030	0.000	0.024	0.000	0.024	0.627	0.260	0.000	0.000	0.887	0.000	0.912
2031	0.000	0.001	0.000	0.001	0.645	0.268	0.000	0.000	0.913	0.000	0.914
2032	0.000	0.024	0.000	0.024	0.664	0.276	0.000	0.000	0.940	0.000	0.964
2033	0.000	0.001	0.000	0.001	0.683	0.284	0.000	0.000	0.968	0.000	0.969
2034	0.000	0.024	0.000	0.024	0.703	0.293	0.000	0.000	0.996	0.000	1.021
Total:	1.706	0.141	0.000	1.847	10.408	4.342	0.000	0.000	14.751	0.000	16.598

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km1-4
Alternative: Base
Sensitivity: Base Sensitivity Scenario

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	0.000	0.002	0.000	0.002	0.469	0.253	0.000	0.000	0.722	0.000	0.724
2016	0.000	0.001	0.000	0.001	0.502	0.271	0.000	0.000	0.773	0.000	0.774
2017	0.000	0.001	0.000	0.001	0.530	0.284	0.000	0.000	0.814	0.000	0.816
2018	0.000	0.001	0.000	0.001	0.559	0.298	0.000	0.000	0.857	0.000	0.859
2019	0.000	0.001	0.000	0.001	0.589	0.313	0.000	0.000	0.902	0.000	0.903
2020	0.000	0.002	0.000	0.002	0.620	0.329	0.000	0.000	0.949	0.000	0.950
2021	0.000	0.002	0.000	0.002	0.652	0.345	0.000	0.000	0.997	0.000	0.999
2022	0.000	0.002	0.000	0.002	0.680	0.359	0.000	0.000	1.039	0.000	1.041
2023	0.000	0.002	0.000	0.002	0.709	0.374	0.000	0.000	1.083	0.000	1.084
2024	0.000	0.002	0.000	0.002	0.740	0.388	0.000	0.000	1.128	0.000	1.130
2025	0.000	0.002	0.000	0.002	0.772	0.404	0.000	0.000	1.176	0.000	1.178
2026	0.000	0.002	0.000	0.002	0.806	0.420	0.000	0.000	1.226	0.000	1.228
2027	0.000	0.002	0.000	0.002	0.840	0.437	0.000	0.000	1.277	0.000	1.279
2028	0.000	0.002	0.000	0.002	0.876	0.455	0.000	0.000	1.330	0.000	1.332
2029	0.000	0.002	0.000	0.002	0.913	0.473	0.000	0.000	1.386	0.000	1.388
2030	0.000	0.002	0.000	0.002	0.945	0.487	0.000	0.000	1.432	0.000	1.434
2031	0.000	0.002	0.000	0.002	0.978	0.502	0.000	0.000	1.480	0.000	1.481
2032	0.000	0.002	0.000	0.002	1.012	0.517	0.000	0.000	1.529	0.000	1.531
2033	0.000	0.002	0.000	0.002	1.047	0.533	0.000	0.000	1.580	0.000	1.582
2034	0.000	0.002	0.000	0.002	1.084	0.550	0.000	0.000	1.634	0.000	1.636
Total:	0.000	0.032	0.000	0.032	15.322	7.994	0.000	0.000	23.316	0.000	23.348

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km1-4
Alternative: Base
Sensitivity: Cost +20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	0.000	0.002	0.000	0.002	0.469	0.253	0.000	0.000	0.722	0.000	0.724
2016	0.000	0.001	0.000	0.001	0.502	0.271	0.000	0.000	0.773	0.000	0.774
2017	0.000	0.001	0.000	0.001	0.530	0.284	0.000	0.000	0.814	0.000	0.816
2018	0.000	0.001	0.000	0.001	0.559	0.298	0.000	0.000	0.857	0.000	0.859
2019	0.000	0.001	0.000	0.001	0.589	0.313	0.000	0.000	0.902	0.000	0.903
2020	0.000	0.002	0.000	0.002	0.620	0.329	0.000	0.000	0.949	0.000	0.950
2021	0.000	0.002	0.000	0.002	0.652	0.345	0.000	0.000	0.997	0.000	0.999
2022	0.000	0.002	0.000	0.002	0.680	0.359	0.000	0.000	1.039	0.000	1.041
2023	0.000	0.002	0.000	0.002	0.709	0.374	0.000	0.000	1.083	0.000	1.084
2024	0.000	0.002	0.000	0.002	0.740	0.388	0.000	0.000	1.128	0.000	1.130
2025	0.000	0.002	0.000	0.002	0.772	0.404	0.000	0.000	1.176	0.000	1.178
2026	0.000	0.002	0.000	0.002	0.806	0.420	0.000	0.000	1.226	0.000	1.228
2027	0.000	0.002	0.000	0.002	0.840	0.437	0.000	0.000	1.277	0.000	1.279
2028	0.000	0.002	0.000	0.002	0.876	0.455	0.000	0.000	1.330	0.000	1.332
2029	0.000	0.002	0.000	0.002	0.913	0.473	0.000	0.000	1.386	0.000	1.388
2030	0.000	0.002	0.000	0.002	0.945	0.487	0.000	0.000	1.432	0.000	1.434
2031	0.000	0.002	0.000	0.002	0.978	0.502	0.000	0.000	1.480	0.000	1.481
2032	0.000	0.002	0.000	0.002	1.012	0.517	0.000	0.000	1.529	0.000	1.531
2033	0.000	0.002	0.000	0.002	1.047	0.533	0.000	0.000	1.580	0.000	1.582
2034	0.000	0.002	0.000	0.002	1.084	0.550	0.000	0.000	1.634	0.000	1.636
Total:	0.000	0.032	0.000	0.032	15.322	7.994	0.000	0.000	23.316	0.000	23.348

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km1-4
Alternative: Base
Sensitivity: Cost +20% and Traffice -20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	0.000	0.002	0.000	0.002	0.375	0.202	0.000	0.000	0.578	0.000	0.579
2016	0.000	0.001	0.000	0.001	0.402	0.217	0.000	0.000	0.618	0.000	0.620
2017	0.000	0.001	0.000	0.001	0.424	0.227	0.000	0.000	0.651	0.000	0.652
2018	0.000	0.001	0.000	0.001	0.446	0.239	0.000	0.000	0.685	0.000	0.686
2019	0.000	0.001	0.000	0.001	0.470	0.251	0.000	0.000	0.721	0.000	0.722
2020	0.000	0.001	0.000	0.001	0.495	0.263	0.000	0.000	0.758	0.000	0.759
2021	0.000	0.002	0.000	0.002	0.520	0.276	0.000	0.000	0.796	0.000	0.798
2022	0.000	0.002	0.000	0.002	0.542	0.287	0.000	0.000	0.829	0.000	0.831
2023	0.000	0.002	0.000	0.002	0.565	0.299	0.000	0.000	0.863	0.000	0.865
2024	0.000	0.002	0.000	0.002	0.589	0.311	0.000	0.000	0.899	0.000	0.901
2025	0.000	0.002	0.000	0.002	0.614	0.323	0.000	0.000	0.937	0.000	0.938
2026	0.000	0.002	0.000	0.002	0.640	0.336	0.000	0.000	0.976	0.000	0.977
2027	0.000	0.002	0.000	0.002	0.666	0.349	0.000	0.000	1.016	0.000	1.017
2028	0.000	0.002	0.000	0.002	0.694	0.363	0.000	0.000	1.058	0.000	1.059
2029	0.000	0.002	0.000	0.002	0.723	0.378	0.000	0.000	1.101	0.000	1.103
2030	0.000	0.002	0.000	0.002	0.747	0.389	0.000	0.000	1.137	0.000	1.138
2031	0.000	0.002	0.000	0.002	0.772	0.401	0.000	0.000	1.173	0.000	1.175
2032	0.000	0.002	0.000	0.002	0.798	0.413	0.000	0.000	1.212	0.000	1.213
2033	0.000	0.002	0.000	0.002	0.825	0.426	0.000	0.000	1.251	0.000	1.253
2034	0.000	0.002	0.000	0.002	0.853	0.439	0.000	0.000	1.292	0.000	1.294
Total:	0.000	0.031	0.000	0.031	12.160	6.391	0.000	0.000	18.551	0.000	18.581

Section: Agara-Kornisi km1-4
Alternative: Base
Sensitivity: Cost -20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	0.000	0.002	0.000	0.002	0.469	0.253	0.000	0.000	0.722	0.000	0.724
2016	0.000	0.001	0.000	0.001	0.502	0.271	0.000	0.000	0.773	0.000	0.774
2017	0.000	0.001	0.000	0.001	0.530	0.284	0.000	0.000	0.814	0.000	0.816
2018	0.000	0.001	0.000	0.001	0.559	0.298	0.000	0.000	0.857	0.000	0.859
2019	0.000	0.001	0.000	0.001	0.589	0.313	0.000	0.000	0.902	0.000	0.903
2020	0.000	0.002	0.000	0.002	0.620	0.329	0.000	0.000	0.949	0.000	0.950
2021	0.000	0.002	0.000	0.002	0.652	0.345	0.000	0.000	0.997	0.000	0.999
2022	0.000	0.002	0.000	0.002	0.680	0.359	0.000	0.000	1.039	0.000	1.041
2023	0.000	0.002	0.000	0.002	0.709	0.374	0.000	0.000	1.083	0.000	1.084
2024	0.000	0.002	0.000	0.002	0.740	0.388	0.000	0.000	1.128	0.000	1.130
2025	0.000	0.002	0.000	0.002	0.772	0.404	0.000	0.000	1.176	0.000	1.178
2026	0.000	0.002	0.000	0.002	0.806	0.420	0.000	0.000	1.226	0.000	1.228
2027	0.000	0.002	0.000	0.002	0.840	0.437	0.000	0.000	1.277	0.000	1.279
2028	0.000	0.002	0.000	0.002	0.876	0.455	0.000	0.000	1.330	0.000	1.332
2029	0.000	0.002	0.000	0.002	0.913	0.473	0.000	0.000	1.386	0.000	1.388
2030	0.000	0.002	0.000	0.002	0.945	0.487	0.000	0.000	1.432	0.000	1.434
2031	0.000	0.002	0.000	0.002	0.978	0.502	0.000	0.000	1.480	0.000	1.481
2032	0.000	0.002	0.000	0.002	1.012	0.517	0.000	0.000	1.529	0.000	1.531
2033	0.000	0.002	0.000	0.002	1.047	0.533	0.000	0.000	1.580	0.000	1.582
2034	0.000	0.002	0.000	0.002	1.084	0.550	0.000	0.000	1.634	0.000	1.636
Total:	0.000	0.032	0.000	0.032	15.322	7.994	0.000	0.000	23.316	0.000	23.348

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km1-4
Alternative: Base
Sensitivity: Traffice +20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	0.000	0.002	0.000	0.002	0.563	0.304	0.000	0.000	0.867	0.000	0.868
2016	0.000	0.001	0.000	0.001	0.603	0.325	0.000	0.000	0.928	0.000	0.929
2017	0.000	0.001	0.000	0.001	0.637	0.341	0.000	0.000	0.978	0.000	0.979
2018	0.000	0.001	0.000	0.001	0.671	0.358	0.000	0.000	1.030	0.000	1.031
2019	0.000	0.002	0.000	0.002	0.708	0.376	0.000	0.000	1.084	0.000	1.085
2020	0.000	0.002	0.000	0.002	0.746	0.395	0.000	0.000	1.141	0.000	1.142
2021	0.000	0.002	0.000	0.002	0.785	0.414	0.000	0.000	1.200	0.000	1.201
2022	0.000	0.002	0.000	0.002	0.820	0.431	0.000	0.000	1.251	0.000	1.252
2023	0.000	0.002	0.000	0.002	0.855	0.448	0.000	0.000	1.304	0.000	1.305
2024	0.000	0.002	0.000	0.002	0.893	0.466	0.000	0.000	1.359	0.000	1.361
2025	0.000	0.002	0.000	0.002	0.933	0.485	0.000	0.000	1.418	0.000	1.419
2026	0.000	0.002	0.000	0.002	0.974	0.504	0.000	0.000	1.479	0.000	1.481
2027	0.000	0.002	0.000	0.002	1.017	0.525	0.000	0.000	1.542	0.000	1.543
2028	0.000	0.002	0.000	0.002	1.061	0.546	0.000	0.000	1.607	0.000	1.609
2029	0.000	0.002	0.000	0.002	1.108	0.568	0.000	0.000	1.676	0.000	1.678
2030	0.000	0.002	0.000	0.002	1.148	0.585	0.000	0.000	1.733	0.000	1.735
2031	0.000	0.002	0.000	0.002	1.189	0.604	0.000	0.000	1.792	0.000	1.794
2032	0.000	0.002	0.000	0.002	1.232	0.622	0.000	0.000	1.854	0.000	1.856
2033	0.000	0.002	0.000	0.002	1.276	0.642	0.000	0.000	1.918	0.000	1.920
2034	0.000	0.002	0.000	0.002	1.323	0.663	0.000	0.000	1.986	0.000	1.988
Total:	0.000	0.032	0.000	0.032	18.542	9.603	0.000	0.000	28.145	0.000	28.177

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km1-4
Alternative: Base
Sensitivity: Traffice -20%

Sect ID: sh22 km1-km4 Road Class: Secondary
 Length: 4.00 km Width: 7.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	0.000	0.002	0.000	0.002	0.375	0.202	0.000	0.000	0.578	0.000	0.579
2016	0.000	0.001	0.000	0.001	0.402	0.217	0.000	0.000	0.618	0.000	0.620
2017	0.000	0.001	0.000	0.001	0.424	0.227	0.000	0.000	0.651	0.000	0.652
2018	0.000	0.001	0.000	0.001	0.446	0.239	0.000	0.000	0.685	0.000	0.686
2019	0.000	0.001	0.000	0.001	0.470	0.251	0.000	0.000	0.721	0.000	0.722
2020	0.000	0.001	0.000	0.001	0.495	0.263	0.000	0.000	0.758	0.000	0.759
2021	0.000	0.002	0.000	0.002	0.520	0.276	0.000	0.000	0.796	0.000	0.798
2022	0.000	0.002	0.000	0.002	0.542	0.287	0.000	0.000	0.829	0.000	0.831
2023	0.000	0.002	0.000	0.002	0.565	0.299	0.000	0.000	0.863	0.000	0.865
2024	0.000	0.002	0.000	0.002	0.589	0.311	0.000	0.000	0.899	0.000	0.901
2025	0.000	0.002	0.000	0.002	0.614	0.323	0.000	0.000	0.937	0.000	0.938
2026	0.000	0.002	0.000	0.002	0.640	0.336	0.000	0.000	0.976	0.000	0.977
2027	0.000	0.002	0.000	0.002	0.666	0.349	0.000	0.000	1.016	0.000	1.017
2028	0.000	0.002	0.000	0.002	0.694	0.363	0.000	0.000	1.058	0.000	1.059
2029	0.000	0.002	0.000	0.002	0.723	0.378	0.000	0.000	1.101	0.000	1.103
2030	0.000	0.002	0.000	0.002	0.747	0.389	0.000	0.000	1.137	0.000	1.138
2031	0.000	0.002	0.000	0.002	0.772	0.401	0.000	0.000	1.173	0.000	1.175
2032	0.000	0.002	0.000	0.002	0.798	0.413	0.000	0.000	1.212	0.000	1.213
2033	0.000	0.002	0.000	0.002	0.825	0.426	0.000	0.000	1.251	0.000	1.253
2034	0.000	0.002	0.000	0.002	0.853	0.439	0.000	0.000	1.292	0.000	1.294
Total:	0.000	0.031	0.000	0.031	12.160	6.391	0.000	0.000	18.551	0.000	18.581

Section: Agara-Kornisi km9-km16
Alternative: Alt1 Rehabilitation
Sensitivity: Base Sensitivity Scenario

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	2.935	0.002	0.000	2.937	1.239	0.658	0.000	0.000	1.897	0.000	4.834
2016	0.000	0.002	0.000	0.002	0.835	0.340	0.000	0.000	1.174	0.000	1.177
2017	0.000	0.002	0.000	0.002	0.876	0.357	0.000	0.000	1.233	0.000	1.236
2018	0.000	0.002	0.000	0.002	0.919	0.375	0.000	0.000	1.294	0.000	1.296
2019	0.000	0.002	0.000	0.002	0.964	0.393	0.000	0.000	1.357	0.000	1.359
2020	0.000	0.002	0.000	0.002	1.010	0.413	0.000	0.000	1.423	0.000	1.426
2021	0.000	0.002	0.000	0.002	1.058	0.434	0.000	0.000	1.491	0.000	1.494
2022	0.000	0.002	0.000	0.002	1.099	0.451	0.000	0.000	1.550	0.000	1.552
2023	0.000	0.002	0.000	0.002	1.141	0.469	0.000	0.000	1.610	0.000	1.612
2024	0.000	0.002	0.000	0.002	1.185	0.488	0.000	0.000	1.673	0.000	1.675
2025	0.000	0.002	0.000	0.002	1.231	0.507	0.000	0.000	1.738	0.000	1.740
2026	0.000	0.002	0.000	0.002	1.279	0.527	0.000	0.000	1.806	0.000	1.808
2027	0.000	0.002	0.000	0.002	1.326	0.548	0.000	0.000	1.874	0.000	1.877
2028	0.000	0.002	0.000	0.002	1.376	0.570	0.000	0.000	1.945	0.000	1.948
2029	0.000	0.002	0.000	0.002	1.427	0.593	0.000	0.000	2.019	0.000	2.022
2030	0.000	0.002	0.000	0.002	1.468	0.610	0.000	0.000	2.078	0.000	2.081
2031	0.000	0.002	0.000	0.002	1.510	0.628	0.000	0.000	2.139	0.000	2.141
2032	0.000	0.002	0.000	0.002	1.554	0.647	0.000	0.000	2.201	0.000	2.203
2033	0.000	0.002	0.000	0.002	1.598	0.667	0.000	0.000	2.265	0.000	2.267
2034	0.000	0.002	0.000	0.002	1.644	0.687	0.000	0.000	2.331	0.000	2.333
Total:	2.935	0.048	0.000	2.983	24.738	10.360	0.000	0.000	35.098	0.000	38.081

Section: Agara-Kornisi km9-km16
Alternative: Alt1 Rehabilitation
Sensitivity: Cost +20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	2.935	0.002	0.000	2.937	1.239	0.658	0.000	0.000	1.897	0.000	4.834
2016	0.000	0.002	0.000	0.002	0.835	0.340	0.000	0.000	1.174	0.000	1.177
2017	0.000	0.002	0.000	0.002	0.876	0.357	0.000	0.000	1.233	0.000	1.236
2018	0.000	0.002	0.000	0.002	0.919	0.375	0.000	0.000	1.294	0.000	1.296
2019	0.000	0.002	0.000	0.002	0.964	0.393	0.000	0.000	1.357	0.000	1.359
2020	0.000	0.002	0.000	0.002	1.010	0.413	0.000	0.000	1.423	0.000	1.426
2021	0.000	0.002	0.000	0.002	1.058	0.434	0.000	0.000	1.491	0.000	1.494
2022	0.000	0.002	0.000	0.002	1.099	0.451	0.000	0.000	1.550	0.000	1.552
2023	0.000	0.002	0.000	0.002	1.141	0.469	0.000	0.000	1.610	0.000	1.612
2024	0.000	0.002	0.000	0.002	1.185	0.488	0.000	0.000	1.673	0.000	1.675
2025	0.000	0.002	0.000	0.002	1.231	0.507	0.000	0.000	1.738	0.000	1.740
2026	0.000	0.002	0.000	0.002	1.279	0.527	0.000	0.000	1.806	0.000	1.808
2027	0.000	0.002	0.000	0.002	1.326	0.548	0.000	0.000	1.874	0.000	1.877
2028	0.000	0.002	0.000	0.002	1.376	0.570	0.000	0.000	1.945	0.000	1.948
2029	0.000	0.002	0.000	0.002	1.427	0.593	0.000	0.000	2.019	0.000	2.022
2030	0.000	0.002	0.000	0.002	1.468	0.610	0.000	0.000	2.078	0.000	2.081
2031	0.000	0.002	0.000	0.002	1.510	0.628	0.000	0.000	2.139	0.000	2.141
2032	0.000	0.002	0.000	0.002	1.554	0.647	0.000	0.000	2.201	0.000	2.203
2033	0.000	0.002	0.000	0.002	1.598	0.667	0.000	0.000	2.265	0.000	2.267
2034	0.000	0.002	0.000	0.002	1.644	0.687	0.000	0.000	2.331	0.000	2.333
Total:	2.935	0.048	0.000	2.983	24.738	10.360	0.000	0.000	35.098	0.000	38.081

Section: Agara-Kornisi km9-km16
Alternative: Alt1 Rehabilitation
Sensitivity: Cost +20% and Traffice -20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	2.935	0.002	0.000	2.937	0.991	0.526	0.000	0.000	1.517	0.000	4.455
2016	0.000	0.002	0.000	0.002	0.668	0.272	0.000	0.000	0.940	0.000	0.942
2017	0.000	0.002	0.000	0.002	0.701	0.286	0.000	0.000	0.987	0.000	0.989
2018	0.000	0.002	0.000	0.002	0.735	0.300	0.000	0.000	1.035	0.000	1.037
2019	0.000	0.002	0.000	0.002	0.771	0.315	0.000	0.000	1.086	0.000	1.088
2020	0.000	0.002	0.000	0.002	0.808	0.330	0.000	0.000	1.139	0.000	1.141
2021	0.000	0.002	0.000	0.002	0.846	0.347	0.000	0.000	1.193	0.000	1.196
2022	0.000	0.002	0.000	0.002	0.879	0.361	0.000	0.000	1.240	0.000	1.242
2023	0.000	0.002	0.000	0.002	0.913	0.375	0.000	0.000	1.288	0.000	1.290
2024	0.000	0.002	0.000	0.002	0.948	0.390	0.000	0.000	1.338	0.000	1.341
2025	0.000	0.002	0.000	0.002	0.985	0.406	0.000	0.000	1.390	0.000	1.393
2026	0.000	0.002	0.000	0.002	1.023	0.422	0.000	0.000	1.445	0.000	1.447
2027	0.000	0.002	0.000	0.002	1.061	0.438	0.000	0.000	1.499	0.000	1.502
2028	0.000	0.002	0.000	0.002	1.100	0.456	0.000	0.000	1.556	0.000	1.559
2029	0.000	0.002	0.000	0.002	1.141	0.474	0.000	0.000	1.616	0.000	1.618
2030	0.000	0.002	0.000	0.002	1.174	0.488	0.000	0.000	1.662	0.000	1.665
2031	0.000	0.002	0.000	0.002	1.208	0.503	0.000	0.000	1.711	0.000	1.713
2032	0.000	0.002	0.000	0.002	1.243	0.518	0.000	0.000	1.761	0.000	1.763
2033	0.000	0.002	0.000	0.002	1.279	0.533	0.000	0.000	1.812	0.000	1.814
2034	0.000	0.002	0.000	0.002	1.315	0.549	0.000	0.000	1.865	0.000	1.867
Total:	2.935	0.048	0.000	2.983	19.790	8.288	0.000	0.000	28.078	0.000	31.061

Section: Agara-Kornisi km9-km16
Alternative: Alt1 Rehabilitation
Sensitivity: Cost -20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	2.935	0.002	0.000	2.937	1.239	0.658	0.000	0.000	1.897	0.000	4.834
2016	0.000	0.002	0.000	0.002	0.835	0.340	0.000	0.000	1.174	0.000	1.177
2017	0.000	0.002	0.000	0.002	0.876	0.357	0.000	0.000	1.233	0.000	1.236
2018	0.000	0.002	0.000	0.002	0.919	0.375	0.000	0.000	1.294	0.000	1.296
2019	0.000	0.002	0.000	0.002	0.964	0.393	0.000	0.000	1.357	0.000	1.359
2020	0.000	0.002	0.000	0.002	1.010	0.413	0.000	0.000	1.423	0.000	1.426
2021	0.000	0.002	0.000	0.002	1.058	0.434	0.000	0.000	1.491	0.000	1.494
2022	0.000	0.002	0.000	0.002	1.099	0.451	0.000	0.000	1.550	0.000	1.552
2023	0.000	0.002	0.000	0.002	1.141	0.469	0.000	0.000	1.610	0.000	1.612
2024	0.000	0.002	0.000	0.002	1.185	0.488	0.000	0.000	1.673	0.000	1.675
2025	0.000	0.002	0.000	0.002	1.231	0.507	0.000	0.000	1.738	0.000	1.740
2026	0.000	0.002	0.000	0.002	1.279	0.527	0.000	0.000	1.806	0.000	1.808
2027	0.000	0.002	0.000	0.002	1.326	0.548	0.000	0.000	1.874	0.000	1.877
2028	0.000	0.002	0.000	0.002	1.376	0.570	0.000	0.000	1.945	0.000	1.948
2029	0.000	0.002	0.000	0.002	1.427	0.593	0.000	0.000	2.019	0.000	2.022
2030	0.000	0.002	0.000	0.002	1.468	0.610	0.000	0.000	2.078	0.000	2.081
2031	0.000	0.002	0.000	0.002	1.510	0.628	0.000	0.000	2.139	0.000	2.141
2032	0.000	0.002	0.000	0.002	1.554	0.647	0.000	0.000	2.201	0.000	2.203
2033	0.000	0.002	0.000	0.002	1.598	0.667	0.000	0.000	2.265	0.000	2.267
2034	0.000	0.002	0.000	0.002	1.644	0.687	0.000	0.000	2.331	0.000	2.333
Total:	2.935	0.048	0.000	2.983	24.738	10.360	0.000	0.000	35.098	0.000	38.081

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km9-km16
Alternative: Alt1 Rehabilitation
Sensitivity: Traffice +20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	2.935	0.002	0.000	2.937	1.487	0.789	0.000	0.000	2.276	0.000	5.213
2016	0.000	0.002	0.000	0.002	1.001	0.408	0.000	0.000	1.409	0.000	1.412
2017	0.000	0.002	0.000	0.002	1.052	0.428	0.000	0.000	1.480	0.000	1.482
2018	0.000	0.002	0.000	0.002	1.103	0.450	0.000	0.000	1.552	0.000	1.555
2019	0.000	0.002	0.000	0.002	1.156	0.472	0.000	0.000	1.628	0.000	1.631
2020	0.000	0.002	0.000	0.002	1.212	0.496	0.000	0.000	1.708	0.000	1.710
2021	0.000	0.002	0.000	0.002	1.269	0.520	0.000	0.000	1.790	0.000	1.792
2022	0.000	0.002	0.000	0.002	1.318	0.541	0.000	0.000	1.860	0.000	1.862
2023	0.000	0.002	0.000	0.002	1.369	0.563	0.000	0.000	1.932	0.000	1.934
2024	0.000	0.002	0.000	0.002	1.422	0.585	0.000	0.000	2.007	0.000	2.010
2025	0.000	0.002	0.000	0.002	1.477	0.608	0.000	0.000	2.086	0.000	2.088
2026	0.000	0.002	0.000	0.002	1.534	0.633	0.000	0.000	2.167	0.000	2.169
2027	0.000	0.002	0.000	0.002	1.591	0.658	0.000	0.000	2.249	0.000	2.252
2028	0.000	0.002	0.000	0.002	1.651	0.684	0.000	0.000	2.335	0.000	2.337
2029	0.000	0.002	0.000	0.002	1.712	0.711	0.000	0.000	2.423	0.000	2.426
2030	0.000	0.002	0.000	0.002	1.762	0.732	0.000	0.000	2.494	0.000	2.496
2031	0.000	0.002	0.000	0.002	1.812	0.754	0.000	0.000	2.566	0.000	2.569
2032	0.000	0.002	0.000	0.002	1.864	0.777	0.000	0.000	2.641	0.000	2.643
2033	0.000	0.002	0.000	0.002	1.918	0.800	0.000	0.000	2.718	0.000	2.720
2034	0.000	0.003	0.000	0.003	1.973	0.824	0.000	0.000	2.797	0.000	2.800
Total:	2.935	0.048	0.000	2.983	29.687	12.433	0.000	0.000	42.119	0.000	45.102

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km9-km16
Alternative: Alt1 Rehabilitation
Sensitivity: Traffice -20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	2.935	0.002	0.000	2.937	0.991	0.526	0.000	0.000	1.517	0.000	4.455
2016	0.000	0.002	0.000	0.002	0.668	0.272	0.000	0.000	0.940	0.000	0.942
2017	0.000	0.002	0.000	0.002	0.701	0.286	0.000	0.000	0.987	0.000	0.989
2018	0.000	0.002	0.000	0.002	0.735	0.300	0.000	0.000	1.035	0.000	1.037
2019	0.000	0.002	0.000	0.002	0.771	0.315	0.000	0.000	1.086	0.000	1.088
2020	0.000	0.002	0.000	0.002	0.808	0.330	0.000	0.000	1.139	0.000	1.141
2021	0.000	0.002	0.000	0.002	0.846	0.347	0.000	0.000	1.193	0.000	1.196
2022	0.000	0.002	0.000	0.002	0.879	0.361	0.000	0.000	1.240	0.000	1.242
2023	0.000	0.002	0.000	0.002	0.913	0.375	0.000	0.000	1.288	0.000	1.290
2024	0.000	0.002	0.000	0.002	0.948	0.390	0.000	0.000	1.338	0.000	1.341
2025	0.000	0.002	0.000	0.002	0.985	0.406	0.000	0.000	1.390	0.000	1.393
2026	0.000	0.002	0.000	0.002	1.023	0.422	0.000	0.000	1.445	0.000	1.447
2027	0.000	0.002	0.000	0.002	1.061	0.438	0.000	0.000	1.499	0.000	1.502
2028	0.000	0.002	0.000	0.002	1.100	0.456	0.000	0.000	1.556	0.000	1.559
2029	0.000	0.002	0.000	0.002	1.141	0.474	0.000	0.000	1.616	0.000	1.618
2030	0.000	0.002	0.000	0.002	1.174	0.488	0.000	0.000	1.662	0.000	1.665
2031	0.000	0.002	0.000	0.002	1.208	0.503	0.000	0.000	1.711	0.000	1.713
2032	0.000	0.002	0.000	0.002	1.243	0.518	0.000	0.000	1.761	0.000	1.763
2033	0.000	0.002	0.000	0.002	1.279	0.533	0.000	0.000	1.812	0.000	1.814
2034	0.000	0.002	0.000	0.002	1.315	0.549	0.000	0.000	1.865	0.000	1.867
Total:	2.935	0.048	0.000	2.983	19.790	8.288	0.000	0.000	28.078	0.000	31.061

Section: Agara-Kornisi km9-km16
Alternative: Alt2 Rehabilitation
Sensitivity: Base Sensitivity Scenario

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	3.199	0.002	0.000	3.202	1.239	0.658	0.000	0.000	1.897	0.000	5.098
2016	0.000	0.002	0.000	0.002	0.835	0.340	0.000	0.000	1.174	0.000	1.177
2017	0.000	0.002	0.000	0.002	0.876	0.357	0.000	0.000	1.233	0.000	1.236
2018	0.000	0.002	0.000	0.002	0.919	0.375	0.000	0.000	1.294	0.000	1.296
2019	0.000	0.002	0.000	0.002	0.964	0.393	0.000	0.000	1.357	0.000	1.359
2020	0.000	0.002	0.000	0.002	1.010	0.413	0.000	0.000	1.423	0.000	1.426
2021	0.000	0.002	0.000	0.002	1.058	0.434	0.000	0.000	1.492	0.000	1.494
2022	0.000	0.002	0.000	0.002	1.099	0.451	0.000	0.000	1.550	0.000	1.552
2023	0.000	0.002	0.000	0.002	1.141	0.469	0.000	0.000	1.610	0.000	1.612
2024	0.000	0.002	0.000	0.002	1.185	0.488	0.000	0.000	1.673	0.000	1.675
2025	0.000	0.002	0.000	0.002	1.231	0.507	0.000	0.000	1.738	0.000	1.741
2026	0.000	0.039	0.000	0.039	1.279	0.527	0.000	0.000	1.806	0.000	1.846
2027	0.000	0.002	0.000	0.002	1.327	0.548	0.000	0.000	1.875	0.000	1.877
2028	0.000	0.039	0.000	0.039	1.377	0.570	0.000	0.000	1.947	0.000	1.986
2029	0.000	0.002	0.000	0.002	1.428	0.593	0.000	0.000	2.021	0.000	2.023
2030	0.000	0.039	0.000	0.039	1.470	0.610	0.000	0.000	2.080	0.000	2.119
2031	0.000	0.002	0.000	0.002	1.512	0.629	0.000	0.000	2.141	0.000	2.143
2032	0.000	0.039	0.000	0.039	1.557	0.647	0.000	0.000	2.204	0.000	2.243
2033	0.000	0.002	0.000	0.002	1.602	0.667	0.000	0.000	2.269	0.000	2.271
2034	0.000	0.039	0.000	0.039	1.650	0.687	0.000	0.000	2.336	0.000	2.375
Total:	3.199	0.233	0.000	3.432	24.758	10.361	0.000	0.000	35.119	0.000	38.551

Section: Agara-Kornisi km9-km16
Alternative: Alt2 Rehabilitation
Sensitivity: Cost +20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	3.199	0.002	0.000	3.202	1.239	0.658	0.000	0.000	1.897	0.000	5.098
2016	0.000	0.002	0.000	0.002	0.835	0.340	0.000	0.000	1.174	0.000	1.177
2017	0.000	0.002	0.000	0.002	0.876	0.357	0.000	0.000	1.233	0.000	1.236
2018	0.000	0.002	0.000	0.002	0.919	0.375	0.000	0.000	1.294	0.000	1.296
2019	0.000	0.002	0.000	0.002	0.964	0.393	0.000	0.000	1.357	0.000	1.359
2020	0.000	0.002	0.000	0.002	1.010	0.413	0.000	0.000	1.423	0.000	1.426
2021	0.000	0.002	0.000	0.002	1.058	0.434	0.000	0.000	1.492	0.000	1.494
2022	0.000	0.002	0.000	0.002	1.099	0.451	0.000	0.000	1.550	0.000	1.552
2023	0.000	0.002	0.000	0.002	1.141	0.469	0.000	0.000	1.610	0.000	1.612
2024	0.000	0.002	0.000	0.002	1.185	0.488	0.000	0.000	1.673	0.000	1.675
2025	0.000	0.002	0.000	0.002	1.231	0.507	0.000	0.000	1.738	0.000	1.741
2026	0.000	0.039	0.000	0.039	1.279	0.527	0.000	0.000	1.806	0.000	1.846
2027	0.000	0.002	0.000	0.002	1.327	0.548	0.000	0.000	1.875	0.000	1.877
2028	0.000	0.039	0.000	0.039	1.377	0.570	0.000	0.000	1.947	0.000	1.986
2029	0.000	0.002	0.000	0.002	1.428	0.593	0.000	0.000	2.021	0.000	2.023
2030	0.000	0.039	0.000	0.039	1.470	0.610	0.000	0.000	2.080	0.000	2.119
2031	0.000	0.002	0.000	0.002	1.512	0.629	0.000	0.000	2.141	0.000	2.143
2032	0.000	0.039	0.000	0.039	1.557	0.647	0.000	0.000	2.204	0.000	2.243
2033	0.000	0.002	0.000	0.002	1.602	0.667	0.000	0.000	2.269	0.000	2.271
2034	0.000	0.039	0.000	0.039	1.650	0.687	0.000	0.000	2.336	0.000	2.375
Total:	3.199	0.233	0.000	3.432	24.758	10.361	0.000	0.000	35.119	0.000	38.551

Section: Agara-Kornisi km9-km16
Alternative: Alt2 Rehabilitation
Sensitivity: Cost +20% and Traffice -20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	3.199	0.002	0.000	3.202	0.991	0.526	0.000	0.000	1.517	0.000	4.719
2016	0.000	0.002	0.000	0.002	0.668	0.272	0.000	0.000	0.940	0.000	0.942
2017	0.000	0.002	0.000	0.002	0.701	0.286	0.000	0.000	0.987	0.000	0.989
2018	0.000	0.002	0.000	0.002	0.735	0.300	0.000	0.000	1.035	0.000	1.037
2019	0.000	0.002	0.000	0.002	0.771	0.315	0.000	0.000	1.086	0.000	1.088
2020	0.000	0.002	0.000	0.002	0.808	0.330	0.000	0.000	1.139	0.000	1.141
2021	0.000	0.002	0.000	0.002	0.846	0.347	0.000	0.000	1.193	0.000	1.196
2022	0.000	0.002	0.000	0.002	0.879	0.361	0.000	0.000	1.240	0.000	1.242
2023	0.000	0.002	0.000	0.002	0.913	0.375	0.000	0.000	1.288	0.000	1.290
2024	0.000	0.002	0.000	0.002	0.948	0.390	0.000	0.000	1.338	0.000	1.341
2025	0.000	0.002	0.000	0.002	0.985	0.406	0.000	0.000	1.391	0.000	1.393
2026	0.000	0.039	0.000	0.039	1.023	0.422	0.000	0.000	1.445	0.000	1.484
2027	0.000	0.002	0.000	0.002	1.061	0.439	0.000	0.000	1.500	0.000	1.502
2028	0.000	0.039	0.000	0.039	1.101	0.456	0.000	0.000	1.557	0.000	1.596
2029	0.000	0.002	0.000	0.002	1.142	0.474	0.000	0.000	1.616	0.000	1.619
2030	0.000	0.039	0.000	0.039	1.175	0.488	0.000	0.000	1.664	0.000	1.703
2031	0.000	0.002	0.000	0.002	1.209	0.503	0.000	0.000	1.712	0.000	1.715
2032	0.000	0.039	0.000	0.039	1.245	0.518	0.000	0.000	1.763	0.000	1.802
2033	0.000	0.002	0.000	0.002	1.281	0.533	0.000	0.000	1.814	0.000	1.817
2034	0.000	0.039	0.000	0.039	1.319	0.549	0.000	0.000	1.868	0.000	1.908
Total:	3.199	0.233	0.000	3.432	19.803	8.289	0.000	0.000	28.092	0.000	31.524

Section: Agara-Kornisi km9-km16
Alternative: Alt2 Rehabilitation
Sensitivity: Cost -20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	3.199	0.002	0.000	3.202	1.239	0.658	0.000	0.000	1.897	0.000	5.098
2016	0.000	0.002	0.000	0.002	0.835	0.340	0.000	0.000	1.174	0.000	1.177
2017	0.000	0.002	0.000	0.002	0.876	0.357	0.000	0.000	1.233	0.000	1.236
2018	0.000	0.002	0.000	0.002	0.919	0.375	0.000	0.000	1.294	0.000	1.296
2019	0.000	0.002	0.000	0.002	0.964	0.393	0.000	0.000	1.357	0.000	1.359
2020	0.000	0.002	0.000	0.002	1.010	0.413	0.000	0.000	1.423	0.000	1.426
2021	0.000	0.002	0.000	0.002	1.058	0.434	0.000	0.000	1.492	0.000	1.494
2022	0.000	0.002	0.000	0.002	1.099	0.451	0.000	0.000	1.550	0.000	1.552
2023	0.000	0.002	0.000	0.002	1.141	0.469	0.000	0.000	1.610	0.000	1.612
2024	0.000	0.002	0.000	0.002	1.185	0.488	0.000	0.000	1.673	0.000	1.675
2025	0.000	0.002	0.000	0.002	1.231	0.507	0.000	0.000	1.738	0.000	1.741
2026	0.000	0.039	0.000	0.039	1.279	0.527	0.000	0.000	1.806	0.000	1.846
2027	0.000	0.002	0.000	0.002	1.327	0.548	0.000	0.000	1.875	0.000	1.877
2028	0.000	0.039	0.000	0.039	1.377	0.570	0.000	0.000	1.947	0.000	1.986
2029	0.000	0.002	0.000	0.002	1.428	0.593	0.000	0.000	2.021	0.000	2.023
2030	0.000	0.039	0.000	0.039	1.470	0.610	0.000	0.000	2.080	0.000	2.119
2031	0.000	0.002	0.000	0.002	1.512	0.629	0.000	0.000	2.141	0.000	2.143
2032	0.000	0.039	0.000	0.039	1.557	0.647	0.000	0.000	2.204	0.000	2.243
2033	0.000	0.002	0.000	0.002	1.602	0.667	0.000	0.000	2.269	0.000	2.271
2034	0.000	0.039	0.000	0.039	1.650	0.687	0.000	0.000	2.336	0.000	2.375
Total:	3.199	0.233	0.000	3.432	24.758	10.361	0.000	0.000	35.119	0.000	38.551

Section: Agara-Kornisi km9-km16
Alternative: Alt2 Rehabilitation
Sensitivity: Traffice +20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	3.199	0.002	0.000	3.202	1.487	0.789	0.000	0.000	2.276	0.000	5.478
2016	0.000	0.002	0.000	0.002	1.001	0.408	0.000	0.000	1.409	0.000	1.412
2017	0.000	0.002	0.000	0.002	1.052	0.428	0.000	0.000	1.480	0.000	1.483
2018	0.000	0.002	0.000	0.002	1.103	0.450	0.000	0.000	1.553	0.000	1.555
2019	0.000	0.002	0.000	0.002	1.156	0.472	0.000	0.000	1.628	0.000	1.631
2020	0.000	0.002	0.000	0.002	1.213	0.496	0.000	0.000	1.708	0.000	1.711
2021	0.000	0.002	0.000	0.002	1.270	0.520	0.000	0.000	1.790	0.000	1.792
2022	0.000	0.002	0.000	0.002	1.319	0.541	0.000	0.000	1.860	0.000	1.862
2023	0.000	0.002	0.000	0.002	1.370	0.563	0.000	0.000	1.932	0.000	1.935
2024	0.000	0.002	0.000	0.002	1.423	0.585	0.000	0.000	2.008	0.000	2.010
2025	0.000	0.002	0.000	0.002	1.478	0.608	0.000	0.000	2.086	0.000	2.088
2026	0.000	0.039	0.000	0.039	1.535	0.633	0.000	0.000	2.168	0.000	2.207
2027	0.000	0.002	0.000	0.002	1.592	0.658	0.000	0.000	2.250	0.000	2.252
2028	0.000	0.039	0.000	0.039	1.652	0.684	0.000	0.000	2.336	0.000	2.375
2029	0.000	0.002	0.000	0.002	1.714	0.711	0.000	0.000	2.425	0.000	2.427
2030	0.000	0.039	0.000	0.039	1.764	0.732	0.000	0.000	2.496	0.000	2.535
2031	0.000	0.002	0.000	0.002	1.815	0.754	0.000	0.000	2.569	0.000	2.571
2032	0.000	0.039	0.000	0.039	1.868	0.777	0.000	0.000	2.645	0.000	2.684
2033	0.000	0.002	0.000	0.002	1.923	0.800	0.000	0.000	2.723	0.000	2.725
2034	0.000	0.039	0.000	0.039	1.980	0.824	0.000	0.000	2.804	0.000	2.843
Total:	3.199	0.232	0.000	3.432	29.711	12.433	0.000	0.000	42.144	0.000	45.576

Section: Agara-Kornisi km9-km16
Alternative: Alt2 Rehabilitation
Sensitivity: Traffice -20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	3.199	0.002	0.000	3.202	0.991	0.526	0.000	0.000	1.517	0.000	4.719
2016	0.000	0.002	0.000	0.002	0.668	0.272	0.000	0.000	0.940	0.000	0.942
2017	0.000	0.002	0.000	0.002	0.701	0.286	0.000	0.000	0.987	0.000	0.989
2018	0.000	0.002	0.000	0.002	0.735	0.300	0.000	0.000	1.035	0.000	1.037
2019	0.000	0.002	0.000	0.002	0.771	0.315	0.000	0.000	1.086	0.000	1.088
2020	0.000	0.002	0.000	0.002	0.808	0.330	0.000	0.000	1.139	0.000	1.141
2021	0.000	0.002	0.000	0.002	0.846	0.347	0.000	0.000	1.193	0.000	1.196
2022	0.000	0.002	0.000	0.002	0.879	0.361	0.000	0.000	1.240	0.000	1.242
2023	0.000	0.002	0.000	0.002	0.913	0.375	0.000	0.000	1.288	0.000	1.290
2024	0.000	0.002	0.000	0.002	0.948	0.390	0.000	0.000	1.338	0.000	1.341
2025	0.000	0.002	0.000	0.002	0.985	0.406	0.000	0.000	1.391	0.000	1.393
2026	0.000	0.039	0.000	0.039	1.023	0.422	0.000	0.000	1.445	0.000	1.484
2027	0.000	0.002	0.000	0.002	1.061	0.439	0.000	0.000	1.500	0.000	1.502
2028	0.000	0.039	0.000	0.039	1.101	0.456	0.000	0.000	1.557	0.000	1.596
2029	0.000	0.002	0.000	0.002	1.142	0.474	0.000	0.000	1.616	0.000	1.619
2030	0.000	0.039	0.000	0.039	1.175	0.488	0.000	0.000	1.664	0.000	1.703
2031	0.000	0.002	0.000	0.002	1.209	0.503	0.000	0.000	1.712	0.000	1.715
2032	0.000	0.039	0.000	0.039	1.245	0.518	0.000	0.000	1.763	0.000	1.802
2033	0.000	0.002	0.000	0.002	1.281	0.533	0.000	0.000	1.814	0.000	1.817
2034	0.000	0.039	0.000	0.039	1.319	0.549	0.000	0.000	1.868	0.000	1.908
Total:	3.199	0.233	0.000	3.432	19.803	8.289	0.000	0.000	28.092	0.000	31.524

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km9-km16
Alternative: Base
Sensitivity: Base Sensitivity Scenario

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	0.000	0.003	0.000	0.003	1.239	0.658	0.000	0.000	1.897	0.000	1.900
2016	0.000	0.003	0.000	0.003	1.322	0.704	0.000	0.000	2.025	0.000	2.028
2017	0.000	0.003	0.000	0.003	1.388	0.739	0.000	0.000	2.126	0.000	2.129
2018	0.000	0.003	0.000	0.003	1.455	0.776	0.000	0.000	2.230	0.000	2.233
2019	0.000	0.003	0.000	0.003	1.525	0.814	0.000	0.000	2.340	0.000	2.342
2020	0.000	0.003	0.000	0.003	1.599	0.855	0.000	0.000	2.454	0.000	2.457
2021	0.000	0.003	0.000	0.003	1.674	0.897	0.000	0.000	2.571	0.000	2.574
2022	0.000	0.003	0.000	0.003	1.739	0.933	0.000	0.000	2.672	0.000	2.675
2023	0.000	0.003	0.000	0.003	1.806	0.970	0.000	0.000	2.776	0.000	2.779
2024	0.000	0.003	0.000	0.003	1.875	1.009	0.000	0.000	2.884	0.000	2.887
2025	0.000	0.003	0.000	0.003	1.947	1.049	0.000	0.000	2.996	0.000	2.999
2026	0.000	0.003	0.000	0.003	2.022	1.091	0.000	0.000	3.113	0.000	3.116
2027	0.000	0.003	0.000	0.003	2.097	1.134	0.000	0.000	3.232	0.000	3.235
2028	0.000	0.003	0.000	0.003	2.175	1.179	0.000	0.000	3.354	0.000	3.357
2029	0.000	0.003	0.000	0.003	2.256	1.226	0.000	0.000	3.482	0.000	3.485
2030	0.000	0.003	0.000	0.003	2.320	1.263	0.000	0.000	3.583	0.000	3.586
2031	0.000	0.003	0.000	0.003	2.387	1.301	0.000	0.000	3.687	0.000	3.691
2032	0.000	0.003	0.000	0.003	2.455	1.339	0.000	0.000	3.795	0.000	3.798
2033	0.000	0.003	0.000	0.003	2.526	1.379	0.000	0.000	3.905	0.000	3.908
2034	0.000	0.003	0.000	0.003	2.598	1.421	0.000	0.000	4.019	0.000	4.022
Total:	0.000	0.059	0.000	0.059	38.405	20.736	0.000	0.000	59.141	0.000	59.200

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km9-km16
Alternative: Base
Sensitivity: Cost +20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	0.000	0.003	0.000	0.003	1.239	0.658	0.000	0.000	1.897	0.000	1.900
2016	0.000	0.003	0.000	0.003	1.322	0.704	0.000	0.000	2.025	0.000	2.028
2017	0.000	0.003	0.000	0.003	1.388	0.739	0.000	0.000	2.126	0.000	2.129
2018	0.000	0.003	0.000	0.003	1.455	0.776	0.000	0.000	2.230	0.000	2.233
2019	0.000	0.003	0.000	0.003	1.525	0.814	0.000	0.000	2.340	0.000	2.342
2020	0.000	0.003	0.000	0.003	1.599	0.855	0.000	0.000	2.454	0.000	2.457
2021	0.000	0.003	0.000	0.003	1.674	0.897	0.000	0.000	2.571	0.000	2.574
2022	0.000	0.003	0.000	0.003	1.739	0.933	0.000	0.000	2.672	0.000	2.675
2023	0.000	0.003	0.000	0.003	1.806	0.970	0.000	0.000	2.776	0.000	2.779
2024	0.000	0.003	0.000	0.003	1.875	1.009	0.000	0.000	2.884	0.000	2.887
2025	0.000	0.003	0.000	0.003	1.947	1.049	0.000	0.000	2.996	0.000	2.999
2026	0.000	0.003	0.000	0.003	2.022	1.091	0.000	0.000	3.113	0.000	3.116
2027	0.000	0.003	0.000	0.003	2.097	1.134	0.000	0.000	3.232	0.000	3.235
2028	0.000	0.003	0.000	0.003	2.175	1.179	0.000	0.000	3.354	0.000	3.357
2029	0.000	0.003	0.000	0.003	2.256	1.226	0.000	0.000	3.482	0.000	3.485
2030	0.000	0.003	0.000	0.003	2.320	1.263	0.000	0.000	3.583	0.000	3.586
2031	0.000	0.003	0.000	0.003	2.387	1.301	0.000	0.000	3.687	0.000	3.691
2032	0.000	0.003	0.000	0.003	2.455	1.339	0.000	0.000	3.795	0.000	3.798
2033	0.000	0.003	0.000	0.003	2.526	1.379	0.000	0.000	3.905	0.000	3.908
2034	0.000	0.003	0.000	0.003	2.598	1.421	0.000	0.000	4.019	0.000	4.022
Total:	0.000	0.059	0.000	0.059	38.405	20.736	0.000	0.000	59.141	0.000	59.200

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km9-km16
Alternative: Base
Sensitivity: Cost +20% and Traffice -20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	0.000	0.003	0.000	0.003	0.991	0.526	0.000	0.000	1.517	0.000	1.520
2016	0.000	0.003	0.000	0.003	1.057	0.563	0.000	0.000	1.620	0.000	1.623
2017	0.000	0.003	0.000	0.003	1.110	0.591	0.000	0.000	1.701	0.000	1.704
2018	0.000	0.003	0.000	0.003	1.164	0.620	0.000	0.000	1.784	0.000	1.787
2019	0.000	0.003	0.000	0.003	1.220	0.651	0.000	0.000	1.872	0.000	1.874
2020	0.000	0.003	0.000	0.003	1.279	0.684	0.000	0.000	1.963	0.000	1.966
2021	0.000	0.003	0.000	0.003	1.339	0.718	0.000	0.000	2.057	0.000	2.060
2022	0.000	0.003	0.000	0.003	1.391	0.746	0.000	0.000	2.137	0.000	2.140
2023	0.000	0.003	0.000	0.003	1.444	0.776	0.000	0.000	2.221	0.000	2.223
2024	0.000	0.003	0.000	0.003	1.500	0.807	0.000	0.000	2.307	0.000	2.310
2025	0.000	0.003	0.000	0.003	1.558	0.839	0.000	0.000	2.397	0.000	2.400
2026	0.000	0.003	0.000	0.003	1.618	0.873	0.000	0.000	2.491	0.000	2.493
2027	0.000	0.003	0.000	0.003	1.678	0.907	0.000	0.000	2.585	0.000	2.588
2028	0.000	0.003	0.000	0.003	1.740	0.943	0.000	0.000	2.684	0.000	2.686
2029	0.000	0.003	0.000	0.003	1.805	0.981	0.000	0.000	2.786	0.000	2.789
2030	0.000	0.003	0.000	0.003	1.856	1.010	0.000	0.000	2.867	0.000	2.870
2031	0.000	0.003	0.000	0.003	1.910	1.040	0.000	0.000	2.950	0.000	2.953
2032	0.000	0.003	0.000	0.003	1.964	1.072	0.000	0.000	3.036	0.000	3.039
2033	0.000	0.003	0.000	0.003	2.020	1.104	0.000	0.000	3.124	0.000	3.127
2034	0.000	0.003	0.000	0.003	2.078	1.136	0.000	0.000	3.215	0.000	3.218
Total:	0.000	0.057	0.000	0.057	30.724	16.589	0.000	0.000	47.313	0.000	47.370

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km9-km16
Alternative: Base
Sensitivity: Cost -20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	0.000	0.003	0.000	0.003	1.239	0.658	0.000	0.000	1.897	0.000	1.900
2016	0.000	0.003	0.000	0.003	1.322	0.704	0.000	0.000	2.025	0.000	2.028
2017	0.000	0.003	0.000	0.003	1.388	0.739	0.000	0.000	2.126	0.000	2.129
2018	0.000	0.003	0.000	0.003	1.455	0.776	0.000	0.000	2.230	0.000	2.233
2019	0.000	0.003	0.000	0.003	1.525	0.814	0.000	0.000	2.340	0.000	2.342
2020	0.000	0.003	0.000	0.003	1.599	0.855	0.000	0.000	2.454	0.000	2.457
2021	0.000	0.003	0.000	0.003	1.674	0.897	0.000	0.000	2.571	0.000	2.574
2022	0.000	0.003	0.000	0.003	1.739	0.933	0.000	0.000	2.672	0.000	2.675
2023	0.000	0.003	0.000	0.003	1.806	0.970	0.000	0.000	2.776	0.000	2.779
2024	0.000	0.003	0.000	0.003	1.875	1.009	0.000	0.000	2.884	0.000	2.887
2025	0.000	0.003	0.000	0.003	1.947	1.049	0.000	0.000	2.996	0.000	2.999
2026	0.000	0.003	0.000	0.003	2.022	1.091	0.000	0.000	3.113	0.000	3.116
2027	0.000	0.003	0.000	0.003	2.097	1.134	0.000	0.000	3.232	0.000	3.235
2028	0.000	0.003	0.000	0.003	2.175	1.179	0.000	0.000	3.354	0.000	3.357
2029	0.000	0.003	0.000	0.003	2.256	1.226	0.000	0.000	3.482	0.000	3.485
2030	0.000	0.003	0.000	0.003	2.320	1.263	0.000	0.000	3.583	0.000	3.586
2031	0.000	0.003	0.000	0.003	2.387	1.301	0.000	0.000	3.687	0.000	3.691
2032	0.000	0.003	0.000	0.003	2.455	1.339	0.000	0.000	3.795	0.000	3.798
2033	0.000	0.003	0.000	0.003	2.526	1.379	0.000	0.000	3.905	0.000	3.908
2034	0.000	0.003	0.000	0.003	2.598	1.421	0.000	0.000	4.019	0.000	4.022
Total:	0.000	0.059	0.000	0.059	38.405	20.736	0.000	0.000	59.141	0.000	59.200

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km9-km16
Alternative: Base
Sensitivity: Traffice +20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	0.000	0.003	0.000	0.003	1.487	0.789	0.000	0.000	2.276	0.000	2.279
2016	0.000	0.003	0.000	0.003	1.586	0.844	0.000	0.000	2.430	0.000	2.433
2017	0.000	0.003	0.000	0.003	1.665	0.886	0.000	0.000	2.552	0.000	2.554
2018	0.000	0.003	0.000	0.003	1.746	0.931	0.000	0.000	2.676	0.000	2.679
2019	0.000	0.003	0.000	0.003	1.830	0.977	0.000	0.000	2.807	0.000	2.810
2020	0.000	0.003	0.000	0.003	1.919	1.026	0.000	0.000	2.945	0.000	2.948
2021	0.000	0.003	0.000	0.003	2.009	1.077	0.000	0.000	3.086	0.000	3.089
2022	0.000	0.003	0.000	0.003	2.086	1.120	0.000	0.000	3.206	0.000	3.209
2023	0.000	0.003	0.000	0.003	2.167	1.164	0.000	0.000	3.331	0.000	3.334
2024	0.000	0.003	0.000	0.003	2.250	1.211	0.000	0.000	3.461	0.000	3.464
2025	0.000	0.003	0.000	0.003	2.337	1.259	0.000	0.000	3.596	0.000	3.599
2026	0.000	0.003	0.000	0.003	2.427	1.309	0.000	0.000	3.736	0.000	3.739
2027	0.000	0.003	0.000	0.003	2.517	1.361	0.000	0.000	3.878	0.000	3.881
2028	0.000	0.003	0.000	0.003	2.610	1.415	0.000	0.000	4.025	0.000	4.028
2029	0.000	0.003	0.000	0.003	2.707	1.471	0.000	0.000	4.179	0.000	4.182
2030	0.000	0.003	0.000	0.003	2.785	1.515	0.000	0.000	4.300	0.000	4.303
2031	0.000	0.003	0.000	0.003	2.864	1.561	0.000	0.000	4.425	0.000	4.428
2032	0.000	0.003	0.000	0.003	2.946	1.607	0.000	0.000	4.554	0.000	4.557
2033	0.000	0.003	0.000	0.003	3.031	1.655	0.000	0.000	4.686	0.000	4.689
2034	0.000	0.003	0.000	0.003	3.118	1.705	0.000	0.000	4.822	0.000	4.826
Total:	0.000	0.061	0.000	0.061	46.086	24.884	0.000	0.000	70.970	0.000	71.030

HDM-4 Road Agency and User Cost Streams (Undiscounted)

Section: Agara-Kornisi km9-km16
Alternative: Base
Sensitivity: Traffice -20%

Sect ID: sh22 km9-16 Road Class: Secondary
 Length: 7.50 km Width: 6.00 m Rise+Fall: 10.00 m/km Curvature: 15.00 deg/km

Year	Road Agency Costs (RAC)				Road User Costs (RUC)					Net Social / Exogenous Cost	Total Transport Cost
	Capital	Recurrent	Special	Total RAC	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accidents	Total RUC		
2015	0.000	0.003	0.000	0.003	0.991	0.526	0.000	0.000	1.517	0.000	1.520
2016	0.000	0.003	0.000	0.003	1.057	0.563	0.000	0.000	1.620	0.000	1.623
2017	0.000	0.003	0.000	0.003	1.110	0.591	0.000	0.000	1.701	0.000	1.704
2018	0.000	0.003	0.000	0.003	1.164	0.620	0.000	0.000	1.784	0.000	1.787
2019	0.000	0.003	0.000	0.003	1.220	0.651	0.000	0.000	1.872	0.000	1.874
2020	0.000	0.003	0.000	0.003	1.279	0.684	0.000	0.000	1.963	0.000	1.966
2021	0.000	0.003	0.000	0.003	1.339	0.718	0.000	0.000	2.057	0.000	2.060
2022	0.000	0.003	0.000	0.003	1.391	0.746	0.000	0.000	2.137	0.000	2.140
2023	0.000	0.003	0.000	0.003	1.444	0.776	0.000	0.000	2.221	0.000	2.223
2024	0.000	0.003	0.000	0.003	1.500	0.807	0.000	0.000	2.307	0.000	2.310
2025	0.000	0.003	0.000	0.003	1.558	0.839	0.000	0.000	2.397	0.000	2.400
2026	0.000	0.003	0.000	0.003	1.618	0.873	0.000	0.000	2.491	0.000	2.493
2027	0.000	0.003	0.000	0.003	1.678	0.907	0.000	0.000	2.585	0.000	2.588
2028	0.000	0.003	0.000	0.003	1.740	0.943	0.000	0.000	2.684	0.000	2.686
2029	0.000	0.003	0.000	0.003	1.805	0.981	0.000	0.000	2.786	0.000	2.789
2030	0.000	0.003	0.000	0.003	1.856	1.010	0.000	0.000	2.867	0.000	2.870
2031	0.000	0.003	0.000	0.003	1.910	1.040	0.000	0.000	2.950	0.000	2.953
2032	0.000	0.003	0.000	0.003	1.964	1.072	0.000	0.000	3.036	0.000	3.039
2033	0.000	0.003	0.000	0.003	2.020	1.104	0.000	0.000	3.124	0.000	3.127
2034	0.000	0.003	0.000	0.003	2.078	1.136	0.000	0.000	3.215	0.000	3.218
Total:	0.000	0.057	0.000	0.057	30.724	16.589	0.000	0.000	47.313	0.000	47.370

Study Name: **Agara-Kornisi km1-km4, km9-km16**

Run Date: **28-08-2014**

Currency: **Lari**

Articulated Truck

Definition

Base type: Articulated Truck Info: articulated truck or truck with drawbar trailer
 Category: Motorised Life method: Optimal life

Basic Characteristics

PCSE: 1.80	Retread cost: 15%	Private use: 0%
No. of wheels: 18	ESALF: 4.63	Passengers: 0
No. of axles: 5	Annual km: 86,000 km/year	Work related trips: 0%
Tyre type: Bias ply	Working hours: 2,050 hours	Operating weight: 28.00 tonnes
Base no. of recaps: 1.30	Average life: 14 years	

Economic Unit Costs

New vehicle: 160,000	Maintenance labour: 3.00 per hour	Passenger work time: 0
Replacement tyre: 800.00	Crew wages: 2.60 per hour	Non-work time: 0
Fuel: 1.65 per litre	Annual overhead: 1,280	Cargo delay time: 3.08 per hour
Lubricating oil: 13.60 per litre	Annual interest: 19.20%	

Forces

Frontal area: 9.00 m ²	Braking power: 255 kW	Rolling resistance a2: 0.01
CD: 0.80	Rated engine power: 300 kW	FPLIM: 1.00
CD Multiplier: 1.22	Rolling resistance a0: 37.00	
Driving power: 227 kW	Rolling resistance a1: 0.06	

Speed

VCURVE_a0: 4.20	Bituminous VDES2: 104.76 km/h	Unsealed CW1: 4.00m
VCURVE_a1: 0.27	Bituminous VDESa0: 0.00 × 10 ⁻³	Unsealed CW2: 6.80m
VROUGH_a0: 1.15	Bituminous VDESa1: 0.70	Concrete VDES2: 104.76 km/h
ARVMAX: 160 mm/s	Bituminous VDESa2: 0.75	Concrete VDESa0: 0.00 × 10 ⁻³
Speed beta: 0.11	Bituminous CW1: 4.00	Concrete VDESa1: 0.70
Speed sigma: 0.00	Bituminous CW2: 6.80	Concrete VDESa2: 0.75
COV: 0.15	Unsealed VDES2: 104.76 km/h	Concrete CW1: 4.00m
CGR_a0: 94.90	Unsealed VDESa0: 0.00 × 10 ⁻³	Concrete CW2: 6.80m
CGR_a1: 0.85	Unsealed VDESa1: 0.70	
CGR_a2: 2.80	Unsealed VDESa2: 0.75	

Fuel

RPM_a0: 1,900 RPM	IDLE_FUEL: 1.12 mL/s	PCTPENG: 80.00%
RPM_a1: -10.18 RPM/(m/s)	ZETAB: 0.055 mL/kW/s	Kpea: 1.00
RPM_a2: 0.15 RPM/(m/s) ²	EHP: 0.10	Oil contam. losses: 3.10 L/1000km
RPM_a3: 0.00 m/s	EDT: 0.86	Oil operation losses: 0.0021 L/1000km
RPM_IDLE: 500 RPM	PACCS_a0: 0.20	

Acceleration Effects

Sigma amaxv: 0.75 m/s ²	NMTAMAX: 0.40 m/s ²	AMAXRI: 20.00 m/s ²
FRIAMAX: 0.20 m/s ²	RIAMAX: 0.30 m/s ²	

Tyres

Wheel diameter: 1.05 m	Wear coefficient: 0.00311 dm ³ /J-m	Wearable rubber volume: 8.00 dm ³
Constant term: 0.03988 dm ³	Congestion effects factor: 0.10	

Maintenance

Parts constant term: 13.58	Parts age effect: 0.371	Labour constant term: 301.46
Parts roughness effect: 2.96	Parts smoothing factor: 0.25	Labour parts exponent: 0.519
Parts rotation factor: 1.00	Parts roughness limit: 2.96	Labour rotation factor: 1.00
Parts translation factor: 0.00	Parts congestion factor: 0.10	Labour translation factor: 0.00

Optimal Life

Regression coeff. 1: -65.8553	Min residual value: 2.00%	Max roughness threshold: 5.00 IRI
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Regression coeff. 2: -1.9194

Max residual value: 15.00%

-Emissions

Hydrocarbon aHC: 0.0400

Hydrocarbon rHC: 0.0000

Carbon monoxide aCO: 0.0800

Nitrous oxide aNOX: 0.0270

Nitrous oxide FRNOx: 0.0000

Particulates aPM: 0.0032

Particulates rPM: 0.0000

Carbon dioxide aCO2: 2.0000

Sulphur dioxide aSO2: 0.0050

Lead Pb: 0.7500

Lead aPb: 0.0000

-Energy

Used in production: 1,500 GJ

% vehicle made in country: 10.00%

Unladen vehicle weight: 11.00 tonnes

% parts made in country: 10.00%

Tyre weight: 13.70 kg

Cars

Definition		
Base type: Medium Car	Info: medium passenger cars	
Category: Motorised	Life method: Constant life	
Basic Characteristics		
PCSE: 1.00	Retread cost: 15%	Private use: 100%
No. of wheels: 4	ESALF: 0.00	Passengers: 1
No. of axles: 2	Annual km: 23,000 km/year	Work related trips: 75%
Tyre type: Radial ply	Working hours: 550 hours	Operating weight: 1.20 tonnes
Base no. of recaps: 1.30	Average life: 10 years	
Economic Unit Costs		
New vehicle: 21,600	Maintenance labour: 1.60 per hour	Passenger work time: 3.60 per hour
Replacement tyre: 120.00	Crew wages: 3.60 per hour	Non-work time: 1.00 per hour
Fuel: 1.65 per litre	Annual overhead: 640	Cargo delay time: 0
Lubricating oil: 13.60 per litre	Annual interest: 19.20%	
Forces		
Frontal area: 1.90 m ²	Braking power: 20 kW	Rolling resistance a2: 0.01
CD: 0.42	Rated engine power: 70 kW	FPLIM: 1.00
CD Multiplier: 1.10	Rolling resistance a0: 37.00	
Driving power: 33 kW	Rolling resistance a1: 0.06	
Speed		
VCURVE_a0: 3.90	Bituminous VDES2: 125.28 km/h	Unsealed CW1: 4.00m
VCURVE_a1: 0.34	Bituminous VDESa0: 0.00 × 10 ⁻³	Unsealed CW2: 6.80m
VROUGH_a0: 1.15	Bituminous VDESa1: 2.90	Concrete VDES2: 125.28 km/h
ARVMAX: 203 mm/s	Bituminous VDESa2: 0.75	Concrete VDESa0: 0.00 × 10 ⁻³
Speed beta: 0.15	Bituminous CW1: 4.00	Concrete VDESa1: 2.90
Speed sigma: 0.00	Bituminous CW2: 6.80	Concrete VDESa2: 0.75
COV: 0.15	Unsealed VDES2: 125.28 km/h	Concrete CW1: 4.00m
CGR_a0: 94.90	Unsealed VDESa0: 0.00 × 10 ⁻³	Concrete CW2: 6.80m
CGR_a1: 0.85	Unsealed VDESa1: 2.90	
CGR_a2: 2.80	Unsealed VDESa2: 0.75	
Fuel		
RPM_a0: 1,910 RPM	IDLE_FUEL: 0.36 mL/s	PCTPENG: 80.00%
RPM_a1: -12.31 RPM/(m/s)	ZETAB: 0.067 mL/kW/s	Kpea: 1.00
RPM_a2: 0.22 RPM/(m/s) ²	EHP: 0.25	Oil contam. losses: 0.40 L/1000km
RPM_a3: -0.00 m/s	EDT: 0.90	Oil operation losses: 0.0028 L/1000km
RPM_IDLE: 800 RPM	PACCS_a0: 0.20	
Acceleration Effects		
Sigma amaxv: 0.75 m/s ²	NMTAMAX: 0.40 m/s ²	AMAXRI: 20.00 m/s ²
FRIAMAX: 0.20 m/s ²	RIAMAX: 0.30 m/s ²	
Tyres		
Wheel diameter: 0.60 m	Wear coefficient: 0.00204 dm ³ /J-m	Wearable rubber volume: 1.40 dm ³
Constant term: 0.02616 dm ³	Congestion effects factor: 0.10	
Maintenance		
Parts constant term: 36.94	Parts age effect: 0.308	Labour constant term: 77.14
Parts roughness effect: 6.20	Parts smoothing factor: 0.25	Labour parts exponent: 0.547
Parts rotation factor: 1.00	Parts roughness limit: 6.20	Labour rotation factor: 1.00
Parts translation factor: 0.00	Parts congestion factor: 0.10	Labour translation factor: 0.00
Optimal Life		
Regression coeff. 1: -65.8553	Min residual value: 2.00%	Max roughness threshold: 5.00 IRI
Regression coeff. 2: -1.9194	Max residual value: 15.00%	
Emissions		
Hydrocarbon aHC: 0.0120	Nitrous oxide aNOX: 0.0550	Carbon dioxide aCO2: 1.8000
Hydrocarbon rHC: 0.0000	Nitrous oxide FRNOX: 0.1700	Sulphur dioxide aSO2: 0.0005
Carbon monoxide aCO: 0.1000	Particulates aPM: 0.0001	Lead Pb: 0.7500
	Particulates rPM: 0.0000	Lead aPb: 0.0005
Energy		
Used in production: 100 GJ	% vehicle made in country: 10.00%	Unladen vehicle weight: 1.00 tonnes
% parts made in country: 10.00%	Tyre weight: 3.50 kg	

Mini Bus

Definition

Base type: Mini Bus Info: small bus based on panel van chassis (usually 4 tyres)
 Category: Motorised Life method: Optimal life

Basic Characteristics

PCSE: 1.20	Retread cost: 15%	Private use: 0%
No. of wheels: 4	ESALF: 1.20	Passengers: 15
No. of axles: 2	Annual km: 30,000 km/year	Work related trips: 75%
Tyre type: Radial ply	Working hours: 750 hours	Operating weight: 2.20 tonnes
Base no. of recaps: 1.30	Average life: 8 years	

Economic Unit Costs

New vehicle: 32,000	Maintenance labour: 2.30 per hour	Passenger work time: 3.60 per hour
Replacement tyre: 200.00	Crew wages: 3.60 per hour	Non-work time: 1.00 per hour
Fuel: 1.65 per litre	Annual overhead: 640	Cargo delay time: 0
Lubricating oil: 13.60 per litre	Annual interest: 19.20%	

Forces

Frontal area: 2.90 m ²	Braking power: 26 kW	Rolling resistance a2: 0.01
CD: 0.50	Rated engine power: 60 kW	FPLIM: 1.00
CD Multiplier: 1.11	Rolling resistance a0: 37.00	
Driving power: 40 kW	Rolling resistance a1: 0.06	

Speed

VCURVE_a0: 3.90	Bituminous VDES2: 165.96 km/h	Unsealed CW1: 4.00m
VCURVE_a1: 0.34	Bituminous VDESa0: 0.00 × 10 ⁻³	Unsealed CW2: 6.80m
VROUGH_a0: 1.15	Bituminous VDESa1: 0.60	Concrete VDES2: 165.96 km/h
ARVMAX: 203 mm/s	Bituminous VDESa2: 0.75	Concrete VDESa0: 0.00 × 10 ⁻³
Speed beta: 0.15	Bituminous CW1: 4.00	Concrete VDESa1: 0.60
Speed sigma: 0.00	Bituminous CW2: 6.80	Concrete VDESa2: 0.75
COV: 0.15	Unsealed VDES2: 165.96 km/h	Concrete CW1: 4.00m
CGR_a0: 94.90	Unsealed VDESa0: 0.00 × 10 ⁻³	Concrete CW2: 6.80m
CGR_a1: 0.85	Unsealed VDESa1: 0.60	
CGR_a2: 2.80	Unsealed VDESa2: 0.75	

Fuel

RPM_a0: 1,910 RPM	IDLE_FUEL: 0.48 mL/s	PCTPENG: 80.00%
RPM_a1: -12.31 RPM/(m/s)	ZETAB: 0.067 mL/kW/s	Kpea: 1.00
RPM_a2: 0.22 RPM/(m/s) ²	EHP: 0.25	Oil contam. losses: 0.67 L/1000km
RPM_a3: -0.00 m/s	EDT: 0.90	Oil operation losses: 0.0028 L/1000km
RPM_IDLE: 800 RPM	PACCS_a0: 0.20	

Acceleration Effects

Sigma amaxv: 0.75 m/s ²	NMTAMAX: 0.40 m/s ²	AMAXRI: 20.00 m/s ²
FRIAMAX: 0.20 m/s ²	RIAMAX: 0.30 m/s ²	

Tyres

Wheel diameter: 0.70 m	Wear coefficient: 0.00187 dm ³ /J-m	Wearable rubber volume: 1.60 dm ³
Constant term: 0.02400 dm ³	Congestion effects factor: 0.10	

Maintenance

Parts constant term: 36.76	Parts age effect: 0.308	Labour constant term: 77.14
Parts roughness effect: 6.20	Parts smoothing factor: 0.25	Labour parts exponent: 0.547
Parts rotation factor: 1.00	Parts roughness limit: 6.20	Labour rotation factor: 1.00
Parts translation factor: 0.00	Parts congestion factor: 0.10	Labour translation factor: 0.00

Optimal Life

Regression coeff. 1: -65.8553	Min residual value: 2.00%	Max roughness threshold: 5.00 IRI
Regression coeff. 2: -1.9194	Max residual value: 15.00%	

Emissions

Hydrocarbon aHC: 0.0120	Nitrous oxide aNOX: 0.0550	Carbon dioxide aCO2: 1.8000
Hydrocarbon rHC: 0.0000	Nitrous oxide FRNOx: 0.1700	Sulphur dioxide aSO2: 0.0005
Carbon monoxide aCO: 0.1000	Particulates aPM: 0.0001	Lead Pb: 0.7500
	Particulates rPM: 0.0000	Lead aPb: 0.0005

Energy

Used in production: 300 GJ	% vehicle made in country: 10.00%	Unladen vehicle weight: 1.10 tonnes
% parts made in country: 10.00%	Tyre weight: 4.00 kg	

Truck

Definition

Base type: Medium Truck Info: medium two-axle rigid truck (> 3.5 tonnes)
 Category: Motorised Life method: Optimal life

Basic Characteristics

PCSE: 1.40 Retread cost: 15% Private use: 0%
 No. of wheels: 6 ESALF: 1.25 Passengers: 0
 No. of axles: 2 Annual km: 40,000 km/year Work related trips: 0%
 Tyre type: Bias ply Working hours: 1,200 hours Operating weight: 7.50 tonnes
 Base no. of recaps: 1.30 Average life: 12 years

Economic Unit Costs

New vehicle: 56,000 Maintenance labour: 3.00 per hour Passenger work time: 0
 Replacement tyre: 640.00 Crew wages: 1.92 per hour Non-work time: 0
 Fuel: 1.65 per litre Annual overhead: 1,280 Cargo delay time: 2.09 per hour
 Lubricating oil: 13.60 per litre Annual interest: 19.20%

Forces

Frontal area: 5.00 m² Braking power: 70 kW Rolling resistance a2: 0.01
 CD: 0.60 Rated engine power: 100 kW FPLIM: 1.00
 CD Multiplier: 1.13 Rolling resistance a0: 37.00
 Driving power: 87 kW Rolling resistance a1: 0.06

Speed

VCURVE_a0: 4.80 Bituminous VDES2: 105.48 km/h Unsealed CW1: 4.00m
 VCURVE_a1: 0.29 Bituminous VDESa0: 0.00 × 10⁻³ Unsealed CW2: 6.80m
 VROUGH_a0: 1.15 Bituminous VDESa1: 0.70 Concrete VDES2: 105.48 km/h
 ARVMAX: 200 mm/s Bituminous VDESa2: 0.75 Concrete VDESa0: 0.00 × 10⁻³
 Speed beta: 0.16 Bituminous CW1: 4.00 Concrete VDESa1: 0.70
 Speed sigma: 0.00 Bituminous CW2: 6.80 Concrete VDESa2: 0.75
 COV: 0.15 Unsealed VDES2: 105.48 km/h Concrete CW1: 4.00m
 CGR_a0: 94.90 Unsealed VDESa0: 0.00 × 10⁻³ Concrete CW2: 6.80m
 CGR_a1: 0.85 Unsealed VDESa1: 0.70
 CGR_a2: 2.80 Unsealed VDESa2: 0.75

Fuel

RPM_a0: 1,926 RPM IDLE_FUEL: 0.37 mL/s PCTPENG: 80.00%
 RPM_a1: -32.35 RPM/(m/s) ZETAB: 0.057 mL/kW/s Kpea: 1.00
 RPM_a2: 0.74 RPM/(m/s)² EHP: 0.10 Oil contam. losses: 1.56 L/1000km
 RPM_a3: -0.00 m/s EDT: 0.86 Oil operation losses: 0.0021 L/1000km
 RPM_IDLE: 500 RPM PACCS_a0: 0.20

Acceleration Effects

Sigma amaxv: 0.75 m/s² NMTAMAX: 0.40 m/s² AMAXRI: 20.00 m/s²
 FRIAMAX: 0.20 m/s² RIAMAX: 0.30 m/s²

Tyres

Wheel diameter: 1.05 m Wear coefficient: 0.00201 dm³/J-m Wearable rubber volume: 6.00 dm³
 Constant term: 0.02585 dm³ Congestion effects factor: 0.10

Maintenance

Parts constant term: 11.58 Parts age effect: 0.371 Labour constant term: 242.03
 Parts roughness effect: 2.96 Parts smoothing factor: 0.25 Labour parts exponent: 0.519
 Parts rotation factor: 1.00 Parts roughness limit: 2.96 Labour rotation factor: 1.00
 Parts translation factor: 0.00 Parts congestion factor: 0.10 Labour translation factor: 0.00

Optimal Life

Regression coeff. 1: -65.8553 Min residual value: 2.00% Max roughness threshold: 5.00 IRI
 Regression coeff. 2: -1.9194 Max residual value: 15.00%

Emissions

Hydrocarbon aHC: 0.0400 Nitrous oxide aNOX: 0.0270 Carbon dioxide aCO2: 2.0000
 Hydrocarbon rHC: 0.0000 Nitrous oxide FRNOX: 0.0000 Sulphur dioxide aSO2: 0.0050
 Carbon monoxide aCO: 0.0800 Particulates aPM: 0.0032 Lead Pb: 0.7500
 Particulates rPM: 0.0000 Lead aPb: 0.0000

Energy

Used in production: 600 GJ % vehicle made in country: 10.00% Unladen vehicle weight: 4.50 tonnes
 % parts made in country: 10.00% Tyre weight: 12.40 kg