

9. Ubicación de Puente Río Chirripo (No.26)

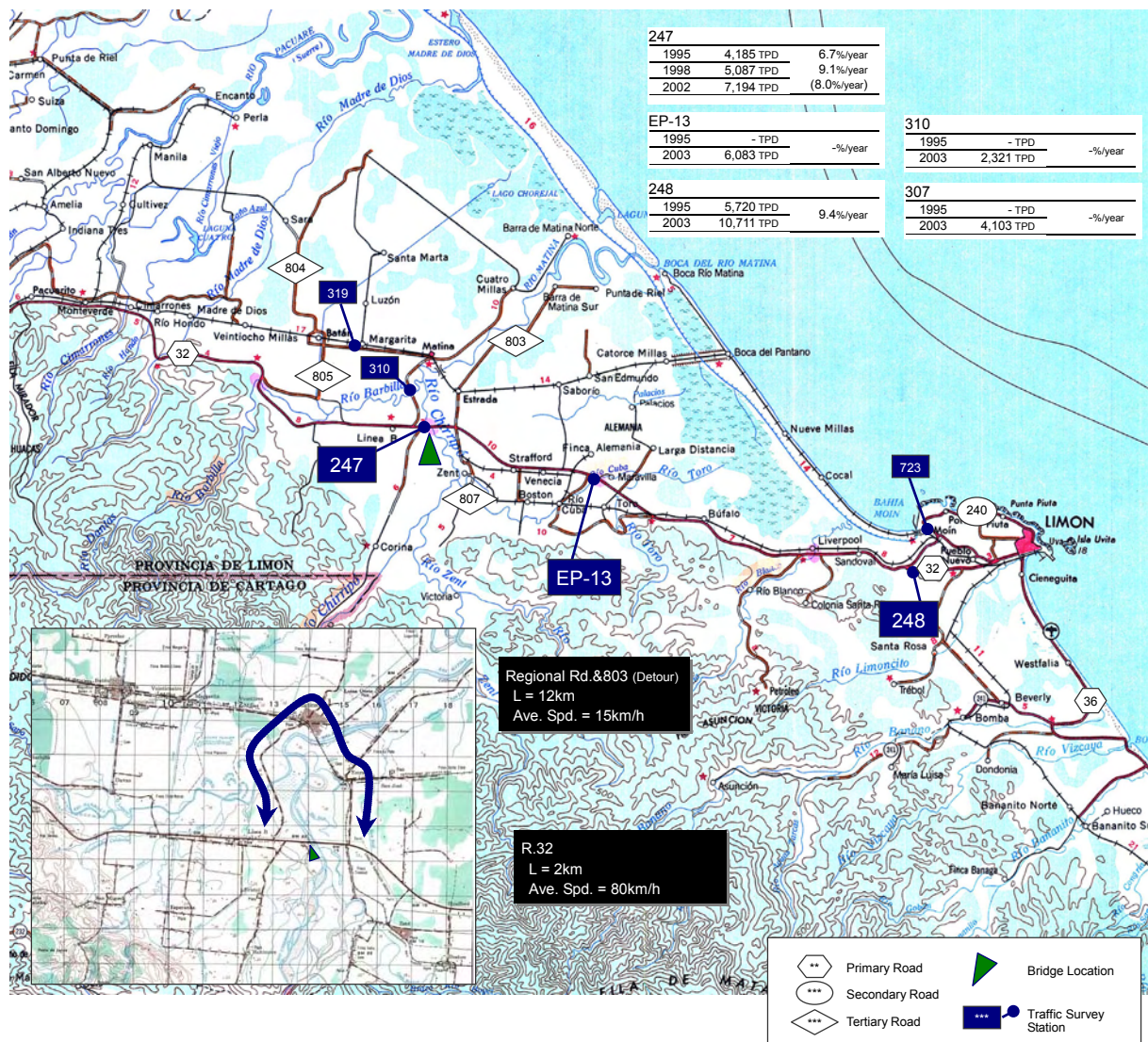
**Ubicación : Limon Province**

**Vista Lateral**

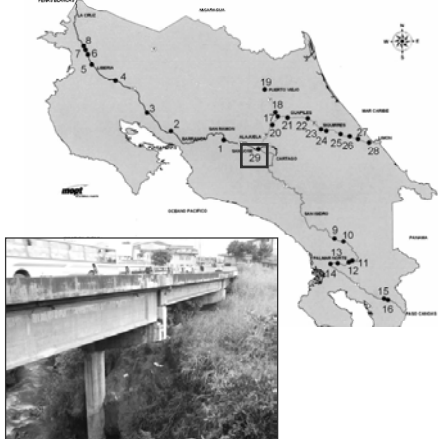
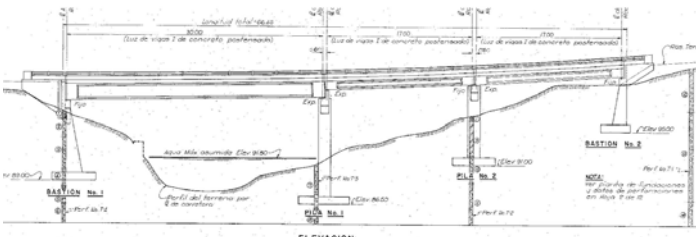
**Diseñado : 1969/07**

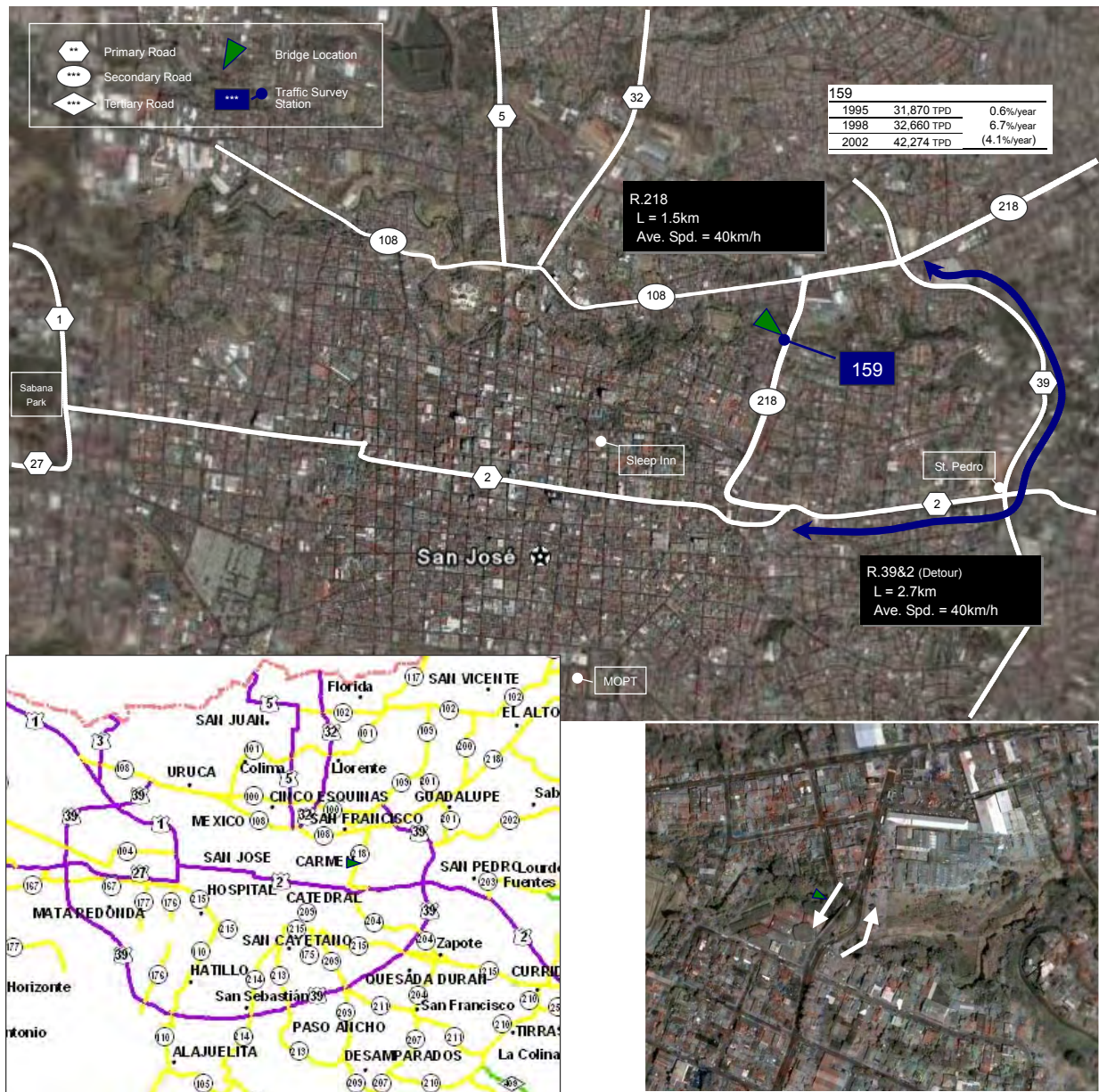
**Terminado: 1974-1978**

**Length: 431.9m, Design Live Load: HS-20**  
**Sup: Continuous Steel I Beam**  
**Sub: Wall Type Pier, Reversed T Type Abutment**  
**Foundation: Pile Foundations**



10. Ubicación de Puente Rio Torres (No.29)

<p><b>Ubicación : San Jose Province</b></p> 	<p><b>Vista Lateral</b></p> 
<p><b>Diseñado : 1979/05/ Terminado: N.D.</b></p>	
<p><b>Length: 66.46m, Design Live Load: HS20-44</b>  <b>Sup: Concrete I Pos-tensioned Girder</b>  <b>Sub: T Type Pier, Rigid Frame Abutment</b>  <b>Foundation: Spread Foundations</b></p>	



#### 4.4. ESCENARIO PARA 10 PUENTES SELECCIONADOS

##### No2 Puente Rio Aranjuez (R.1)

##### Situación "Realizar" en caso de implemetar Rehabilitación & Refuerzo

Contents of Rehabilitation & Reinforcement	Super	Slab Deck: Replacement (Precast Slab) Floor System Stringer Addition & Rearrange meme Main Girder Member Addition Accessory Expansion Joint (New Installation) Flexible Railing Installation Prevention System Asphalt Paving & Water Proofing Pier Girder Connection (Concrete Block) Concrete Jacketing Footing Widening
	Sub	Foundation Gabion Box Installation Wet Masonry Prevention System Bridge Seat Widening (Abutment & Pier)
Traffic Control	Both lane / <u>One lane</u> / Not Necessary	( 24h ) Total ( 100 ) Days
Maintenance Plan	Inspection	Routine every ( 5 ) years
		Detailed every ( 10 ) years
	Super	Painting every ( 10 ) years
		Repair for Floor System (Injection etc) every ( 15 ) years
		Reinforcement for Floor System (FRP Bonding) every ( 30 ) years
		Overlay of Pavement every ( 7 ) years
		Replacement of Expansion Joint every ( 15 ) years
		Asphalt Paving & Waterproofing every ( 15 ) years
		Sub

##### Situación "No realizar" en caso de NO implemetar Rehabilitación & Refuerzo

Escenario					
No.	Occurrence Part	Results	year	Social Effect	Emergency & Rehabilitation Work
1	Deck Slab Floor System	Increase of Deficiency	Within	Traffic Suspension 20 days	Urgent Repair Work
		Not Passable	10 years	1-dir. Traffic Closure 100 days	Slab Replacement
2	Main Girder	Deterioration of Paint & Corrosion	Within	Traffic Suspension 24 hrs.	Member Addition
		Lack of Cross Sectional Area	20 years		
3	Main Girder	Fatigue Damaged Cracks around Connections	Within 30 years	Traffic Suspension 24 hrs	Member Addition
4	Pier	Earthquake Damage at Pier	Within 30 years	1-dir. Traffic Closure 3 hrs. 7 days	Urgent Repair Work
5	Pier	Earthquake Collapse of Pier & Bridge Falling Down	Within 50 years	Traffic Suspension 30 days	Bailey Bridge Const. Re-Construction

**No3 Puente Rio Abangares (R.1)**

**Situación "Realizar" en caso de implemetar Rehabilitación & Refuerzo**

Contents of Rehabilitation & Reinforcement	Super	Slab Deck:	Replacement (Precast Slab)	
		Floor System	Stringer Addition & Rearrange meme	
		Main Girder	Diaphragm Rearrangement Cover Plate Fixing	
		Accessory	Expansion Joint (New Installation) Flexible Railing Installation	
		Prevention System	Asphalt Paving & Water Proofing	
	Sub	Pier	Girder Connection (Chain Type) Concrete Jacketing	
		Foundation	Footing Widening Gabion Box Installation	
		Prevention System	Bridge Seat Widening (Abutment & Pier)	
		Traffic Control		Both lane / <u>One lane</u> / Not Necessary ( 24h ) Total ( 100 ) Days
		Maintenance Plan	Inspection	Routine
Detailed	every ( 10 ) years			
Super	Painting		every ( 10 ) years	
	Repair for Floor System (Injection etc)		every ( 15 ) years	
	Reinforcement for Floor System (FRP Bonding)		every ( 30 ) years	
	Overlay of Pavement		every ( 7 ) years	
	Replacement of Expansion Joint		every ( 15 ) years	
	Asphalt Paving & Waterproofing		every ( 15 ) years	
	Sub		N/A	N/A

**Situación "No realizar" en caso de NO implemetar Rehabilitación & Refuerzo**

Escenario					
No.	Occurrence Part	Results	year	Social Effect	Emergency & Rehabilitation Work
1	Deck Slab Floor System	Increase of Deficiency Not Passable	Within 10 years	Traffic Suspension 20 days 1-dir. Traffic Closure 100 days	Urgent Repair Work Slab Replacement
2	Main Girder	Deterioration of Paint & Corrosion Lack of Cross Sectional Area	Within 20 years	Traffic Suspension 24 hrs.	Member Addition
3	Main Girder	Fatigue Damaged Cracks around Connections	Within 30 years	Traffic Suspension 24 hrs	Member Addition
4	Pier	Earthquake Damage at Pier	Within 30 years	1-dir. Traffic Closure 3 hrs. 7 days	Urgent Repair Work
5	Pier	Earthquake Collapse of Pier & Bridge Falling Down	Within 50 years	Traffic Suspension 30 days	Bailey Bridge Const. Re-Construction

**No7 Puente Rio Azufrado (R.1)**

**Situación "Realizar" en caso de implementar Rehabilitación & Refuerzo**

Contents of Rehabilitation & Reinforcement	Super	Slab Deck:	Slab Thickness Increase
		Floor System	N/A
		Main Girder	Girder Height Increase Steel Plate Bonding
		Accessory	Expansion Joint (New Installation) Asphalt Paving & Water Proofing
	Sub	Prevention System	N/A
		Pier	Concrete Jacketing
		Foundation	Footing Widening
		Prevention System	N/A
Traffic Control	Both lane / <input checked="" type="checkbox"/> One lane / Not Necessary ( 24h ) Total ( 100 ) Days		
Maintenance Plan	Inspection	Routine	every ( 5 ) years
		Detailed	every ( 10 ) years
	Super	Painting	N/A
		Repair for Floor System (Injection etc)	every ( 15 ) years
		Reinforcement for Floor System (FRP Bonding)	N/A
		Overlay of Pavement	every ( 7 ) years
		Replacement of Expansion Joint	N/A
		Asphalt Paving & Waterproofing	every ( 15 ) years
		Sub	N/A

**Situación "No realizar" en caso de NO implementar Rehabilitación & Refuerzo**

Escenario					
No.	Occurrence Part	Results	year	Social Effect	Emergency & Rehabilitation Work
1	Deck Slab	Holes Not Passable for 1-lane	Within 10 years	1-dir. Traffic Closure 10 days	Urgent Repair Work
2	Main Girder	Increase of Deficiency Not Passable	Within 20 years	Traffic Suspension 30 days	Bailey Bridge Const. Reinforcement of Main Girder

**No12 Puente Río Puerto Nuevo (R.2)**

**Situación “Realizar” en caso de implemetar Rehabilitación & Refuerzo**

Contents of Rehabilitation & Reinforcement	Super	Slab Deck:	FRP Bonding
		Floor System	N/A
		Main Girder	Prestressing (Out Cable) Steel Plate Bonding
		Accessory	Expansion Joint (New Installation) Asphalt Paving & Water Proofing
	Sub	Prevention System	Girder Connection (Chain Type)
		Pier	Height of Transversal Beam Increase
		Foundation	Footing Widening Wet Masonry
		Prevention System	Bridge Seat Widening (Abutment & Pier)
Traffic Control	Both lane / <input checked="" type="checkbox"/> One lane / Not Necessary ( 24h ) Total ( 100 ) Days		
Maintenance Plan	Inspection	Routine	every ( 5 ) years
		Detailed	every ( 10 ) years
	Super	Painting	every ( 10 ) years
		Repair for Floor System (Injection etc)	N/A
		Reinforcement for Floor System (FRP Bonding)	every ( 30 ) years
		Overlay of Pavement	every ( 7 ) years
		Replacement of Expansion Joint	every ( 15 ) years
		Asphalt Paving & Waterproofing	every ( 15 ) years
		Sub	N/A

**Situación “No realizar” en caso de NO implemetar Rehabilitación & Refuerzo**

<b>Escenario</b>					
No.	Occurrence Part	Results	year	Social Effect	Emergency & Rehabilitation Work
1	Deck Slab Floor System	Increase of Deficiency Not Passable	Within 15 years	Traffic Suspension 30 days	Bailey Bridge Const.  Slab Replacement
2	Main Girder	Deterioration of Paint & Corrosion Lack of Cross Sectional Area	Within 20 years	1-dir. Traffic Closure 3 hrs. 7 days	Reinforcement of Main Girder
3	Main Girder	Fatigue Damaged Cracks around Connections	Within 30 years	Traffic Suspension 24 hrs 1-dir. Traffic Closure 3 hrs. 7 days	Reinforcement of Main Girder
4	Pier	Earthquake Collapse of Pier & Bridge Falling Down	Within 50 years	Traffic Suspension 30 days	Bailey Bridge Const.  Re-Construction

**No16 Puente Río Nuevo (R.2)**

**Situación "Realizar" en caso de implemetar Rehabilitación & Refuerzo**

Contents of Rehabilitation & Reinforcement	Super	Slab Deck: Floor System Main Girder Accessory Prevention System Pier	Slab Thickness Increase N/A FRP Bonding Reconstruction of Cross Beam Expansion Joint (New Installation) Asphalt Paving & Water Proofing Girder Connection (Concrete Block) Concrete Jacketing Footing Widening
	Sub	Foundation Prevention System	Additional Pile Installation Gabion Box Installation Wet Masonry Bridge Seat Widening (Abutment)
Traffic Control	Both lane / <u>One lane</u> / Not Necessary ( 24h ) Total ( 100 ) Days		
Maintenance Plan	Inspection	Routine	every ( 5 ) years
		Detailed	every ( 10 ) years
	Super	Painting	N/A
		Repair for Floor System (Injection etc)	every ( 15 ) years
		Reinforcement for Floor System (FRP Bonding)	N/A
		Overlay of Pavement	every ( 7 ) years
		Replacement of Expansion Joint	every ( 15 ) years
		Asphalt Paving & Waterproofing	every ( 15 ) years
		Sub	Gabion

**Situación "No realizar" en caso de NO implemetar Rehabilitación & Refuerzo**

<b>Escenario</b>					
No.	Occurrence Part	Results	year	Social Effect	Emergency & Rehabilitation Work
1	Deck Slab Floor System	Hole Not Passable for 1-dir lane	Within 10 years	1-dir. Traffic Closure 100 days	Urgent Repair
2	Main Girder	Increase of Deficiency Not Passable	Within 20 years	Traffic Suspension 24 hrs.	Bailey Bridge Const. Steel Plate Bonding
3	Foundation	Scouring Buckling	Within 10 years	Traffic Suspension 10 days	Bailey Bridge Const. Re-Construction
4	Foundation	Earthquake Damage of Foundation & Bridge Falling Down	Within 30 years	Traffic Suspension 10 days	Bailey Bridge Const. Re-Construction

**No17 Puente Rio Chirripo (R.4)**

**Situación "Realizar" en caso de implemetar Rehabilitación & Refuerzo**

Contents of Rehabilitation & Reinforcement	Super	Slab Deck:	N/A
		Floor System	N/A
		Main Girder	N/A
	Accessory	Expansion Joint (Replacement)	
		Asphalt Paving & Water Proofing	
		Prevention System	N/A
	Sub	Pier	Rolling Stone Protection
		Foundation	Footing Widening
		Prevention System	N/A
Traffic Control	Both lane / <input checked="" type="checkbox"/> One lane / Not Necessary ( 24h ) Total ( 100 ) Days		
Maintenance Plan	Inspection	Routine	every ( 5 ) years
		Detailed	every ( 10 ) years
	Super	Painting	N/A
		Repair for Floor System (Injection etc)	every ( 15 ) years
		Reinforcement for Floor System (FRP Bonding)	N/A
		Overlay of Pavement	every ( 7 ) years
		Replacement of Expansion Joint	every ( 15 ) years
		Asphalt Paving & Waterproofing	every ( 15 ) years
		Sub	Pier Protection

**Situación "No realizar" en caso de NO implemetar Rehabilitación & Refuerzo**

Escenario					
No.	Occurrence Part	Results	year	Social Effect	Emergency & Rehabilitation Work
1	Deck Slab	Increase of Deficiency Not Passable	Within 30 years	Traffic Suspension 30 days	Bailey Bridge Const.  Reinforcement of Main Girder
2	Pier	Decrease of Cross Sectional Area Decrease of Resistance for Earthquake (20 years after) Earthquake Collapse of Pier & Bridge Falling Down	Within 50 years	Traffic Suspension 30 days	Bailey Bridge Const.  Re-Construction



**No19 Puente Rio Sarapiquí (R.4)**

**Situación "Realizar" en caso de implemetar Rehabilitación & Refuerzo**

Contents of Rehabilitation & Reinforcement	Super	Slab Deck:	FRP Bonding
		Floor System	N/A
		Main Girder	PC Canle Steel Plate Bonding Steel Plate Replacement
		Accessory	Expansion Joint (New Installation) Asphalt Paving & Water Proofing
Sub	Pier	Prevention System	Girder Connection (Chain Type)
		Foundation	Height of Transversal Beam Increase Additional Pile Installation
		Prevention System	Footing Widening Bridge Seat Widening (Abutment & Pier)
		Foundation	Footing Widening Bridge Seat Widening (Abutment & Pier)
Traffic Control	Both lane / <u>One lane</u> / Not Necessary ( 24h ) Total ( 100 ) Days		
Maintenance Plan	Inspection	Routine	every ( 5 ) years
		Detailed	every ( 10 ) years
		Painting	every ( 10 ) years
	Super	Repair for Floor System (Injection etc)	N/A
		Reinforcement for Floor System (FRP Bonding)	every ( 30 ) years
		Overlay of Pavement	every ( 7 ) years
		Replacement of Expansion Joint	every ( 15 ) years
		Asphalt Paving & Waterproofing	every ( 15 ) years
		Sub	N/A

**Situación "No realizar" en caso de NO implemetar Rehabilitación & Refuerzo**

Escenario					
No.	Occurrence Part	Results	year	Social Effect	Emergency & Rehabilitation Work
1	Deck Slab	Increase of Deficiency Not Passable	Within 15 years	Traffic Suspension 30 days	Urgent Repair Work Slab Replacement
2	Main Girder	Deterioration of Paint & Corrosion Lack of Cross Sectional Area	Within 10 years	Traffic Suspension 3 hrs, 7 days.	Steel Plate Replacement
3	Main Girder	Fatigue Damaged Cracks around Connections	Within 30 years	Traffic Suspension 24 hrs Traffic Suspension 3 hrs, 14 days.	Steel Plate Replacement
4	Pier	Earthquake Collapse of Pier & Bridge Falling Down	Within 30 years	Traffic Suspension 30 days	Bailey Bridge Const. Re-Construction

**No20 Puente Rio Sucio (R.32)**

**Situación "Realizar" en caso de implementar Rehabilitación & Refuerzo**

Contents of Rehabilitation & Reinforcement	Super	Slab Deck:	N/A
		Floor System	N/A
		Main Girder	N/A
		Expansion Joint (Replacement)	
	Sub	Accessory	N/A
		Asphalt Paving & Water Proofing	
		Prevention System	N/A
		Pier	Rolling Stone Protection
Sub	Foundation	N/A	
	Prevention System	N/A	
Traffic Control	Both lane / <input checked="" type="checkbox"/> One lane / Not Necessary ( 24h ) Total ( 100 ) Days		
Maintenance Plan	Inspection	Routine	every ( 5 ) years
		Detailed	every ( 10 ) years
	Super	Painting	N/A
		Repair for Floor System (Injection etc)	N/A
		Reinforcement for Floor System (FRP Bonding)	N/A
		Overlay of Pavement	every ( 7 ) years
		Replacement of Expansion Joint	every ( 15 ) years
		Asphalt Paving & Waterproofing	every ( 15 ) years
		Sub	Pier Protection

**Situación "No realizar" en caso de NO implementar Rehabilitación & Refuerzo**

Escenario					
No.	Occurrence Part	Results	year	Social Effect	Emergency & Rehabilitation Work
1	Deck Slab Floor System	Increase of Deficiency Not Passable	Within 30 years	Traffic Suspension 30 days	Bailey Bridge Const.  Slab Replacement
2	Pier	Decrease of Cross Sectional Area Decrease of Resistance for Earthquake Earthquake Collapse of Pier & Bridge Falling Down	Within 50 years	Traffic Suspension 30 days	Bailey Bridge Const.  Re-Construction

**No26 Puente Rio Chirripo (R.32)**

**Situación "Realizar" en caso de implemetar Rehabilitación & Refuerzo**

Contents of Rehabilitation & Reinforcement	Super	Slab Deck:	FRP Bonding
		Floor System	N/A
		Main Girder	N/A
		Accessory	Expansion Joint (New Installation)
	Sub	Prevention System	Asphalt Paving & Water Proofing
		Pier	Girder Connection (Chain Type)
		Foundation	Height of Transversal Beam Installation
	Prevention System	Footing Widening	
		Bridge Seat Widening (Abutment & Pier)	
Traffic Control	Both lane / <input checked="" type="checkbox"/> One lane / Not Necessary ( 24h ) Total ( 100 ) Days		
Maintenance Plan	Inspection	Routine	every ( 5 ) years
		Detailed	every ( 10 ) years
	Super	Painting	N/A
		Repair for Floor System (Injection etc)	every ( 15 ) years
		Reinforcement for Floor System (FRP Bonding)	N/A
		Overlay of Pavement	every ( 7 ) years
		Replacement of Expansion Joint	every ( 15 ) years
		Asphalt Paving & Waterproofing	every ( 15 ) years
		Sub	Pier Protection

**Situación "No realizar" en caso de NO implemetar Rehabilitación & Refuerzo**

Escenario					
No.	Occurrence Part	Results	year	Social Effect	Emergency & Rehabilitation Work
1	Deck Slab Floor System	Increase of Deficiency Not Passable	Within 15 years	Traffic Suspension 30 days	Bailey Bridge Const.  Slab Replacement
2	Main Girder	Deterioration of Paint & Corrosion Lack of Cross Sectional Area	Within 20 years	1-dir. Traffic Closure 3 hrs. 7 days	Steel Plate Replacement
3	Main Girder	Fatigue Damaged Cracks around Connections	Within 30 years	Traffic Suspension 24 hrs  1-dir. Traffic Closure 3 hrs. 14 days	Cover Plate Fixing
4	Pier	Earthquake Falling Down at Main Girder of Side Span	Within 30 years	Traffic Suspension 30 days	Bailey Bridge Const.  Re-Construction

**No29 Puente Rio Torres (R.218)**

**Situación "Realizar" en caso de implemetar Rehabilitación & Refuerzo**

Contents of Rehabilitation & Reinforcement	Super	Slab Deck:	Slab Thickness Increase
		Floor System	N/A
		Main Girder	FRP Bonding
		Accessory	Expansion Joint (New Installation)
		Prevention System	N/A
	Sub	Pier	Asphalt Paving & Water Proofing
		Foundation	Concrete Jacketing
		Prevention System	Height of Transversal Beam Increase
			Footing Widening
			Gabion Box Installation
		Bridge Seat Widening (Abutment & Pier)	
Traffic Control	Both lane / <u>One lane</u> / Not Necessary ( 24h ) Total ( 100 ) Days		
Maintenance Plan	Inspection	Routine	every ( 5 ) years
		Detailed	every ( 10 ) years
	Super	Painting	every ( 10 ) years
		Repair for Floor System (Injection etc)	N/A
		Reinforcement for Floor System (FRP Bonding)	every ( 30 ) years
		Overlay of Pavement	every ( 7 ) years
		Replacement of Expansion Joint	every ( 15 ) years
		Asphalt Paving & Waterproofing	every ( 15 ) years
		Sub	N/A

**Situación "No realizar" en caso de NO implemetar Rehabilitación & Refuerzo**

<b>Escenario</b>					
No.	Occurrence Part	Results	year	Social Effect	Emergency & Rehabilitation Work
1	Deck Slab Floor System	Increase of Deficiency Not Passable	Within 20 years	Traffic Suspension 30 days Detour to another route	FRP/Steel Plate Bonding
2	Pier	Earthquake Bridge Falling Down	Within 30 years	Traffic Suspension 100 days Detour to another route	Re-Construction

#### 4.5. COSTOS DEL TRABAJO PARA 10 PUENTES SELECCIONADOS

Unidad: USD incluyendo Impuesto

		Items	No2	No3	No7	No12	No16
Costos del Trabajo "Situación Realizar"		Project Cost	1,291,336	1,371,664	432,352	1,371,182	661,336
	Inspection	Periodic	*	*	*	*	*
		Detail	*	*	*	*	*
	Maintenance Sup. - St.	Re-Painting	89,360	103,164		106,778	
		Repair for Floor System (Injection)	9,024	10,418	3,227		5,702
		FRP Bounding	135,510	156,444		161,924	
		Overlay of Pavement	8,401	9,698	3,004	10,038	5,308
		Expansion Joint Replacement	45,570	34,178		68,355	45,570
		Asphalt Paving	10,095	11,654	3,610	12,062	6,379
		Water Proofing	92,432	106,711	33,054	110,449	58,410
	Sub - St.	Rolling Stone Protection					
		Protection for Scouring (Gabion)					23,018
	Costos del Trabajo Situación "No realizar"	Emergency Recovery Deck Slab	Emergency Repair	184,338	319,221	4,500	132,161
Floor System			473,630	456,857		631,480	
Main Girder		Member Addition	66,715	26,506	120,927		78,940
		Reinforcement				9,162	
Pier		Urgent Repair Work	48,495	48,495			
Bailey Bridge		Preparation & Construction	553,014	638,442	197,757	660,807	349,461
Re-construction			3,511,200	4,053,600		4,195,600	2,218,800

		Items	No17	No19	No20	No26	No29
Costos del Trabajo Situación "Realizar"		Project Cost <sup>*1</sup>	485,436	1,107,777	359,984	3,270,323	557,085
	Inspection	Periodic	*	*	*	*	*
		Detail	*	*	*	*	*
	Maintenance Sup.- St.	Re-Painting		102,716			67,595
		Repair for Floor System (Injection)	18,072			44,399	
		FRP Bounding		155,716			102,505
		Overlay of Pavement	16,824	9,656	17,920	41,333	6,354
		Expansion Joint Replacement	45,570	45,570	34,178	102,533	45,570
		Asphalt Paving	20,217	11,604	21,534	49,699	7,636
		Water Proofing	185,117	106,248	197,174	454,791	69,919
	Sub - St.	Rolling Stone Protection	40,000				
		Protection for Scouring (Gabion)			48,000		
	Costos del Trabajo Situación "No realizar"	Emergency Recovery Deck Slab	Emergency Repair				
Floor System				607,458	1,127,320	2,600,211	
Main Girder		Member Addition	391,688	261,125		1,117,739	212,306
		Reinforcement				9,162	
Pier		Urgent Repair Work					
Bailey Bridge		Preparation & Construction	1,107,540	635,670	1,179,675	2,720,970	
Re-construction		7,032,000	4,036,000	7,490,000	17,276,000	2,656,000	

**Nota:** "Project Costs" listed herein the table are duly bound with Chapter 12 as well as Appendix 3.: Construction Planning and Cost Estimate.

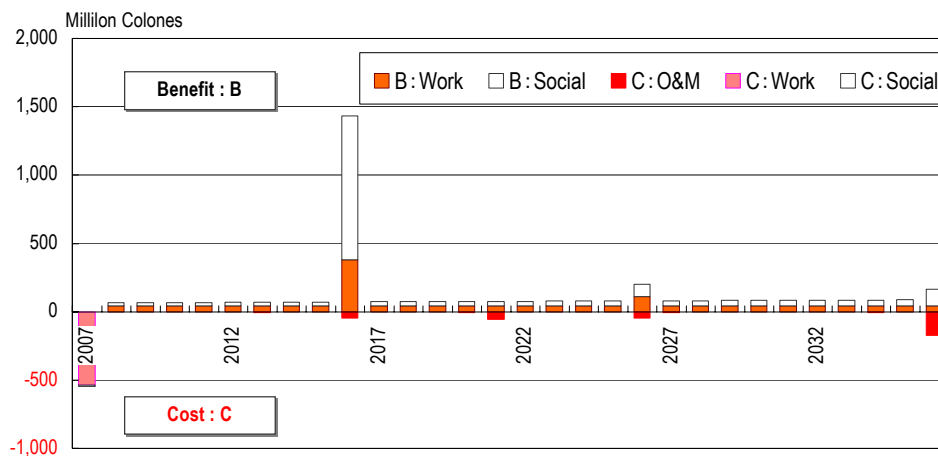
#### 4.6. RRIE & VNA SOBRE 12% PARA 10 PUENTES SELECCIONADOS

##### No2 Puente Rio Aranjuez (R.1)

year	Costs				Benefits			Results
	Work		Social	Total Cost (A)	Work	Social	Total Benefit (B)	Net Benefit (B-A)
	Rehabili. & Renf.	Maintenance	Traffic Rest.		Scenario 1 to 5	Scenario 1 to 5		
1 2007	535,151,502		10,281,282	545,432,784				-545,432,784
2 2008				0	41,927,670	23,957,589	65,885,259	65,885,259
3 2009				0	41,927,670	24,726,747	66,654,417	66,654,417
4 2010				0	41,927,670	25,495,905	67,423,575	67,423,575
5 2011		31,000		31,000	41,927,670	26,265,063	68,192,733	68,161,733
6 2012				0	41,927,670	27,034,221	68,961,891	68,961,891
7 2013		5,206,846		5,206,846	41,927,670	27,803,379	69,731,050	64,524,203
8 2014				0	41,927,670	28,572,537	70,500,208	70,500,208
9 2015				0	41,927,670	29,341,696	71,269,366	71,269,366
10 2016		46,259,909		46,259,909	381,307,565	1,050,038,079	1,431,345,644	1,385,085,735
11 2017				0	41,927,670	30,880,012	72,807,683	72,807,683
12 2018				0	41,927,670	31,649,171	73,576,841	73,576,841
13 2019				0	41,927,670	32,418,329	74,346,000	74,346,000
14 2020		5,206,846		5,206,846	41,927,670	33,187,488	75,115,159	69,908,312
15 2021		57,568,915		57,568,915	41,927,670	33,956,647	75,884,317	18,315,402
16 2022				0	41,927,670	34,725,806	76,653,476	76,653,476
17 2023				0	41,927,670	35,494,964	77,422,635	77,422,635
18 2024				0	41,927,670	36,264,123	78,191,794	78,191,794
19 2025				0	41,927,670	37,033,282	78,960,953	78,960,953
20 2026		46,259,909		46,259,909	110,750,864	91,827,280	202,578,144	156,318,236
21 2027		5,206,846		5,206,846	41,927,670	38,571,600	80,499,271	75,292,425
22 2028				0	41,927,670	39,340,760	81,268,430	81,268,430
23 2029				0	41,927,670	40,109,919	82,037,589	82,037,589
24 2030				0	41,927,670	40,879,078	82,806,749	82,806,749
25 2031		31,000		31,000	41,927,670	41,648,237	83,575,908	83,544,908
26 2032				0	41,927,670	42,417,397	84,345,067	84,345,067
27 2033				0	41,927,670	43,186,556	85,114,227	85,114,227
28 2034		5,206,846		5,206,846	41,927,670	43,955,716	85,883,387	80,676,540
29 2035				0	41,927,670	44,724,876	86,652,546	86,652,546
30 2036		173,694,075		173,694,075	41,927,670	121,315,783	163,243,453	-10,450,622

EIRR = 21.5%

NPV at 12% = 489,869,123 Colones

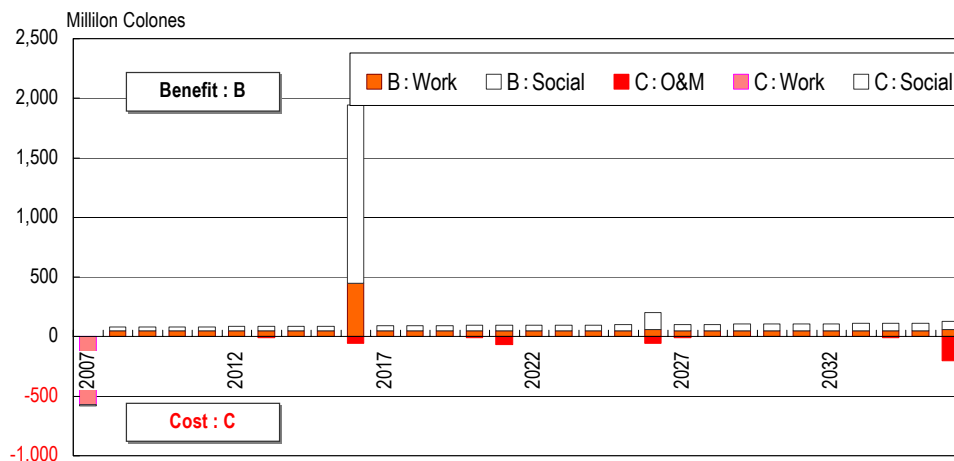


**No3 Puente Rio Abangares (R.1)**

year	Costs				Benefits		Results		
	Work		Social	Total Cost (A)	Work	Social	Total Benefit (B)	Net Benefit (B-A)	
	Rehabil. & Renf.	Maintenance	Traffic Rest.		Scenario 1 to 5	Scenario 1 to 5			
1	2007	568,440,785		9,640,330	578,081,115			-578,081,115	
2	2008				0	48,404,344	31,239,379	79,643,723	79,643,723
3	2009				0	48,404,344	32,460,538	80,864,882	80,864,882
4	2010				0	48,404,344	33,681,698	82,086,042	82,086,042
5	2011		31,000		31,000	48,404,344	34,902,857	83,307,201	83,276,201
6	2012				0	48,404,344	36,124,016	84,528,361	84,528,361
7	2013		6,011,185		6,011,185	48,404,344	37,345,176	85,749,520	79,738,335
8	2014				0	48,404,344	38,566,336	86,970,680	86,970,680
9	2015				0	48,404,344	39,787,495	88,191,839	88,191,839
10	2016		53,380,053		53,380,053	448,705,377	1,492,883,623	1,941,588,999	1,888,208,946
11	2017				0	48,404,344	42,229,815	90,634,159	90,634,159
12	2018				0	48,404,344	43,450,975	91,855,319	91,855,319
13	2019				0	48,404,344	44,672,135	93,076,479	93,076,479
14	2020		6,011,185		6,011,185	48,404,344	45,893,295	94,297,639	88,286,454
15	2021		66,457,205		66,457,205	48,404,344	47,114,455	95,518,799	29,061,594
16	2022				0	48,404,344	48,335,616	96,739,960	96,739,960
17	2023				0	48,404,344	49,556,776	97,961,120	97,961,120
18	2024				0	48,404,344	50,777,937	99,182,281	99,182,281
19	2025				0	48,404,344	51,999,097	100,403,441	100,403,441
20	2026		53,380,053		53,380,053	62,076,139	141,919,285	203,995,424	150,615,371
21	2027		6,011,185		6,011,185	48,404,344	54,441,419	102,845,763	96,834,578
22	2028				0	48,404,344	55,662,580	104,066,924	104,066,924
23	2029				0	48,404,344	56,883,741	105,288,085	105,288,085
24	2030				0	48,404,344	58,104,902	106,509,246	106,509,246
25	2031		31,000		31,000	48,404,344	59,326,063	107,730,407	107,699,407
26	2032				0	48,404,344	60,547,225	108,951,569	108,951,569
27	2033				0	48,404,344	61,768,386	110,172,730	110,172,730
28	2034		6,011,185		6,011,185	48,404,344	62,989,548	111,393,892	105,382,707
29	2035				0	48,404,344	64,210,709	112,615,053	112,615,053
30	2036		200,499,880		200,499,880	62,076,139	65,431,871	127,508,010	-72,991,870

EIRR = 24.9%

NPV at 12% = 759,825,081 Colones

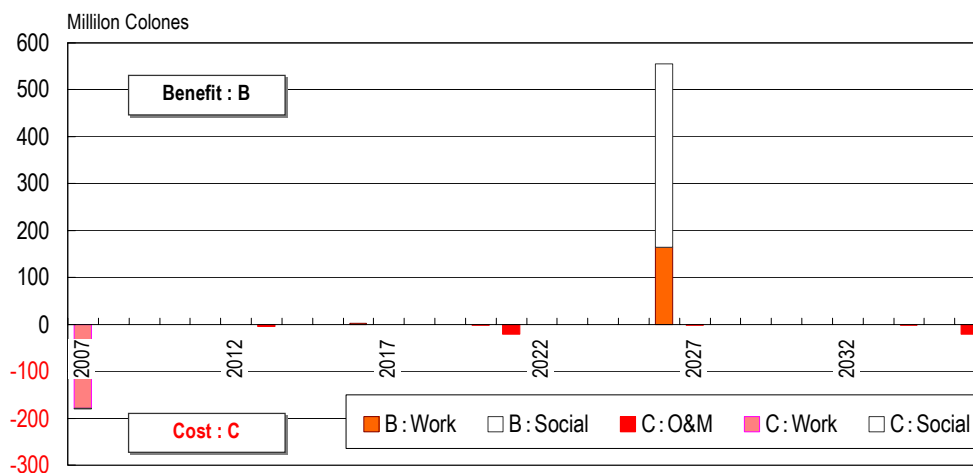


**No7 Puente Rio Azufrado (R.1)**

year	Costs				Benefits		Results		
	Work		Social	Total Cost (A)	Work	Social	Total Benefit (B)	Net Benefit (B-A)	
	Rehabil. & Renf.	Maintenance	Traffic Rest.		Scenario 1 to 5	Scenario 1 to 5			
1	2007	179,173,989		1,677,388	180,851,377				-180,851,377
2	2008				0	0	0	0	0
3	2009				0	0	0	0	0
4	2010				0	0	0	0	0
5	2011		31,000		31,000	0	0	0	-31,000
6	2012				0	0	0	0	0
7	2013		5,206,846		5,206,846	0	0	0	-5,206,846
8	2014				0	0	0	0	0
9	2015				0	0	0	0	0
10	2016		168,000		168,000	2,321,100	172,073	2,493,173	2,325,173
11	2017				0	0	0	0	0
12	2018				0	0	0	0	0
13	2019				0	0	0	0	0
14	2020		1,861,961		1,861,961	0	0	0	-1,861,961
15	2021		20,606,475		20,606,475	0	0	0	-20,606,475
16	2022				0	0	0	0	0
17	2023				0	0	0	0	0
18	2024				0	0	0	0	0
19	2025				0	0	0	0	0
20	2026		168,000		168,000	164,377,207	390,113,877	554,491,084	554,323,084
21	2027		1,861,961		1,861,961	0	0	0	-1,861,961
22	2028				0	0	0	0	0
23	2029				0	0	0	0	0
24	2030				0	0	0	0	0
25	2031		31,000		31,000	0	0	0	-31,000
26	2032				0	0	0	0	0
27	2033				0	0	0	0	0
28	2034		1,861,961		1,861,961	0	0	0	-1,861,961
29	2035				0	0	0	0	0
30	2036		20,743,475		20,743,475	0	0	0	-20,743,475

EIRR = 5.5%

-124,010,926 Colones



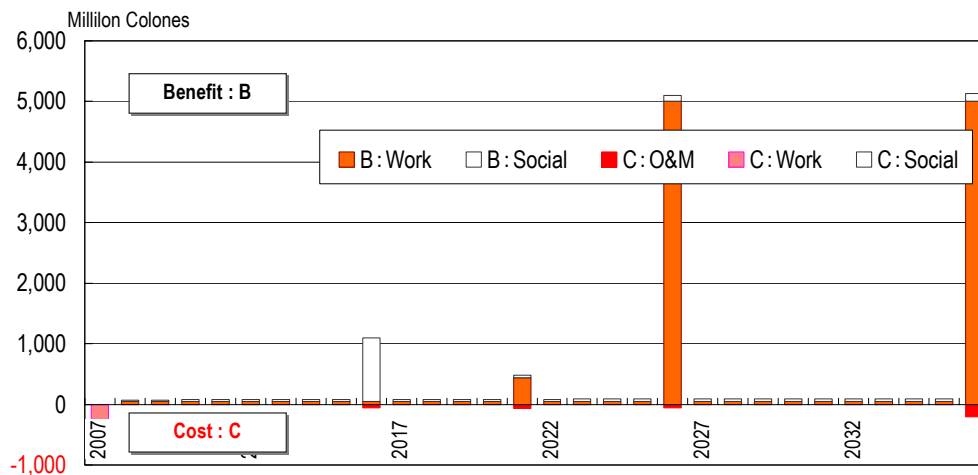


**No12 Puente Río Puerto Nuevo (R.2)**

year	Costs				Benefits			Results
	Work		Social	Total Cost (A)	Work	Social	Total Benefit (B)	Net Benefit (B-A)
	Rehabili. & Renf.	Maintenance	Traffic Rest.		Scenario 1 to 5	Scenario 1 to 5		
1 2007	568,241,036		1,372,497	569,613,533				-569,613,533
2 2008				0	50,098,695	23,957,589	74,056,284	74,056,284
3 2009				0	50,098,695	24,726,747	74,825,441	74,825,441
4 2010				0	50,098,695	25,495,905	75,594,599	75,594,599
5 2011		31,000		31,000	50,098,695	26,265,063	76,363,757	76,332,757
6 2012				0	50,098,695	27,034,221	77,132,916	77,132,916
7 2013		6,221,760		6,221,760	50,098,695	27,803,379	77,902,074	71,680,314
8 2014				0	50,098,695	28,572,537	78,671,232	78,671,232
9 2015				0	50,098,695	29,341,696	79,440,390	79,440,390
10 2016		55,244,103		55,244,103	50,098,695	1,050,038,079	1,100,136,773	1,044,892,671
11 2017				0	50,098,695	30,880,012	80,978,707	80,978,707
12 2018				0	50,098,695	31,649,171	81,747,866	81,747,866
13 2019				0	50,098,695	32,418,329	82,517,024	82,517,024
14 2020		6,221,760		6,221,760	50,098,695	33,187,488	83,286,183	77,064,423
15 2021		63,222,442		63,222,442	443,984,803	33,956,647	477,941,450	414,719,008
16 2022				0	50,098,695	34,725,806	84,824,500	84,824,500
17 2023				0	50,098,695	35,494,964	85,593,659	85,593,659
18 2024				0	50,098,695	36,264,123	86,362,818	86,362,818
19 2025				0	50,098,695	37,033,282	87,131,977	87,131,977
20 2026		55,244,103		55,244,103	5,007,099,425	91,827,280	5,098,926,705	5,043,682,603
21 2027		6,221,760		6,221,760	50,098,695	38,571,600	88,670,295	82,448,535
22 2028				0	50,098,695	39,340,760	89,439,454	89,439,454
23 2029				0	50,098,695	40,109,919	90,208,613	90,208,613
24 2030				0	50,098,695	40,879,078	90,977,773	90,977,773
25 2031		31,000		31,000	50,098,695	41,648,237	91,746,932	91,715,932
26 2032				0	50,098,695	42,417,397	92,516,092	92,516,092
27 2033				0	50,098,695	43,186,556	93,285,251	93,285,251
28 2034		6,221,760		6,221,760	50,098,695	43,955,716	94,054,411	87,832,651
29 2035				0	50,098,695	44,724,876	94,823,570	94,823,570
30 2036		201,955,912		201,955,912	5,007,099,425	121,315,783	5,128,415,208	4,926,459,297

EIRR = 23.9%

NPV at 12% = 1,234,911,469 Colones

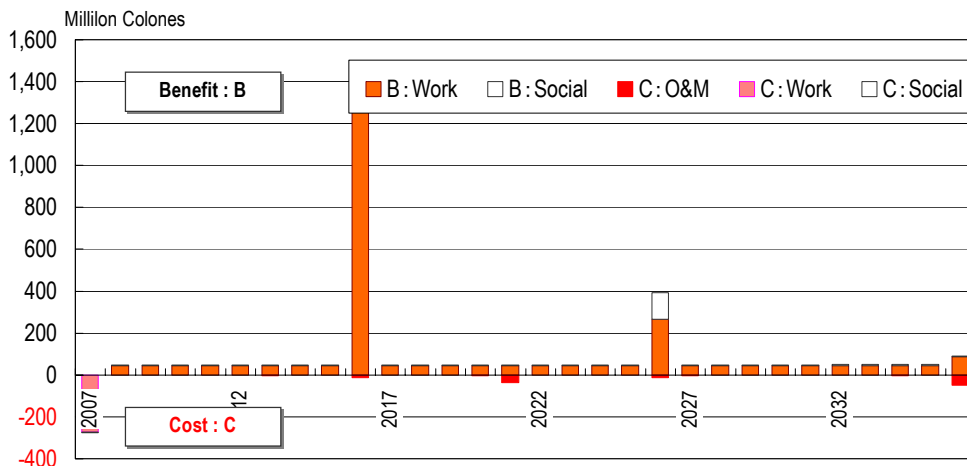


**No16 Puente Río Nuevo (R.2)**

year		Costs			Total Cost (A)	Benefits		Total Benefit (B)	Net Benefit (B-A)
		Work		Social		Work	Social		
		Rehabili. & Renf.	Maintenance	Traffic Rest.		Scenario 1 to 5	Scenario 1 to 5		
1	2007	274,068,835		2,277,205	<b>276,346,040</b>				<b>-276,346,040</b>
2	2008				0	44,156,967	2,773,224	46,930,191	46,930,191
3	2009				0	44,156,967	2,876,174	47,033,141	47,033,141
4	2010				0	44,156,967	2,979,124	47,136,092	47,136,092
5	2011		31,000		31,000	44,156,967	3,082,075	47,239,042	47,208,042
6	2012				0	44,156,967	3,185,025	47,341,992	47,341,992
7	2013		3,290,314		3,290,314	44,156,967	3,287,975	47,444,943	44,154,629
8	2014				0	44,156,967	3,390,925	47,547,893	47,547,893
9	2015				0	44,156,967	3,493,876	47,650,843	47,650,843
10	2016		12,040,684		12,040,684	1,369,639,691	111,823,075	1,481,462,766	1,469,422,082
11	2017				0	44,156,967	3,699,776	47,856,744	47,856,744
12	2018				0	44,156,967	3,802,727	47,959,694	47,959,694
13	2019				0	44,156,967	3,905,677	48,062,644	48,062,644
14	2020		3,290,314		3,290,314	44,156,967	4,008,627	48,165,595	44,875,281
15	2021		36,390,400		36,390,400	44,156,967	4,111,577	48,268,545	11,878,145
16	2022				0	44,156,967	4,214,528	48,371,495	48,371,495
17	2023				0	44,156,967	4,317,478	48,474,445	48,474,445
18	2024				0	44,156,967	4,420,428	48,577,396	48,577,396
19	2025				0	44,156,967	4,523,379	48,680,346	48,680,346
20	2026		12,040,684		12,040,684	265,126,203	126,823,720	391,949,923	379,909,238
21	2027		3,290,314		3,290,314	44,156,967	4,729,279	48,886,247	45,595,933
22	2028				0	44,156,967	4,832,229	48,989,197	48,989,197
23	2029				0	44,156,967	4,935,180	49,092,147	49,092,147
24	2030				0	44,156,967	5,038,130	49,195,098	49,195,098
25	2031		31,000		31,000	44,156,967	5,141,080	49,298,048	49,267,048
26	2032				0	44,156,967	5,244,031	49,400,998	49,400,998
27	2033				0	44,156,967	5,346,981	49,503,948	49,503,948
28	2034		3,290,314		3,290,314	44,156,967	5,449,931	49,606,899	46,316,585
29	2035				0	44,156,967	5,552,882	49,709,849	49,709,849
30	2036		48,400,085		48,400,085	85,647,919	5,655,832	91,303,751	42,903,667

EIRR = 31.1%

NPV at 12% = 646,541,983 Colones

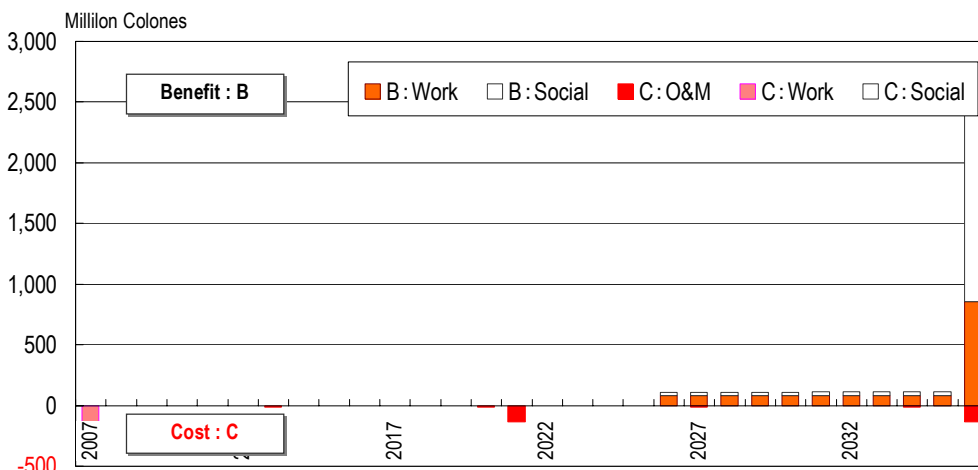


**No17 Puente Rio Chirripo (R.4)**

year	Costs			Benefits			Results			
	Work		Social Traffic Rest.	Total Cost (A)	Work		Total Benefit (B)	Net Benefit (B-A)		
	Rehabili. & Renf.	Maintenance			Scenario 1 to 5	Scenario 1 to 5				
1	2007	201,172,897		3,804,158						
2	2008									
3	2009									
4	2010									
5	2011		31,000							
6	2012									
7	2013		10,427,929							
8	2014									
9	2015									
10	2016		168,000							
11	2017									
12	2018									
13	2019									
14	2020		10,427,929							
15	2021		135,896,145							
16	2022									
17	2023									
18	2024									
19	2025									
20	2026		168,000							
21	2027		10,427,929		83,967,495	24,979,901				
22	2028				83,967,495	26,049,503				
23	2029				83,967,495	26,584,304				
24	2030				83,967,495	27,119,105				
25	2031		31,000		83,967,495	27,653,906				
26	2032				83,967,495	28,188,707				
27	2033				83,967,495	28,723,508				
28	2034		10,427,929		83,967,495	29,258,309				
29	2035				83,967,495	29,793,110				
30	2036		136,033,145		857,269,039	1,546,723,482				

EIRR = 10.2%

-75,887,171 Colones

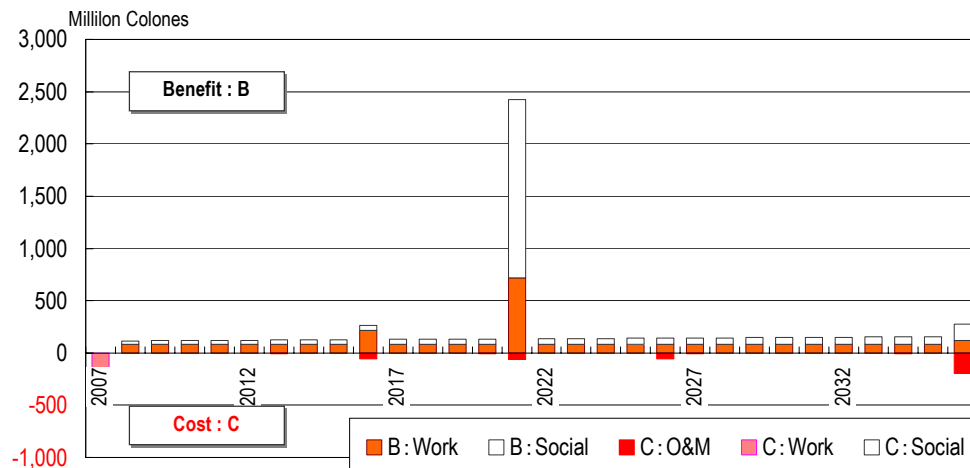


**No19 Puente Rio Sarapiquí (R.4)**

year	Costs				Benefits			Results
	Work		Social	Total Cost (A)	Work	Social	Total Benefit (B)	Net Benefit (B-A)
	Rehabili. & Renf.	Maintenance	Traffic Rest.		Scenario 1 to 5	Scenario 1 to 5		
1	2007	459,081,545		3,105,152				<b>-462,186,697</b>
2	2008				80,321,580	35,148,093	115,469,673	115,469,673
3	2009				80,321,580	36,665,092	116,986,672	116,986,672
4	2010				80,321,580	38,182,091	118,503,671	118,503,671
5	2011		31,000		80,321,580	39,699,090	120,020,669	119,989,669
6	2012				80,321,580	41,216,089	121,537,668	121,537,668
7	2013		5,985,085		80,321,580	42,733,088	123,054,667	117,069,582
8	2014				80,321,580	44,250,087	124,571,666	124,571,666
9	2015				80,321,580	45,767,086	126,088,665	126,088,665
10	2016		53,149,016		215,009,855	47,284,352	262,294,206	209,145,190
11	2017				80,321,580	48,801,083	129,122,663	129,122,663
12	2018				80,321,580	50,318,082	130,639,662	130,639,662
13	2019				80,321,580	51,835,081	132,156,661	132,156,661
14	2020		5,985,085		80,321,580	53,352,080	133,673,660	127,688,574
15	2021		60,818,649		721,527,188	1,700,941,447	2,422,468,635	2,361,649,986
16	2022				80,321,580	56,386,078	136,707,657	136,707,657
17	2023				80,321,580	57,903,077	138,224,656	138,224,656
18	2024				80,321,580	59,420,076	139,741,655	139,741,655
19	2025				80,321,580	60,937,075	141,258,654	141,258,654
20	2026		53,149,016		80,321,580	62,454,073	142,775,653	89,626,637
21	2027		5,985,085		80,321,580	63,971,072	144,292,652	138,307,567
22	2028				80,321,580	65,488,071	145,809,651	145,809,651
23	2029				80,321,580	67,005,070	147,326,650	147,326,650
24	2030				80,321,580	68,522,069	148,843,649	148,843,649
25	2031		31,000		80,321,580	70,039,068	150,360,647	150,329,647
26	2032				80,321,580	71,556,067	151,877,646	151,877,646
27	2033				80,321,580	73,073,066	153,394,645	153,394,645
28	2034		5,985,085		80,321,580	74,590,065	154,911,644	148,926,559
29	2035				80,321,580	76,107,064	156,428,643	156,428,643
30	2036		194,279,930		121,038,832	154,662,225	275,701,056	81,421,127

EIRR = 30.1%

NPV at 12% = 1,022,415,782 Colones

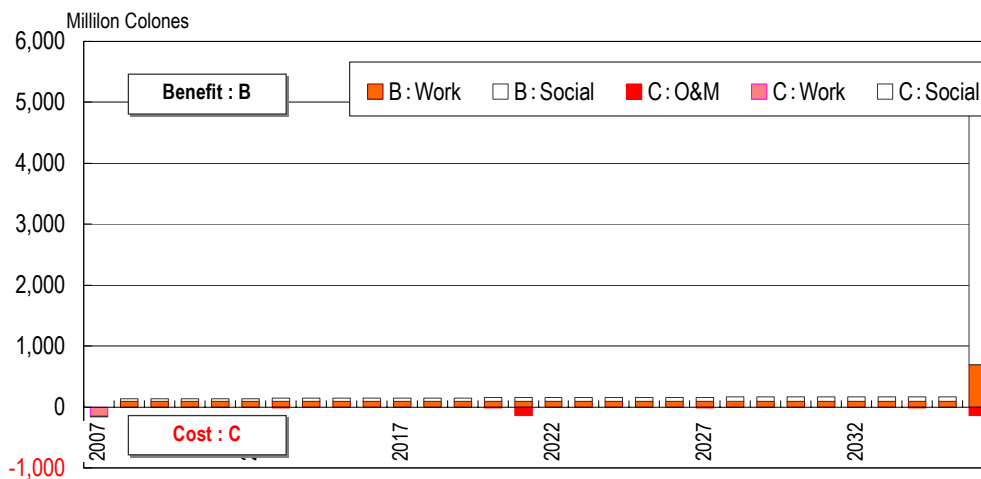


**No20 Puente Rio Sucio (R.32)**

year	Costs				Benefits			Results	
	Work		Social	Total Cost (A)	Work	Social	Total Benefit (B)	Net Benefit (B-A)	
	Rehabili. & Renf.	Maintenance	Traffic Rest.		Scenario 1 to 5	Scenario 1 to 5			
1	2007	149,183,464		15,879,569					
2	2008				0	89,436,367	43,210,248	132,646,615	132,646,615
3	2009				0	89,436,367	44,600,732	134,037,099	134,037,099
4	2010				0	89,436,367	45,991,215	135,427,583	135,427,583
5	2011		31,000		31,000	89,436,367	47,381,699	136,818,066	136,787,066
6	2012				0	89,436,367	48,772,183	138,208,550	138,208,550
7	2013		11,107,108		11,107,108	89,436,367	50,162,666	139,599,033	128,491,925
8	2014				0	89,436,367	51,553,150	140,989,517	140,989,517
9	2015				0	89,436,367	52,943,633	142,380,001	142,380,001
10	2016		168,000		168,000	89,436,367	54,334,117	143,770,484	143,602,484
11	2017				0	89,436,367	55,724,601	145,160,968	145,160,968
12	2018				0	89,436,367	57,115,084	146,551,452	146,551,452
13	2019				0	89,436,367	58,505,568	147,941,935	147,941,935
14	2020		11,107,108		11,107,108	89,436,367	59,896,052	149,332,419	138,225,311
15	2021		137,598,986		137,598,986	89,436,367	61,286,535	150,722,903	13,123,916
16	2022				0	89,436,367	62,677,019	152,113,386	152,113,386
17	2023				0	89,436,367	64,067,503	153,503,870	153,503,870
18	2024				0	89,436,367	65,457,986	154,894,353	154,894,353
19	2025				0	89,436,367	66,848,470	156,284,837	156,284,837
20	2026		168,000		168,000	89,436,367	68,238,953	157,675,321	157,507,321
21	2027		11,107,108		11,107,108	89,436,367	69,629,437	159,065,804	147,958,696
22	2028				0	89,436,367	71,019,921	160,456,288	160,456,288
23	2029				0	89,436,367	72,410,404	161,846,772	161,846,772
24	2030				0	89,436,367	73,800,888	163,237,255	163,237,255
25	2031		31,000		31,000	89,436,367	75,191,372	164,627,739	164,596,739
26	2032				0	89,436,367	76,581,855	166,018,223	166,018,223
27	2033				0	89,436,367	77,972,339	167,408,706	167,408,706
28	2034		11,107,108		11,107,108	89,436,367	79,362,823	168,799,190	157,692,082
29	2035				0	89,436,367	80,753,306	170,189,673	170,189,673
30	2036		137,735,986		137,735,986	697,912,732	4,185,237,311	4,883,150,043	4,745,414,056

EIRR = 81.2%

NPV at 12% = 1,112,274,555 Colones

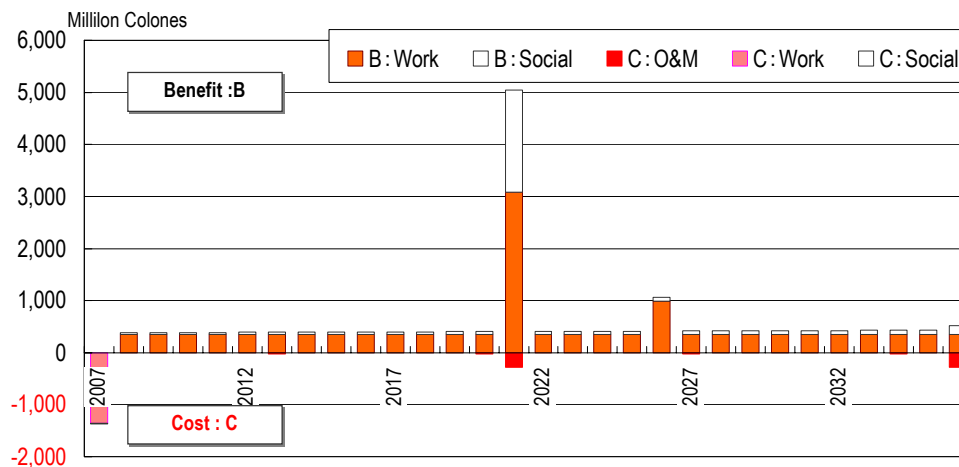


**No26 Puente Rio Chirripo (R.32)**

year	Costs				Benefits			Results	
	Work		Social	Total Cost (A)	Work	Social	Total Benefit (B)	Net Benefit (B-A)	
	Rehabil. & Renf.	Maintenance	Traffic Rest.		Scenario 1 to 5	Scenario 1 to 5			
1	2007	1,355,277,221		11,437,992	<b>1,366,715,214</b>				<b>-1,366,715,214</b>
2	2008				0	343,814,571	41,049,885	<b>384,864,456</b>	<b>384,864,456</b>
3	2009				0	343,814,571	42,732,137	<b>386,546,708</b>	<b>386,546,708</b>
4	2010				0	343,814,571	44,414,388	<b>388,228,959</b>	<b>388,228,959</b>
5	2011		31,000		<b>31,000</b>	343,814,571	46,096,640	<b>389,911,211</b>	<b>389,880,211</b>
6	2012				0	343,814,571	47,778,891	<b>391,593,462</b>	<b>391,593,462</b>
7	2013			25,619,012	<b>25,619,012</b>	343,814,571	49,461,142	<b>393,275,713</b>	<b>367,656,701</b>
8	2014				0	343,814,571	51,143,394	<b>394,957,965</b>	<b>394,957,965</b>
9	2015				0	343,814,571	52,825,645	<b>396,640,216</b>	<b>396,640,216</b>
10	2016		168,000		<b>168,000</b>	343,814,571	54,507,897	<b>398,322,468</b>	<b>398,154,468</b>
11	2017				0	343,814,571	56,190,148	<b>400,004,719</b>	<b>400,004,719</b>
12	2018				0	343,814,571	57,872,399	<b>401,686,970</b>	<b>401,686,970</b>
13	2019				0	343,814,571	59,554,651	<b>403,369,222</b>	<b>403,369,222</b>
14	2020			25,619,012	<b>25,619,012</b>	343,814,571	61,236,902	<b>405,051,473</b>	<b>379,432,461</b>
15	2021		283,132,225		<b>283,132,225</b>	3,088,479,607	1,950,493,762	<b>5,038,973,369</b>	<b>4,755,841,145</b>
16	2022				0	343,814,571	64,601,405	<b>408,415,976</b>	<b>408,415,976</b>
17	2023				0	343,814,571	66,283,656	<b>410,098,227</b>	<b>410,098,227</b>
18	2024				0	343,814,571	67,965,908	<b>411,780,479</b>	<b>411,780,479</b>
19	2025				0	343,814,571	69,648,159	<b>413,462,730</b>	<b>413,462,730</b>
20	2026		168,000		<b>168,000</b>	989,167,656	71,331,369	<b>1,060,499,024</b>	<b>1,060,331,024</b>
21	2027			25,619,012	<b>25,619,012</b>	343,814,571	73,012,662	<b>416,827,233</b>	<b>391,208,221</b>
22	2028				0	343,814,571	74,694,913	<b>418,509,484</b>	<b>418,509,484</b>
23	2029				0	343,814,571	76,377,165	<b>420,191,736</b>	<b>420,191,736</b>
24	2030				0	343,814,571	78,059,416	<b>421,873,987</b>	<b>421,873,987</b>
25	2031		31,000		<b>31,000</b>	343,814,571	79,741,668	<b>423,556,238</b>	<b>423,525,238</b>
26	2032				0	343,814,571	81,423,919	<b>425,238,490</b>	<b>425,238,490</b>
27	2033				0	343,814,571	83,106,170	<b>426,920,741</b>	<b>426,920,741</b>
28	2034			25,619,012	<b>25,619,012</b>	343,814,571	84,788,422	<b>428,602,993</b>	<b>402,983,980</b>
29	2035				0	343,814,571	86,470,673	<b>430,285,244</b>	<b>430,285,244</b>
30	2036		283,269,225		<b>283,269,225</b>	348,540,475	167,148,694	<b>515,689,169</b>	<b>232,419,945</b>

EIRR = 30.8%

NPV at 12% = 2,752,424,784 Colones



**No29 Puente Rio Torres (R.218)**

year	Costs				Benefits			Results	
	Work		Social	Total Cost (A)	Work	Social	Total Benefit (B)	Net Benefit (B-A)	
	Rehabilit. & Renf.	Maintenance	Traffic Rest.		Scenario 1 to 5	Scenario 1 to 5			
1	2007	230,865,456		3,190,223	234,055,679				-234,055,679
2	2008				0	45,665,493	1,928,868	47,594,361	47,594,361
3	2009				0	45,665,493	1,963,222	47,628,715	47,628,715
4	2010				0	45,665,493	1,997,576	47,663,069	47,663,069
5	2011		31,000		31,000	45,665,493	2,031,930	47,697,424	47,666,424
6	2012				0	45,665,493	2,066,285	47,731,778	47,731,778
7	2013		3,938,649		3,938,649	45,665,493	2,100,639	47,766,132	43,827,483
8	2014				0	45,665,493	2,134,993	47,800,486	47,800,486
9	2015				0	45,665,493	2,169,347	47,834,841	47,834,841
10	2016		35,033,604		35,033,604	45,665,493	75,978,806	121,644,300	86,610,696
11	2017				0	45,665,493	2,238,056	47,903,549	47,903,549
12	2018				0	45,665,493	2,272,410	47,937,904	47,937,904
13	2019				0	45,665,493	2,306,764	47,972,258	47,972,258
14	2020		3,938,649		3,938,649	45,665,493	2,341,119	48,006,612	44,067,963
15	2021		40,033,972		40,033,972	45,665,493	2,375,473	48,040,966	8,006,994
16	2022				0	45,665,493	2,409,827	48,075,321	48,075,321
17	2023				0	45,665,493	2,444,181	48,109,675	48,109,675
18	2024				0	45,665,493	2,478,536	48,144,029	48,144,029
19	2025				0	45,665,493	2,512,890	48,178,383	48,178,383
20	2026		35,033,604		35,033,604	155,172,928	2,547,244	157,720,172	122,686,568
21	2027		3,938,649		3,938,649	45,665,493	2,581,599	48,247,092	44,308,443
22	2028				0	45,665,493	2,615,953	48,281,446	48,281,446
23	2029				0	45,665,493	2,650,307	48,315,800	48,315,800
24	2030				0	45,665,493	2,684,661	48,350,155	48,350,155
25	2031		31,000		31,000	45,665,493	2,719,016	48,384,509	48,353,509
26	2032				0	45,665,493	2,753,370	48,418,863	48,418,863
27	2033				0	45,665,493	2,787,724	48,453,217	48,453,217
28	2034		3,938,649		3,938,649	45,665,493	2,822,078	48,487,572	44,548,923
29	2035				0	45,665,493	2,856,433	48,521,926	48,521,926
30	2036		127,908,655		127,908,655	45,665,493	2,890,787	48,556,280	-79,352,375

EIRR = 20.7%

NPV at 12% = 155,854,489 Colones

