

MINISTRY OF PUBLIC WORKS – CHILE MAJOR PROJECTS 2016-2021



DIRECT PUBLIC INVESTMENT

- Upgrade and Rehabilitation of Route 11 CH
- Optimization of Route 41 CH
- Improvement of Route E-30-F
- Upgrade of Route 7 by sections
- Canelillo Reservoir
- Pocuro Reservoir
- Cautín Reservoir
- New Hospital of Puente Alto

PROJECT DATA SHEET UPGRADE AND REHABILITATION ROUTE 11 CH

Project Information		
Location	Arica & Parinacota Region	
Objective	Improvement of the international highway Arica to Tambo Quemado (border with Bolivia), 192 km.	
Description of Works	Maintenance and upgrade of Route 11 CH. Main works 2016-2019: Asphalt repair, construction of auxiliary tracks, road safety measures, path rectification, bridge construction and environmental measures.	
Estimated Investment	2016-2019: US\$ 130 million 2020-2023:US\$ 250 million	
Type of Investment	Public	
Benefits Improvement of connectivity between Chile at Bolivia and the Port of Arica. Reduction of risk of accidents and travel time and improving road safety.		

NATIONAL ROAD DEPARTMENT

Update date: December 2016

Location Map



Current Situation	Timetable	
	Activity	Date
Working section km. 36-60, asphalt repair, path rectification, construction of auxiliary tracks, road safety measures	Section km. 36-60	End of works 1 st Semester 2017
From first term 2016, Works on km. 170-192, asphalt replacement, road safety measures, path rectification, and environmental measures in Lauca National Park	Section km. 170-192	End of works 4 th Quarter 2018
In process design studies sections km 18-36; 76-100 and 100- 127. Construction begins at the end of 2018. All projects consider citizen consulting process	Section km. 137-147	End of works 1 st Semester 2017
	End of works	2 nd Semester 2023

Source: Sub-Department of Development, Sub-Department of Works

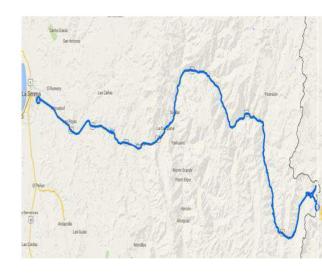
- OPTIMIZATION OF ROUTE 41 CH

	Project Information	
Location	Coquimbo Region	
Objective	Improvement of the international connection from Coquimbo - La Serena to Argentina (San Juan) and the Mercosur.	
Description of Works	Improvement works and expansion in some sections. Construction of bridges and protection structures in an international route of 233 km in the Chilean side.	
Estimated Investment	2016-2019: US\$ 27 million 2019-2024: US\$ 104 million	
Type of Investment	Public	
Benefits	To improve connection between Chile and Argentina and the access to the Port of Coquimbo and the touristic areas in La Serena and Vicuña. Reduce the risk of accidents, reduce travel times and improve safety on the route.	

NATIONAL ROAD DEPARTMENT

Update date: December 2016

Location Map



Current Situation
Design Project of section La Serena-Las Rojas ready at the end of 2016
New call for tender to finish section Juntas del Toro y Puente El Camarón (km 147-162) during first term 2017
Plans for Citizen Participation during the whole Project. Environmental management measures should be taken even if the Project is not in a National Park

rimetable		
Activity	Date	
Call for tender:		
Design of Las Rojas-Vicuña,	2017	
including Puclaro bridge		
Rehabilitation and expansión works section La Serena-Las	2019	
Rojas	2019	
Design studies: Vicuña-		
Rivadavia	2020	
Improvement Works: La		
Laguna- Llano Las Liebres	2020	

Source: Sub-Department of Development, Sub-Department of Works

- IMPROVEMENT OF ROUTE E-30-F

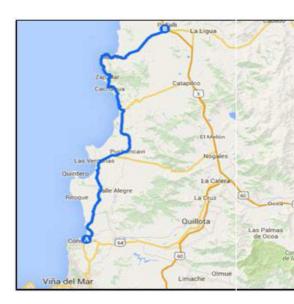
	Project Information	
Location	Valparaíso Region, from the crossing of National Highway 5 to Zapallar - Puchuncaví - Concón.	
Objective	Improve the standard of urban and interurban roads between Zapallar and Concón.	
Description of Works	Route of 83 km. The first section will have 7 m. wide and an outer berm of 2 m. In the urban section (2 km.) a roundabout is considered together with a new bridge over the Aconcagua river	
Estimated Investment	2016-2019: US\$ 35 million 2020-2024: US\$ 119 million	
Type of Investment	Public	
Benefits Improve coastal connectivity in Northern Valparaiso Region with a reduction of trave times, reduction of the risks of accidents an improvement in safety of the route.		

Current Situation
Expropiation process until the end of 2016. Interurban section works in progress
Engineering studies for section Concón - Quintero (17 km) ready at the end of 2016.
Citizen Participation during the whole project

Source: Sub-Department of Development, Sub-Department of Works

NATIONAL ROAD DEPARTMENT

Update date: December 2016



Timetable	
Activity	Date
Call for tender:	
- Improvement of section Concón-Cantonera Norte Concón Bridge	2017
- Upgrading works of section Cantonera Norte- Cruce Route F-240	2018

- UPGRADE OF ROUTE 7 BY SECTIONS

	Project Information	
Location	Los Lagos and Aysén Regions	
	 Improvement of connectivity in Route 7 between Coyhaique and Puerto Montt with only 3 seatransfers 	
	 Studies for road construction of section Pichanco - Caleta Gonzalo and beginning of expropiation process. 	
Objective	- Paving of central section in Villa Ortega	
	- Paving from Cerro Castillo to South Access of Cochrane (250 km)	
	- Design studies road Cochrane-Puerto Yungay (120 km)	
	 Length of the road: 1,075 km (Pto. Montt – Coyhaique – Cochrane – Pto. Yungay), 475 km paved in asphalt or concrete. 	
Description of Works	 Construction of a paved road for average speed of 50-70km/hr. 	
	 Sections of mountain road will be 4-6 mt.wide to allow average speed of 40 km/hr. 	
Estimated Investment	US\$ 1,200 million for improvement of remaining 600 kms	
Type of Investment	Public	
Benefits	Improve connectivity of the Region, with the reduction of travel times, risk of accidents and the improving of road safety. Benefits for the population, tourism and economic activities of 16 % of the national territory.	

NATIONAL ROAD DEPARTMENT

Update date: December 2016



Current Situation
This initiative is part of the portfolio of projects of the Special Development Plan for Extreme Areas (PEDZE) of the Region of Aysén. Citizen participation plans are considered.
The Project has been divided in 3 sections: - Northern Section: Pto. Montt – Coyhaique - Central: Intersection R 240 CH – Intersection Route X-50, - Southern: Villa Cerro Castillo – Cochrane – Pto. Yungay.
Northern Section: Puerto Montt – Coyhaique: · Not paved section: 230 km · Studies under progress: 96 km · Paving under progress: 65 km
Central Section: Intersection R 240 CH and Route X-50: Not paved section: 52 km Studies under progress: 28 km
Southern Section: Villa Cerro Castillo – Cochrane: · Not paved section: 245 km · Studies under progress: 65 km · Basic Works under progress: 30 km

Timetable 2016 – 2018		
Activity	Date	
Northern Section, Call for bids · Section Puñon – Ex Pte. Parafina, 8 km · Section Pte. Cisnes – Pichicolo, 11 km · Section Pte. El Blanco – Pichanco, 25 km · Section Leptepú – Fiordo Largo, 11 km · Section C. Gonzalo – Pte. Bonito, 35 km · Section Lím. Reg – La Tolva, 22 km · Section Lago Risopatrón, 14 km · Section Las Pulgas – F. Queulat, 12 km Sector F. Queulat – Bif. Cisnes, 27 km	 2nd sem 2016 2nd sem 2016 2018 - 2019 2018 - 2019 2017 - 2018 1st sem 2017 2nd sem 2017 2nd sem 2016 2018 - 2019 	
Central Section, Call for bids · Section 1 Intersection R 240 CH – V. Ortega	· 2 nd sem 2016 - 2018	
Southern Section, Call for bids: · Section V. Cerro Castillo – Laguna Verde · Section 1 Acc. Murta – Pto. Tranquilo · Section 1 Confluence River Baker/Nef – Cochrane	2017-182017-182017-18	

Source: Sub-Department of Development, Sub-Department of Works

- CANELILLO RESERVOIR

Project Information		
Location	Province of Choapa in Coquimbo Region,	
Description of Works	Capacity: 200 Hm3 Flood area 800 ha Wall height: 84 m. Netwrk of new irrigation channels: 300 kms.	
Irrigation Area	15.000 ha.	
Communes	Illapel, Canela, Los Vilos	
Estimated Investment	US\$ 169 million	
Hydroelectric generation	Under analysis	
Water Rights	The National Department for Hydraulic Works has rights for 150 Hm³/year. Possibilities to capture the water near the reservoir under study	

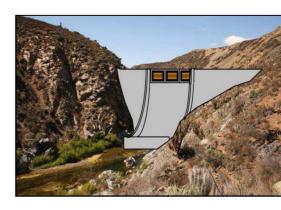
NATIONAL DEPARTMENT FOR HYDRAULIC WORKS

Update date: December 2016

Location Map



Wall of the dam



Current Situation
Feasibility studies are been executed by Empresa SMI. Design of Project and environmental studies from 2017

Timetable	
Activity	Date
Feasibility studies	Ready end 2016
Study of environmental assessment	2017 – 2018
Design studies	2018 – 2019
Construction	2020 – 2024

- POCURO RESERVOIR

Project Info	rmation
Location	Province of los Andes, Commune of Calle Larga, Valparaíso Region
Description of Works	Volume of the reservoir: 100 Hm3 Dam wall height: 100 m Feeder Channel: 17 km (from Aconcagua River) and a capacity of 20 m3/s Main channel: 10 km
Irrigation Area	30.000 Has
River sections	1 st and 2 nd sections of Aconcagua river
Estimated Investment	US\$ 290 million
Hydroelectri c generation	5 to 10 MW installed capacity
Water Rights	The National Department has permanent water rights for 400 Hm ³ /year in the first section of Aconcagua river.

NATIONAL DEPARTMENT FOR HYDRAULIC WORKS

Update date: December 2016

Location Map



Area of the Wall Dam



Current Situation	
Feasibility studies and environment assessment under progress, ending first Semester 2017	
Working on a model to run in a single contract both design and construction	

Timetable	
Activity	Date
Social and economic State Evaluation System	1 st sem. 2017
Council of Ministers	1 st sem 2017
Allocation of budgetary resources	1 st sem. 2017
Expropiaton	2 nd sem. 2017
Call for bids	2 nd sem. 2017

- CAUTIN RESERVOIR

Project Information	
Location	Province of Cautín, Araucanía Region
Description of Works	Capacity: 142 Hm ³ Dam wall height: 62 m
Irrigation Area	32.274 Has
Communes	Victoria, Perquenco and Lautaro
Estimated Investment	US\$ 427 million
Hydroelectric generation	Under evaluation
Water Rights	The National Department has permanent water rights for 670 Hm3/year and temporal water rights for 534 Hm³/year.

NATIONAL DEPARTMENT FOR HYDRAULIC WORKS

Update date: December 2016

Location Map





Current Situation
Prefeasibility studies ready since 2013
Feasibility studies from 2017

Timetable	
Activity	Date
Feasibility studies	2017- 2018
Environmental Assessment	2019 – 2020
Design	2020 - 2021
Construction	2022 - 2024

- NEW HOSPITAL OF PUENTE ALTO

Project Information	
Location	Commune of Puente Alto, Santiago Metropolitan Region
Objective	Set up a health infrastructure to give high complexity coverage to 1.5 millon inhabitants in the south of Santiago city
Description of Works	It will have 400 beds (48 for critical patients), 10 surgical pavilions
Estimated Investment	US\$ 243 million (including equipment)
Type of Investment	Public. Ministry of Health
Other Priorities	It should cover: open care, hospitalization, therapeutic procedures, emergency telemedicine and a nursery.

NATIONAL DEPARTMENT OF ARCHITECTURE

Update date: December 2016





Current Situation	
Proyecto delayed	
Design studies by the Ministry of Health in progress	

Timetable	
Activity	Date
Call for bids	2018

Source: Planning and Coordination Division

CONCESSIONS

- The Loa Route
- Route 5, Section Antofagasta Iquique
- Route 5: Section Caldera Antofagasta
- Re-tender of Route N° 5 Los Vilos La Serena and Conurbation
- Route 5, Section Santiago Los Vilos
- Interconnection Santiago-Valparaíso-Viña del Mar (Route 68) + Alternatives
- Costanera Central Highway Section Av. La Florida –
 Camilo Henríquez
- Eastern Américo Vespucio Urban Highway Príncipe de Gales – Grecia
- Interconnection Highway 68 with Highway 78
- Highway Santiago San Antonio (Route 78)
- Transversal Route of O'higgins Region
- Fruit Highway, G-66
- Re-tender Route 5 Talca Chillán
- Re-tender Route 5 Chillán Collipulli
- Nahuelbuta Route
- Route Freire Villarrica Pucón
- Re-tender Route 5: Temuco Rio Bueno + Access to Valdivia
- Metropolitan Highway of Puerto Montt
- North-South Route of Chiloé
- Las Palmas Reservoir
- Los Angeles Reservoir
- Catemu Reservoir
- La Jaula Reservoir

PROJECT DATA SHEET - THE LOA ROUTE

PUBLIC WORKS PPP

Update date: December 2016

	Project Information
Location	Communes of Sierra Gorda and Calama in Antofagasta Region
Objective	Increase service levels and improving connectivity and territorial integration of the Region
Description of Works	 Revamping and expansion up to 2 lanes each side of the Route 25 Construction of the Eastern bypass to Calama connecting Routes 21, 23, 24 and 25
Economic Conditions	It considers MGI and ITC
Estimated Investment	US\$ 200 million
Type of Investment	PPP – BOT
Benefits	 Improvement of service and standard levels of Route 25. Improvement of safety conditions and shorter travel times



Current Situation		
•	Preparation of bidding conditions	

Timetable	
Call for Bids	4 th Quarter 2016
Receipt of Tenders	2 nd Semester 2017
Contract award	1st Semester 2018

- ROUTE 5, SECTION ANTOFAGASTA – IQUIQUE

Project Information: Route 5 between the cities of Antofagasta and Location Iquique Improvement of the standard in Route 5, Carmen **Objective** Alto and Humberstone in the junction with Route 16. **Description of** Two lanes in each side. Works Max speed 120km/h **Economic** Road tolls **Conditions** State subsidy 30% aprox. **Estimated** US\$ 458 million **Investment** Type of PPP - BOT Investment Rehabilitation and improvement of a section of the Route 5. **Benefits** Improvement of safety conditions and shorter

Current Situation	
Private initiativeStudies under progress	

More secondary access roads

travel times

Source: CCOP

PUBLIC WORKS PPP

Update date: December 2016



Timetable		
Call for Bids 1 st Semester 2020		
Receipt of Tenders	2 nd Semester 2020	
Contract award	2 nd Semester 2021	

- ROUTE 5: SECTION CALDERA -ANTOFAGASTA

Project Informa	ation:		
Location	Route 5 between the cities of Caldera and Antofagasta		
Objective	Improvement of the standard in this section of the Route 5		
Description of Works	Two lanes in each side.Max speed 120km/h		
Economic Conditions	Road tollsState subsidy 30 %		
Estimated Investment	US\$ 640 million		
Type of Investment	PPP – BOT -		
Benefits	 Expansion of the 4 lanes highway from Antofagasta to the south Improvement of safety conditions and shorter travel times More secondary access roads 		

Current Situation

- Studies of this private proposal under progress
- Possible subsidies under study

Source: CCOP

PUBLIC WORKS PPP

Update date: December 2016



Timetable	
Call for Bids	3 rd Quarter 2018
Receipt of Tenders	1 st Quarter 2019
Contract award	2 nd Semester 2019

- RE-TENDER OF ROUTE N° 5 LOS VILOS – LA SERENA AND CONURBATION

Project Information Location North of Santiago from km 229 to km 474 Re- tender of the contract for Route N° 5 from Los **Objective** Vilos to Coquimbo, including urban sector between Coquimbo and La Serena **Description of** 229 km 4-lanes intercity road Works 17 km of urban highway with three lanes in each direction **Economic** Road tolls **Conditions Estimated** US\$ 328 million Investment Type of PPP - BOT Investment Improve urban connectivity Increase transport capacity on the urban sector **Benefits** Reduce accidents With this section the concessioned highway from Caldera to Pargua goes up to 1.955 km

PUBLIC WORKS PPP

Update date: December 2016

Location Map



Current Situation		
•	Private Initiative	
•	Developing studies for: design, expropriations, environmental assessment	
•	Finishing project proposal	
•	Preparation of bidding conditions	

Timetable		
Call for bids	2 nd Quarter 2017	
Reception of bids	4 th Quarter 2017	
Contract award	1 st Semester 2018	

PROJECT DATA SHEET - ROUTE 5, SECTION SANTIAGO - LOS VILOS

Project Information:		
Location Communes of Quilicura, Colina, Lampa, Llay Llay, Hijuelas, La Calera, Nogales, Z La Ligua, Papudo and Los Vilos in Central (
Objective	Increase service levels and improving connectivity and territorial integration of this part of the national territory	
Description of Works	Improvement of the standard of the Route 5 between Santiago and Los Vilos.	
Economic Conditions	Road tolls - No subsidies	
Estimated Investment	US\$ 225 million	
Type of Investment	PPP – BOT	
Standard improvement of a section of the Route 5. Improvement of safety conditions and shorter travel times More secondary access roads		

PUBLIC WORKS PPP

Update date: December 2016

Location Map



Current Situation	
Evaluating necessary studies to develop this re-tender project	

Timetable

Call for Bids End of 2019

Receipt of Tenders 2nd Semester 2020

Contract award 1st Quarter 2021

 INTERCONNECTION SANTIAGO-VALPARAÍSO-VIÑA DEL MAR (ROUTE 68) + ALTERNATIVES

Project Information:		
Location	Provinces of Valparaíso and Santiago	
Objective	Increase service levels and improving the standard of the highway	
Description of Works	Route 68, has 110 km. It needs a better standard with different secondary roads, junctions and additional lanes.	
Economic Conditions	Road tolls	
Estimated Investment	US\$ 600 million	
Type of Investment	PPP – BOT	
Benefits	Promotes regional economic growth and territorial integration of 2 of the most important metropolitan areas of the country and Valparaíso seaport	

Current Situation

- Studies of demand and Social Evaluation under progress
- Re-tender Route 68 Santiago Valparaíso Viña del Mar.

Source: CCOP

PUBLIC WORKS PPP

Update date: December 2016





Timetable	
Call for Bids	1 st Semester 2019
Receipt of Tenders	End of 2019
Contract award	2 nd Quarter 2020

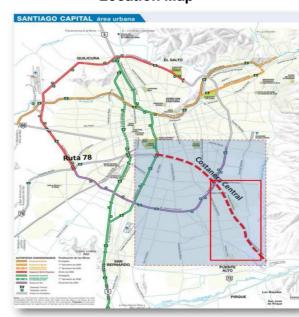
COSTANERA CENTRAL HIGHWAY - SECTION AV. LA FLORIDA – CAMILO HENRÍQUEZ

PUBLIC WORKS PPP

Update date: December 2016

Project Informa	ation:	
Location	South-east side of Santiago Metropolitan Area. Communes of La Florida and Puente Alto.	
Objective	Improvement of transport system, connectivity and infrastructure standard of the city	
Description of Works	 Building a high standard underground highway of 12 km 9 km is an underground route with 3 lanes in each side and the other 3 km will have 2 lanes in each side. The project includes connections to local roads and Américo Vespucio Sur Highway. 	
Economic Conditions	 Road tolls State subsidies 35-40 % Free flow tolls 	
Estimated Investment	US\$ 1,116 million	
Type of Investment	Private Initiative - PPP – BOT	
Benefits	 Improvement of connectivity between south-east districts and downtown Reduction of traffic congestion New public transport corridor Reduction of operational costs. Improvement of safety conditions and shorter travel times. 	

Location Map





	Current Situation	Timeta	able
	Developing of technical studies	Call for bids	3 rd Quarter 2017
	Consultations with local communities	Receipt of tenders	2 nd Quarter 2018
		Contract award	End of 2018

PROJECT DATA SHEET
Eastern Américo Vespucio Urban Highway - Príncipe de Gales – Grecia

Project Information		
Location	Eastern side of Santiago	
Objective	Complete the Americo Vespucio ring road with high quality and service standard	
Description of Works	 Construction of two underground double tracks with 3 lanes each side Urban redeveloping in surface considering larger green areas and more facilities for public urban transportation. 	
Economic Conditions	 Road tolls Estimated 15% of state subsidy Free flow tolls 	
Estimated Investment	US\$ 790 million	
Type of Investment	PPP – BOT	
Benefits	 Complete the Américo Vespucio ring road in Santiago with a high service standard Reduce accidents and traffic jams, mainly during rush hours. Reduce commuting time and pollution emissions. Improve public transportation and connectivity in the city 	

PUBLIC WORKS PPP

Update date: December 2016

Location Map





Timetable		
Call for Bids	August 2016	
Receipt of Tenders	1 st Quarter 2017	
Contract award	2 nd Semester 2017	

Current Situation

- Finishing technical studies
- Bidding bases under analysis
- Prequalification process re-open
- Closing agreements and approval with authorities

PROJECT DATA SHEET INTERCONNECTION HIGHWAY 68 WITH HIGHWAY 78

PUBLIC WORKS PPP

Update date: December 2016

Project Information:		
Location	Western side of Santiago Metropolitan Area. Communes of Pudahuel and Maipú.	
Objective	Improvement of transport system, connectivity and infrastructure standard of Western Santiago	
Description of Works Economic Conditions	 Construction of a 9.4 km 4-lanes road, to reduce traffic impact in urban zones Internal roads, lighting and drainage Construction of different flyovers and structures in the junctions with Route 68 and Route 78 Internal roads and road safety measures Road tolls Free flow tolls No subsidies 	
Estimated Investment	US\$ 250 million	
Type of Investment	Private Initiative - PPP – BOT	
Benefits	 Improve connectivity between central and western areas of Santiago Improve connection to the main national seaports avoiding to cross through Santiago. Better local urban development Reduction of accidents, travel times and pollution emissions 	

Location Map





	times and pollution emissions		
Current Situation		Time	etable
Finishing technical studie	dioc	Call for bids	3 rd Quarter 2017
 Preparation of bidding co 		Reception of bids	1 st Quarter 2018
		Contract award	3 rd Quarter 2018

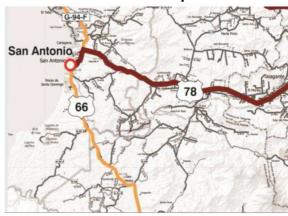
- HIGHWAY SANTIAGO – SAN ANTONIO (ROUTE 78)

Project Information:		
Location	Provinces of Santiago, Talagante, Melipilla and San Antonio.	
Objective	Upgrade the standard of the route Better service levels	
Description of Works	 Route 78 highway has 4 lanes and an extension of 105 kms It needs a better standard with different secondary roads, junctions and local roads. Replacement of old bridges and construction of a few new ones. 	
Economic Conditions	 Road tolls No subsidies One trunk toll area in Melipilla and in some junction roads. 	
Estimated Investment	US\$ 300 million	
Type of Investment	PPP – BOT	
Benefits	Promotes regional economic growth and territorial integration in medium size localities and between Santiago and the main national port: San Antonio	

Current Situation Re-tender of Route 78 Santiago-San Antonio Studies of demand and social evaluation under progress Source: CCOP

PUBLIC WORKS PPP

Update date: December 2016





Timetable		
Call for Bids	1 st Quarter 2020	
Receipt of Tenders	4 rd Quarter 2020	
Contract award	1 st Semester 2021	

PROJECT DATA SHEET TRANSVERSAL ROUTE OF O'HIGGINS REGION

Project Information: Location From south-west Rancagua to the village of Alhué Create a new connection to the port of San Antonio **Objective** from Rancagua and the commune of Alhué Building of a new road (68 km.) including **Description of** auxiliary tracks and road safety measures. **Works** Tunnel of 6 km. **Economic** Road tolls **Conditions** State subsidy almost 30% **Estimated** US\$ 306 million **Investment** Type of PPP - BOT Investment Improve travel time between Rancagua and San Antonio Create a better connection to the Fruit Highway **Benefits** Complementary to the future binational tunnel Las Leñas between Chile and Argentina

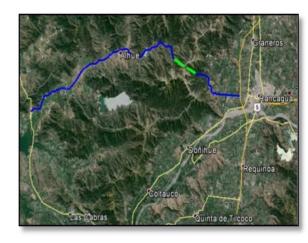
	Current Situation
•	First stages of a private initiative. Studies under progress

Source: CCOP

PUBLIC WORKS PPP

Update date: December 2016





Timetable	
Call for Bids	1 st Semester 2020
Receipt of Tenders	2 nd Semester 2020
Contract award	1 st Semester 2021

PROJECT DATA SHEET FRUIT HIGHWAY, G-66

PUBLIC WORKS PPP	
(

Update date: December 2016

Project Information		
Location	120 km south from Santiago to the port of San Antonio	
Objective	Improve connectivity for small and medium scale producers (fruits, vegetables and wine) from O'Higgins and Maule Regions to the port of San Antonio	
Description of Works	 Restore and improve 138 km of the existing road and construction of a bidirectional road to reduce traffic impact in urban zones Construction of a 21 km 4-lanes road Construction of different flyovers and structures to reduce negative impact on population 	
Economic Conditions	 Road tolls State subsidies 50-60 % Free flow tolls 	
Estimated Investment	US\$ 600 million	
Type of Investment	PPP – BOT	
Benefits	Improvement of connectivity Reduction of transport costs for local producers Reduction of accidents	

Location Map



Current Situation		
	Finishing technical studies Closing agreements with local authorities and citizen participation Preparation of bidding contracts	

Timetable		
Call for Bids	End of 2016	
Receipt of Tenders	1 st Semester 2017	
Contract award	2 nd Semester 2017	

PROJECT DATA SHEET RE-TENDER ROUTE 5 - TALCA – CHILLÁN

PUBLIC WORKS PPP

Update date: December 2016

Project Information:		
Location	Communes of Río Claro, San Rafael, Talca, Maule, San Javier, Villa Alegre, Linares, Longaví, Retiro, Parral y Ñiquén, San Carlos, San Nicolás, Chillán and Chillán Viejo.	
Objective	Increase service levels and improving the standard of the highway with additional works	
Description of Works 4-lanes road and 193.3 km, It will have: New local roads Junctions – bridges Bypass sectors Free flow toll system		
Economic Conditions	Road tollsNo subsidies	
Estimated Investment US\$ 225 million		
Type of Investment	PPP – BOT	
Benefits	Improve connectivity between central and southern Chile Better local and regional economic development and integration Reduction of accidents, travel times and pollution emissions	

Location Map





Timetable		
Call for Bids	End of 2018	
Receipt of Tenders	3 rd Quarter 2019	
Contract award	End of 2019	

Current Situation

- Studies of demand and social evaluation under progress
- TOR of basic engineering studies in preparation.

PROJECT DATA SHEET RE-TENDER ROUTE 5 - CHILLÁN – **COLLIPULLI**

Project Information:		
Location	Communes of Chillán, Bulnes, Cabrero, Los Ángeles, Mulchén and Collipulli in Biobío Region	
Objective	Improvement of actual highway standard, including additional works and the increase of service levels while improving user safety	
Description of Works Economic Conditions	Section of 160 km. in Route 5 with 2-lanes in each side. To include: New local roads Junctions – bridges Bypass sectors Free flow toll system Road tolls No subsidies	
Estimated Investment	US\$ 225 million	
Type of Investment	PPP – BOT	
Benefits	 Improvement of connectivity Reduction of transport costs for local producers Reduction of accidents Improve connectivity between central and southern Chile Better local and regional economic development and integration 	

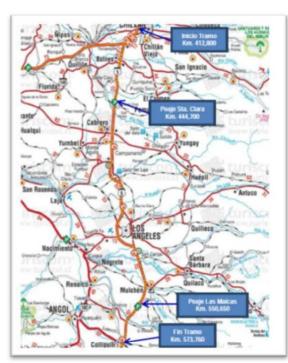
Current Situation

Studies under progress

Source: CCOP

PUBLIC WORKS PPP

Update date: December 2016





Timetable		
Call for Bids	1 st Semester 2019	
Receipt of Tenders	3 rd Quarter 2019	
Contract award	1 st Quarter 2020	

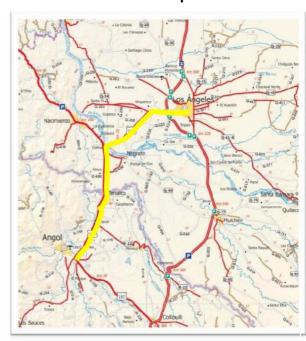
PROJECT DATA SHEET NAHUELBUTA ROUTE

Project Information		
Location	Km 520 south of Santiago	
Objective	Improve connectivity and maximize economic and social benefits in an area mainly focused on forests and forestry	
Description of Works	55 km road4-lanes highwayUneven junctions	
Economic Conditions	Road tollsEstimated 41% of state subsidyManual tolls	
Estimated Investment	US\$ 245 million	
Type of Investment	PPP – B5OT	
Benefits	 Connectivity improvement Reduction of transport costs for local producers Reduction of accidents 	

PUBLIC WORKS PPP

Update date: December 2016

Location Map



Current Situation		
• (Bidding bases and procedures under final revision Closing agreements with local authorities and indigenous communities	

Timetable		
Call for Bids	End 2016	
Receipt of Tenders	1 st Semester 2017	
Contract award	2 nd Semester 2017	

PROJECT DATA SHEET ROUTE FREIRE – VILLARRICA – PUCÓN

Project Information:		
Location	Freire, Villarrica and Pucón	
Objective	Improvement of Route 199 CH between Freire and Villarrica and additional works	
Description of Works	 Construction of a road with 2-lanes in each side High safety standard 40.8 km. of auxiliary roads 	
Economic Conditions	Road tollsState subsidy approx. 28 %	
Estimated Investment	t US\$ 330 million	
Type of Investment	PPP – BOT	
Benefits	 Connectivity improvement Reduction of transport costs for local producers Reduction of accidents and congestion 	

Current Situation		
•	Private initiative under study	

Source: CCOP

PUBLIC WORKS PPP

Update date: December 2016





Timetable			
Call for Bids End of 2019			
Receipt of Tenders	1 st Quarter 2020		
Contract award	2 nd Semester 2020		

 RE-TENDER ROUTE 5: TEMUCO – RIO BUENO + ACCESS TO VALDIVIA

Project Informa	ation:		
Location	Communes of Gorbea, Loncoche, Lanco, San José de la Mariquina, Máfil, Los Lagos, Paillaco, La Unión, Río Bueno and Valdivia		
Objective	Improvement of actual highway standard, including additional works and the increase of service levels while improving user safety and better access to Valdivia city		
Description of Works	 Improvement of 172 km. of the 4 - lanes road Upgrade to 2-lanes in each side to Valdivia (88 km.) New local roads Junctions – bridges Bypass sectors. 		
Economic Conditions	Road tollsNo subsidies		
Estimated Investment	US\$ 250 million.		
Type of Investment	PPP – BOT		
Benefits	 Increase of safety standard to decrease accident rate in acess to Valdivia Connectivity improvement Reduction of transport costs for local producers Reduction of accidents and congestion Better local and regional economic development 		

	Current Situation	ı
•	Private initiative. Proponent R y Q Ingeniería. Time limit for presentation of first studies: April 2017	

Source: CCOP

PUBLIC WORKS PPP

Update date: December 2016



Timetable		
Call for Bids	End of 2017	
Receipt of Tenders	4 th Quarter 2018	
Contract award	2 nd Quarter 2019	

METROPOLITAN HIGHWAY OF PUERTO MONTT

Project Information Location Puerto Montt - 1.000 km. south of Santiago · Improvement of transport system, connectivity **Objective** and infrastructure standard of Puerto Montt • Improvement of connection between Puerto Varas and El Tepual Airport 4-lanes highway in 32 km. **Description of** Works Urban highway standard Road tolls **Economic** Estimated State subsidy; 30 % **Conditions** Free flow tolls **Estimated** US\$ 321 million Investment Type of **Investment** PPP - BOT Improvement of connectivity between Puerto Montt and Puerto Varas **Benefits** Reduction of traffic congestion. Reduction of operational costs. Improvement of safety conditions.

Current Situation Private initiative Developing of technical studies (demand, environmental assessement, business model, etc..) Defining economic conditions Citizen participation from 2nd Semester 2016

Source: CCOP

PUBLIC WORKS PPP

Update date: December 2016



Timetable		
Call for Bids	2 nd Quarter 2017	
Receipt of Tenders	4 th Quarter 2017	
Contract award	1 st Semester 2018	

PROJECT DATA SHEET NORTH-SOUTH ROUTE OF CHILOÉ

PUBLIC WORKS PPP

Update date: December 2016

Project Information		
Location	1,100 km south of Santiago	
Objective	Improve and extend the transportation system in the island of Chiloé	
Description of Works	 Improvement of 101 km road with 2-lanes each side Construction of auxiliary tracks, road safety measures, path rectification, construction of new bridges and maintenance of existing ones and environmental measures. 	
Economic Conditions	Road tolls No subsidies	
Estimated Investment	US\$ 250 million	
Type of Investment	Private initiative – PPP BOT	
Benefits	 Improve connectivity Increase transport capacity on the trunk road of the island Reduce accidents Contribute to the economic development of the island 	

Loc	cation Map	
Puente	Puente	Ni. Que
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- Private initiative (Constructora Internacional). Developing of studies until February 2017
- Preparation of bidding conditions

Timetable		
Call for Bids	3 rd Quarter 2017	
Receipt of Tenders	2 nd Quarter 2018	
Contract award 1 st Quarter 2019		
•		

LAS PALMAS RESERVOIR

PROJECT INFORMATION: Petorca Province, Petorca Commune Location Volume of the reservoir: 55 Hm³. **Description of** Feeder channel: 58 km Works Irrigation area 3,281 Ha and 1,285 rural properties **River sections** In communes of Petorca and Cabildo **Estimated** VAN MM\$ 35,000. investment and TIR = 8,9 % economic US\$ 169 million conditions **Hydroelectric** No generation The National Department has water rights for 10 Water rights Hm3/year, in rivulet Las Palmas.

NATIONAL DEPARTMENT FOR HYDRAULIC WORKS

Update date: December 2016





Current Situation	Timetable	
	Activity	Date
Design studies under process	End of design	August 2016
2. Project in the National System for Environment Assessment	Environment Assessment	August 2016
3. The MOPW is analyzing a PPP model for financing	Call for bids	End of 2017
	End of construction	2022

- LOS ÁNGELES RESERVOIR

PROJECT INFORMATION: Location Petorca Province, Commune of La Ligua. Volume of the reservoir: 30 Hm³. **Description of** Feeder channel 24 km (from Alicahue Works River). **Irrigation Area** 2,160 Ha. and 676 rural properties Socio-economic indicators VAN: MM\$ 280 **Estimated** US\$ 161 million Investment Hydroelectric No Generation Water rights under study. The reservoir has Water rights water rights from users.

NATIONAL DEPARTMENT FOR HYDRAULIC WORKS

Update date: December 2016

Location Map





Current Situation	Timetable	
	Activity	Date
Environment assessment studies under progress.	Design Studies	1st Semester 2017
Complementary design studies are developing	Environment Assessment	1st Semester 2017
3. The MOPW is analyzing PPP conditions and financial	Bidding process	End of 2017
alternatives		

- CATEMU RESERVOIR

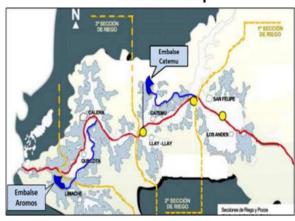
	Project Information
Location	San Felipe Province, Commune of Catemu in Valparaiso Region
Description of works	Volume of the reservoir: 180 Hm ³ Dam wall height: 65 m Feeder Channel: 25 km (from Aconcagua River) and a capacity of 20 m ³ /s
Irrigation área	38,000 Ha and 4,160 rural properties
River sections	Lower areas of 2 nd , 3 rd and 4 th sections of Aconcagua River
Estimated investment	US\$ 368 million
Hydroelectric generation	5 to 10 MW
Water rights	The National Department has water rights for 630 Hm³/year in the 2 nd section of Aconcagua River. Water rights of users equivalent to 70 % during winter.

Current Situation
Technical studies to review and complement the feasibility of the dam are performed via direct contracts
Study of environmental assessment under progress. Working on the concession model Prequalification requirements for special registration under analysis of Comptroller.
Tender conditions in elaboration

Source: Department of Irrigation Projects

NATIONAL DEPARTMENT FOR HYDRAULIC WORKS

Update date: December 2016





Timetable		
Activity	Date	
Decision by the Council of Ministers	1 st sem. 2016	
Expropiation	End of 2016	
Bidding process	2 nd Quarter 2017	

- LA JAULA RESERVOIR

Project information			
Location	Commune El Romeral (Teno river), Maule Region		
Description of Works	Capacity: 160 Hm³ Dam Wall height: 115 m		
Irrigated área	53,045 Has Commune of Teno		
Estimated Investment	US\$ 359 million		
Hydroelectric Generation	20 MW (estimated)		
Water rights	The National Department has water rights for 320 Hm³ in the Teno River from October to January		

NATIONAL DEPARTMENT FOR HYDRAULIC WORKS

Update date: December 2016

Location Map





 Timetable

 Activity
 Date

 Feasibility
 2017 - 2018

 Environment Assessment
 2019 - 2020

 Design
 2020 - 2021

 Construction
 2022 - 2024

BINATIONAL PROJECTS

- Agua Negra Binational Tunnel

PROJECT DATA SHEET AGUA NEGRA BINATIONAL TUNNEL

CHILE-ARGENTINA

Update date: December 2016

Project Information			
Location	Coquimbo region in Chile and San Juan Province in Argentina		
Objective	Improve integration between Chile and Argentina and extend the transportation system with Mercosur countries		
Description of Works	Construction of a tunnel of 13.9 km in the Andes Mountains at 3,600 mt of altitude		
Economic Conditions	Total costs according to the territorial part: 72 % Argentina and 28 % Chile		
Estimated Investment	US\$ 1.4 billion		
Type of Investment	Direct public investment financed by IABD		
Benefits	Improve connectivity of Chile and Mercosur countries Contribute to the economic development mainly of Coquimbo region and San Juan Province		

Location Map		
CIFICO	PARAGUAY	
OCEANO PACIFICO	S-MA DE ITUCUMAN STGO. DEL CATAMARCA AGUA PO-DE CATAMARCA PO-DE CATAMARCA AGUA PO-DE CATAMARCA PO-D	
LA SE	NEGRA Goya	
	SAN LUS Rosario URUGUAY BUENOS AIRES MONTEVIDEO	

	Current Situation		
 Institutional organization of a binational entity: EBITAN Prequalification in progress 	•	·	

Timetable		
Call for prequalification	October 19th, 2016	
Call for Bids	2 nd Quarter 2017	
Contract award	1 st Quarter 2018	

Source: MOP