



AGENCIA NACIONAL DE INFRAESTRUCTURA
Ministerio de Transporte

FOURTH GENERATION OF ROAD CONCESSIONS IN COLOMBIA

Luis Fernando Andrade Moreno

President - Agencia Nacional de Infraestructura



DISCLAIMER

*The National Infrastructure Agency (“ANI” or the “Agency”) clarifies that the purpose of the event “**The Fourth Generation (4G) of Road Concessions in Colombia**” is to introduce the conceptual framework developed by the National Government of Colombia for the structuring of new projects in road concessions. Therefore, the ideas and documents presented by the Agency at this event are for indicative purposes only and do not imply any warranties with regards to tender processes within this program.*

Please be advised that there is a legal framework in place for the regulation of PPPs (Law 1508), including a legal decree that regulates some of their specific aspects. However, some aspects of the PPP Law are still under review for subsequent regulation by decree.

The information presented at this event is preliminary and subject to change and continued review by the Agency. In addition, this document, the ideas contained herein, and the other presentations at this event do not constitute a request or solicitation for tenders or a commitment by the Agency to accept proposals for a future tender process.



OUTLINE

- 1. GOVERNMENT OBJECTIVES**
- 2. FOURTH GENERATION OF ROAD CONCESSIONS PROGRAM**
- 3. EARLY VICTORIES**



OUTLINE

- 1. GOVERNMENT OBJECTIVES**
2. FOURTH GENERATION OF ROAD CONCESSIONS PROGRAM
3. EARLY VICTORIES



Government Objectives

The Lag

- Lag in competitiveness due to underinvestment in transportation infrastructure
- US\$3.3 billion invested in transportation infrastructure in 2011 (1% of GDP)
- 50/50 between public works and PPP.

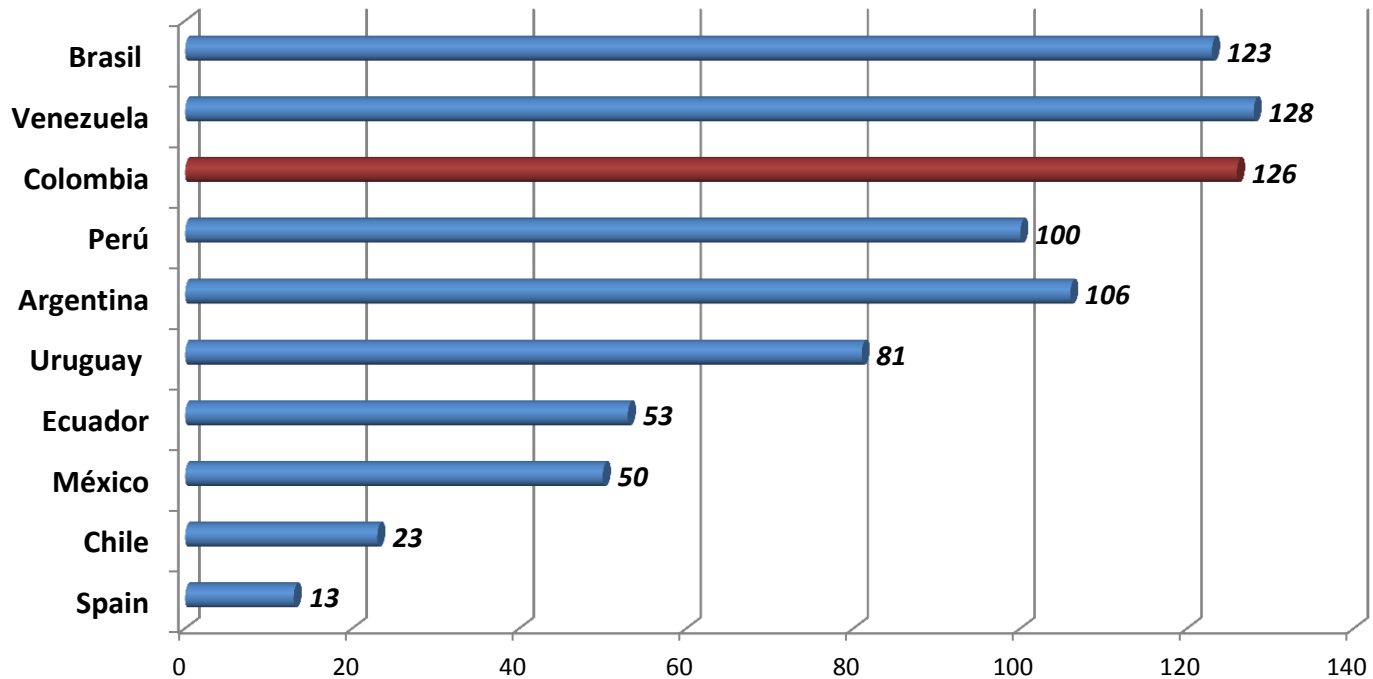
The Strategy

- Objective : Achieve 3% of GDP in 2014 (US\$10 billion)
 - US\$3.3 billion for public works (1% of GDP)
 - US\$6.7 billion for PPP (2% of GDP)
- First step in 2012: US\$4.4 billion (33% increase)



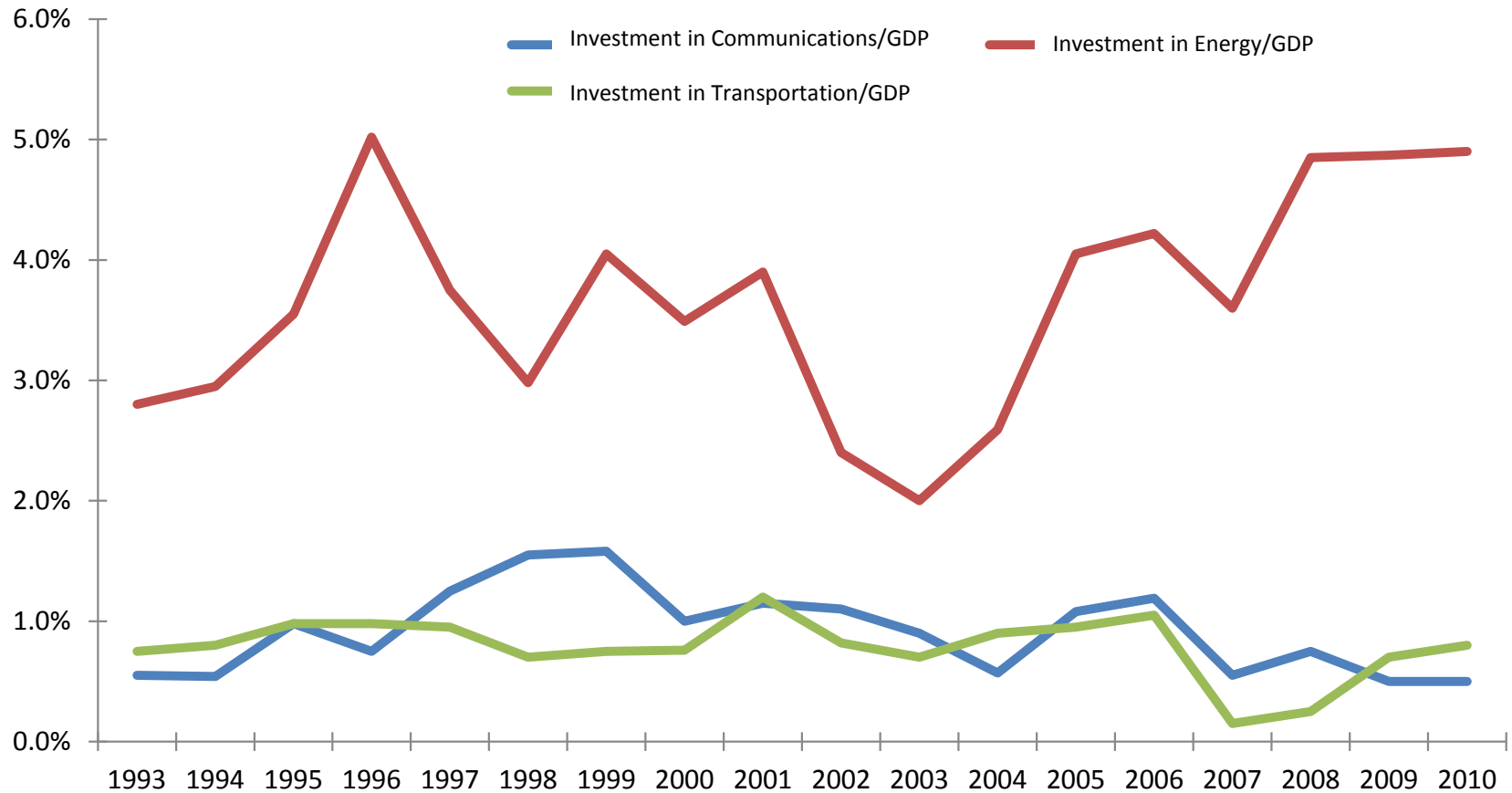
Poor Competitiveness in Infrastructure

Ranking in Quality of Roads



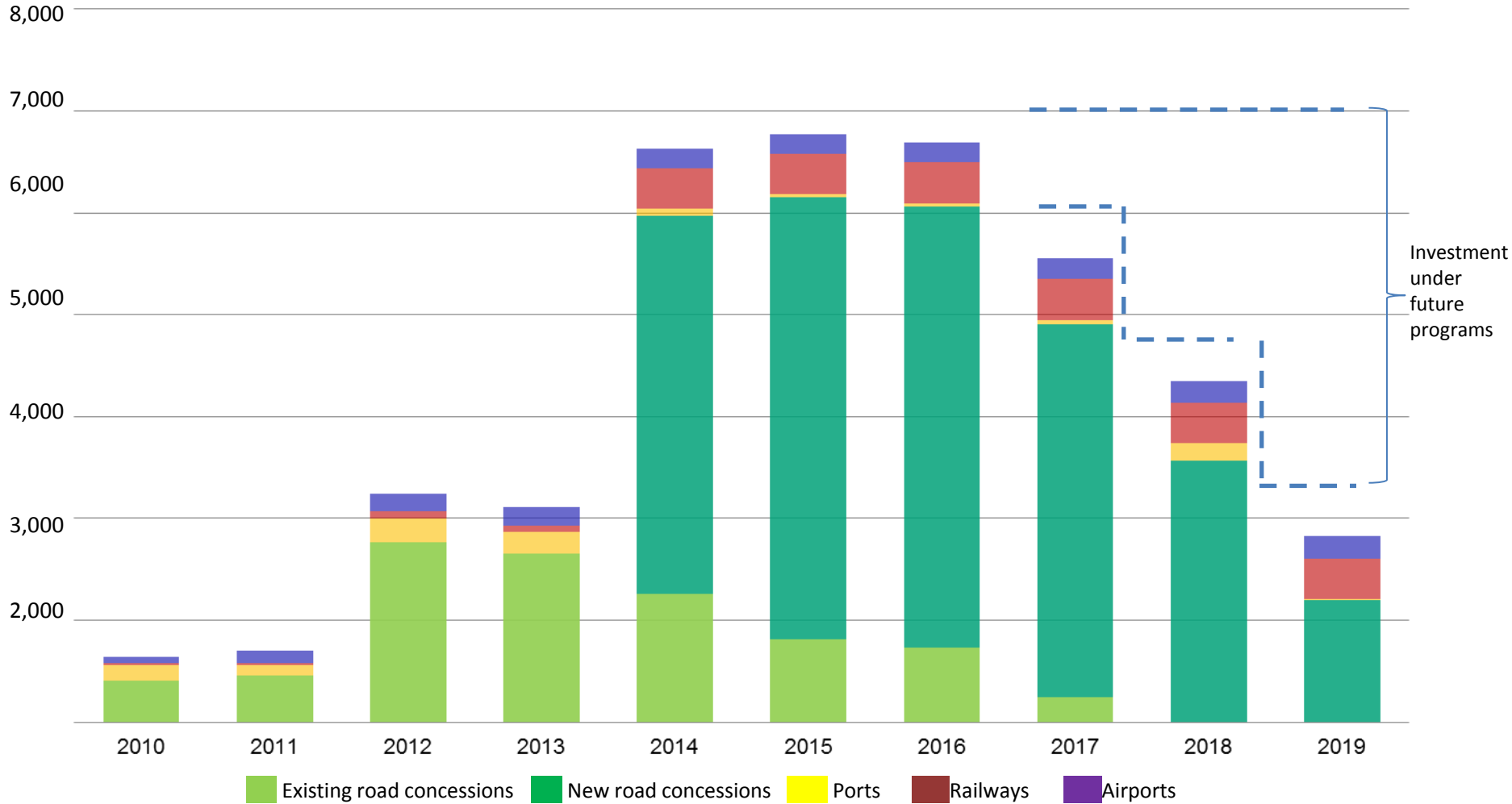


Underinvestment in Infrastructure





Objectives Investment Levels



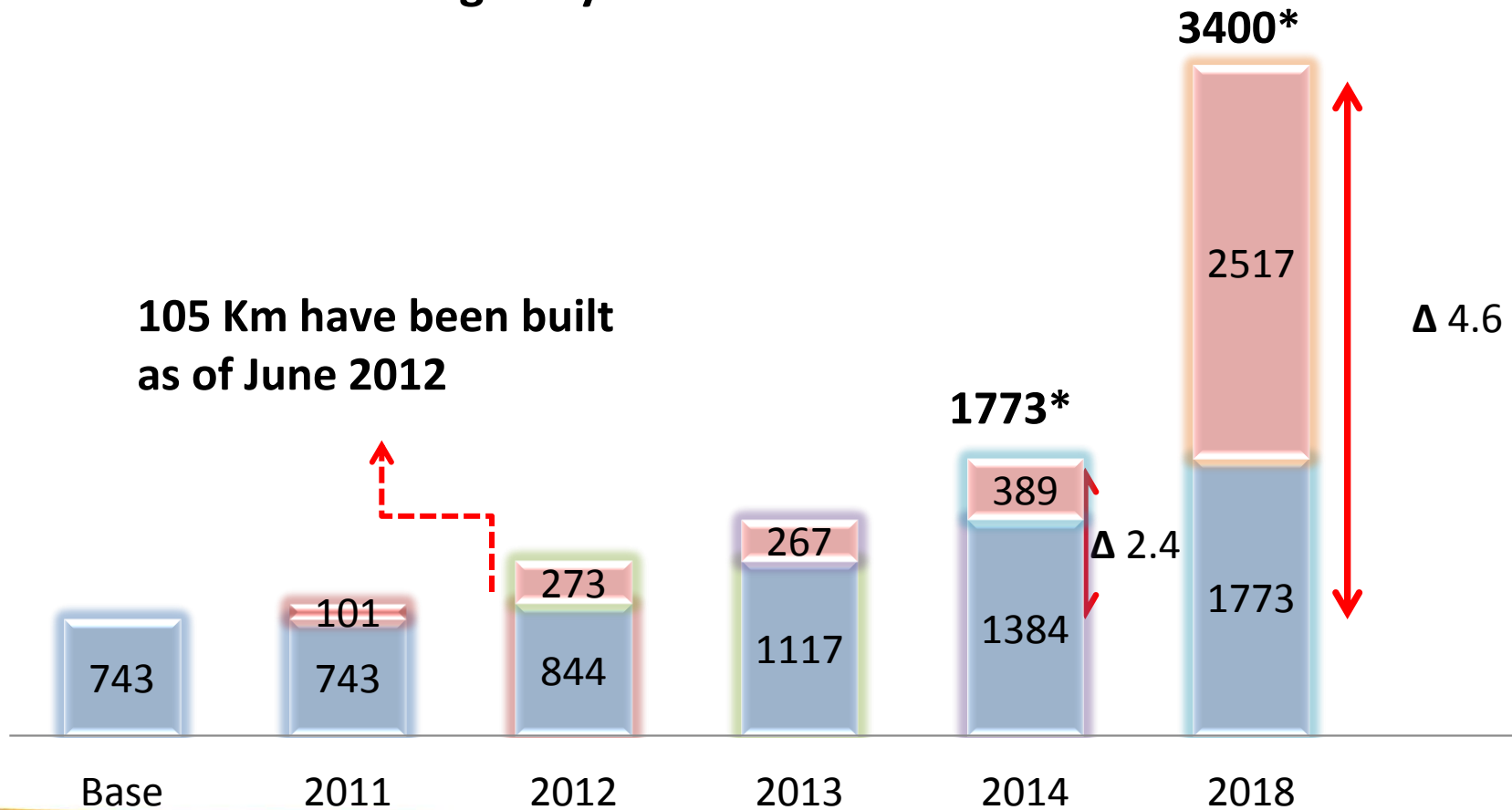
Investment under future programs



Objectives of Four-year Period

Kms of Four-lane Highways to be Built

105 Km have been built
as of June 2012



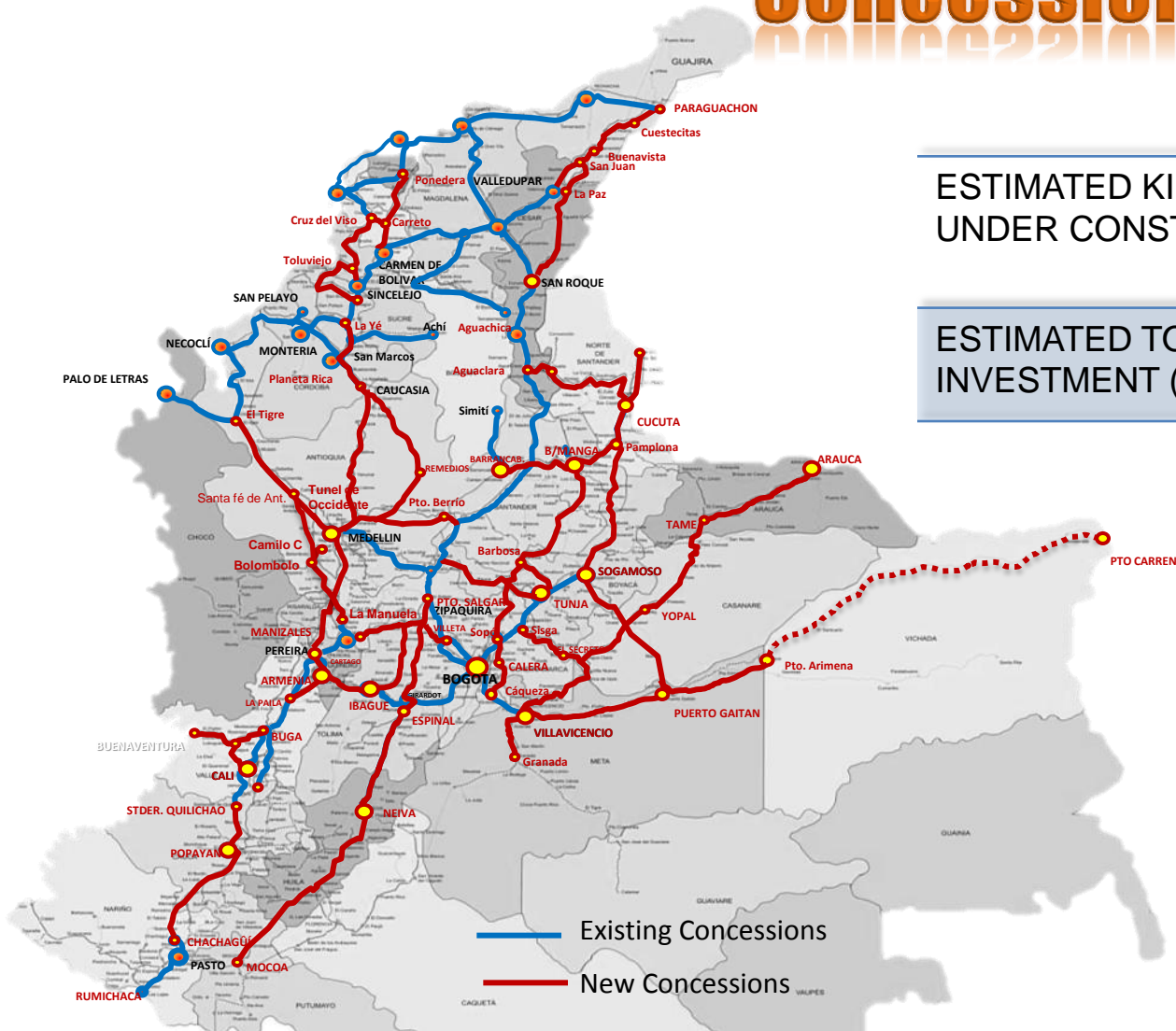


OUTLINE

1. GOVERNMENT OBJECTIVES
2. **FOURTH GENERATION OF ROAD CONCESSIONS PROGRAM**
3. EARLY VICTORIES



Road Concessions

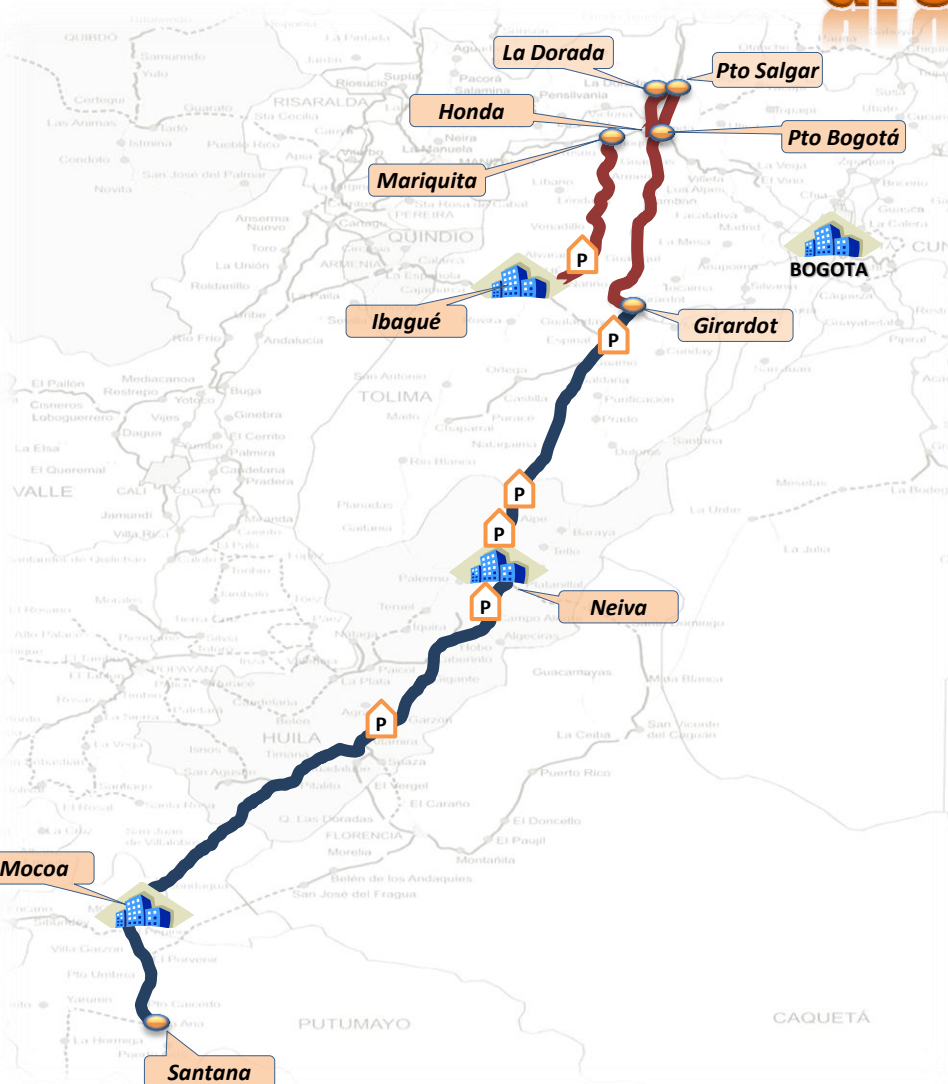
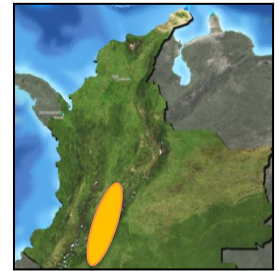


ESTIMATED KILOMETERS UNDER CONSTRUCTION	8,170
ESTIMATED TOTAL INVESTMENT (Billion USD)	24.4

— Existing Concessions
— New Concessions



Center-South Group 1



SPECIFICATIONS

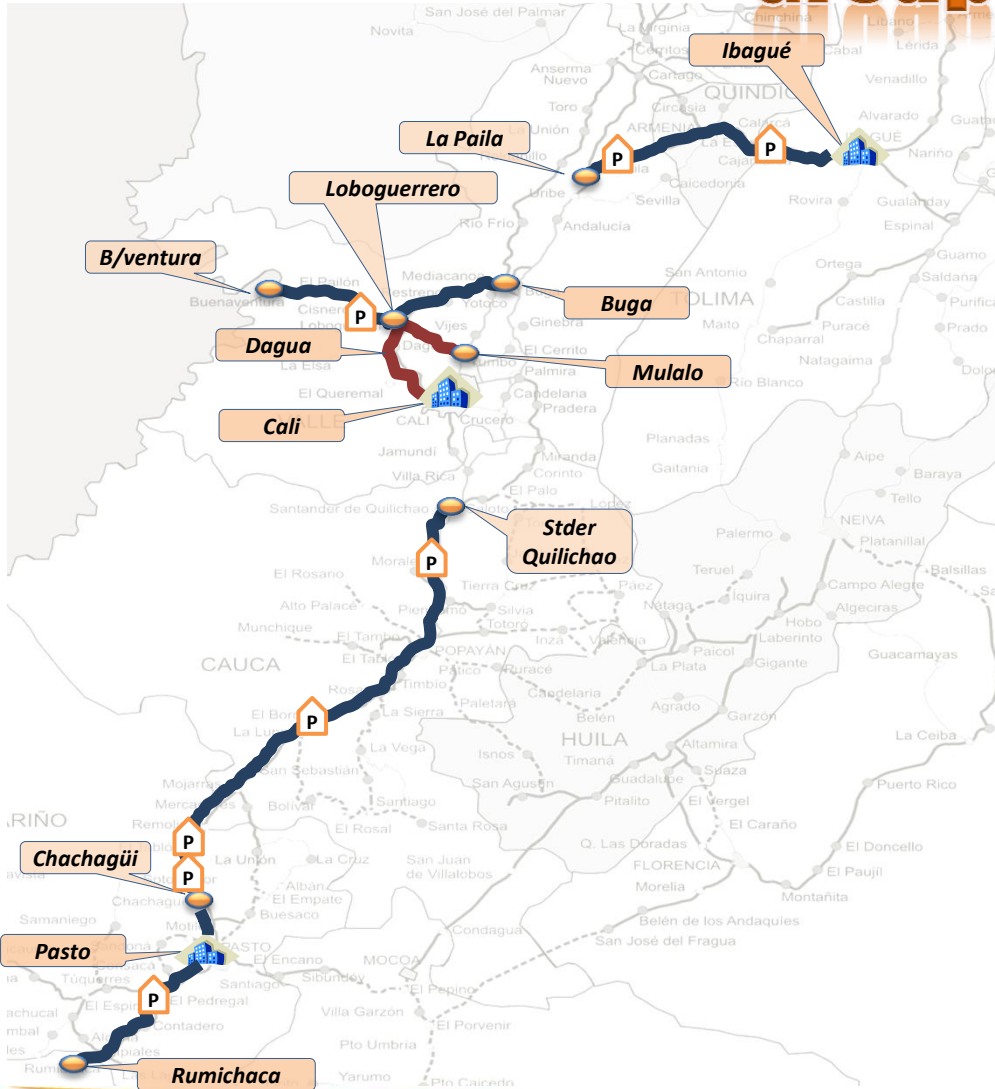
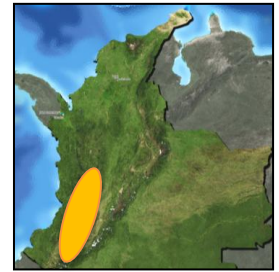
Kilometers: 879 Km
Existing Toll Booths: 6
New Toll Booths: 7-9
TOTAL CAPEX (Billion USD): \$1.29

CORRIDORS:

- ★ Ibagué – Puerto Salgar – Girardot (313 km)
- Girardot - Neiva (166 km)
- Neiva – Mocoa- Santana (400 km)



Center-West Group 2



SPECIFICATIONS

Kilometers: 783 Km
Existing Toll Booths: 8
New Toll Booths: 3
TOTAL CAPEX (Billion USD): \$2.76

CORRIDORS:

- Ibagué – La Paila (135km)
- Buga – Buenaventura (118km)
- ★ Mulaló – Loboguerrero (90km)
- Santander de Quilichao –Chachagüi/Pasto Rumichaca (440km)

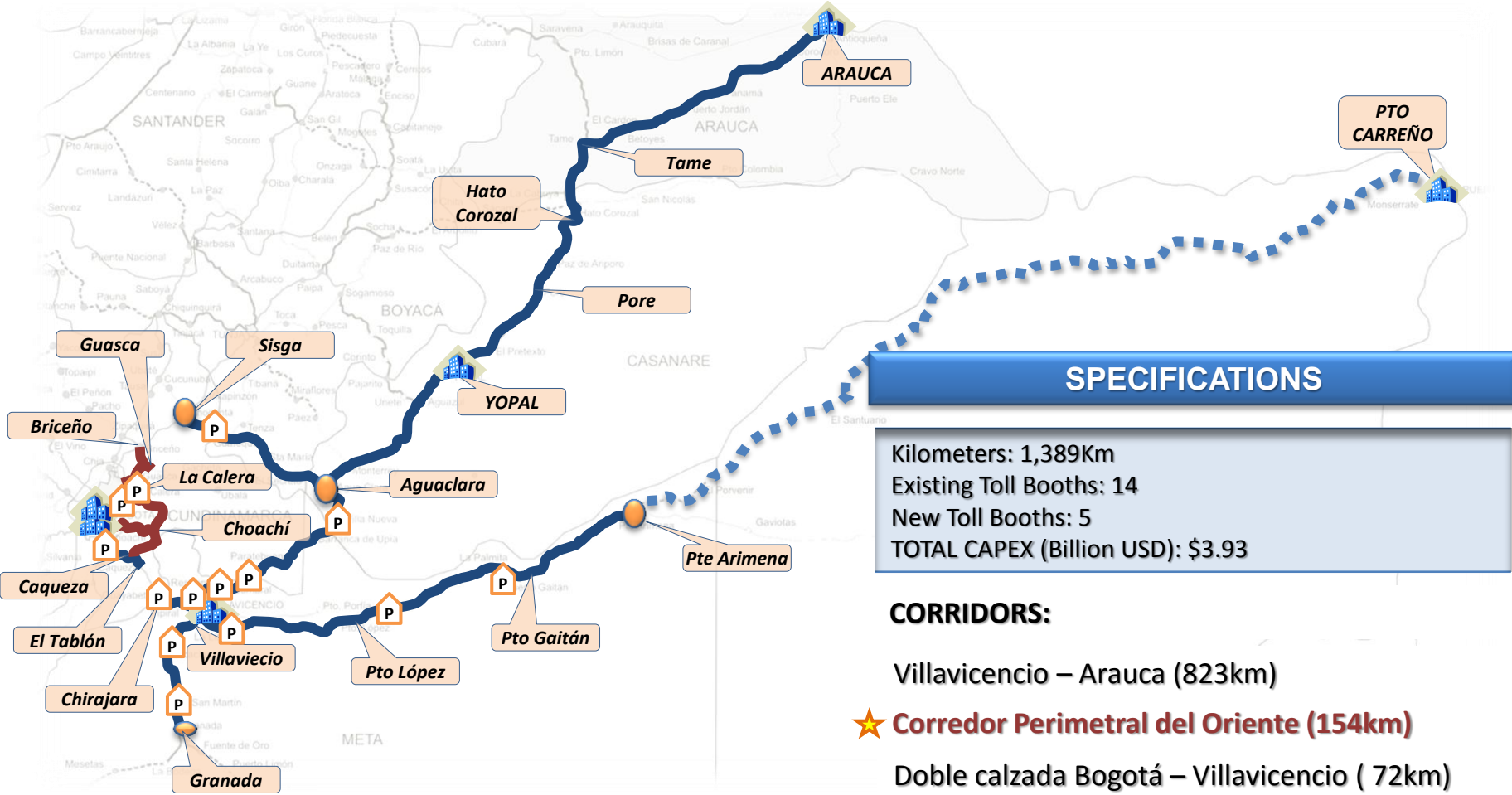
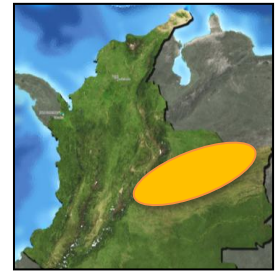
Existing Toll Booth Early Victory

* Estimated figures, subject to change





Center-East Group 3



SPECIFICATIONS

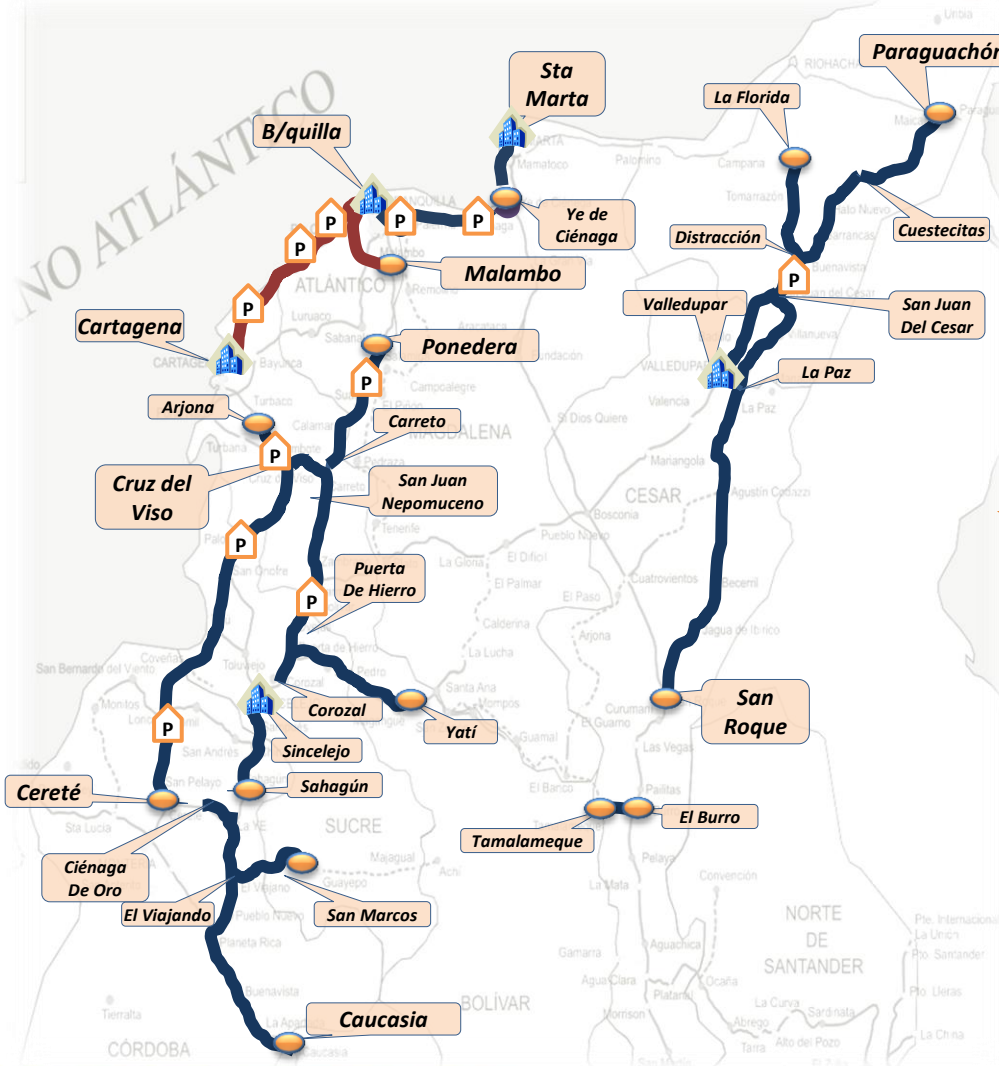
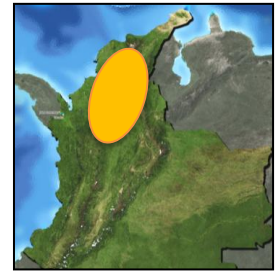
Kilometers: 1,389Km
Existing Toll Booths: 14
New Toll Booths: 5
TOTAL CAPEX (Billion USD): \$3.93

CORRIDORS:

- Villavicencio – Arauca (823km)
- ★ **Corredor Perimetral del Oriente (154km)**
- Doble calzada Bogotá – Villavicencio (72km)
- Malla Vial del Meta (340km)



North Group 4



SPECIFICATIONS

Kilometers: 1,487 Km
Existing Toll Booths: 11
New Toll Booths: 6
TOTAL CAPEX (Billion USD): \$2.91

CORRIDORS:

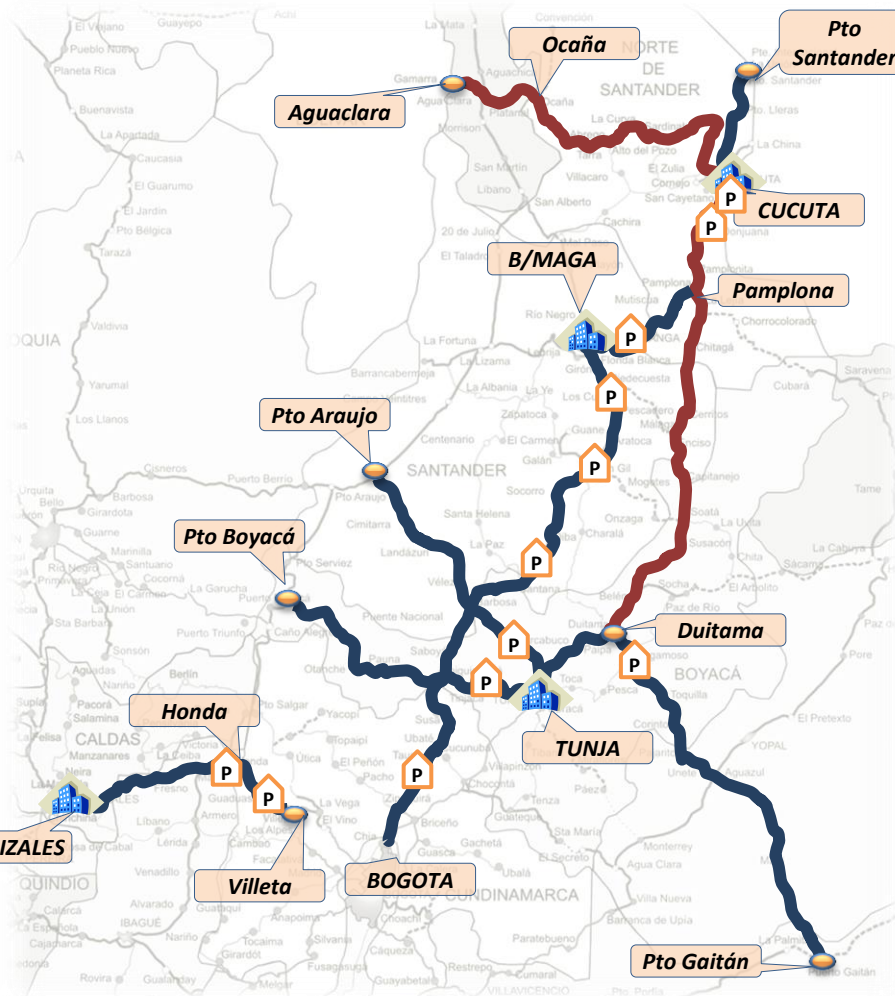
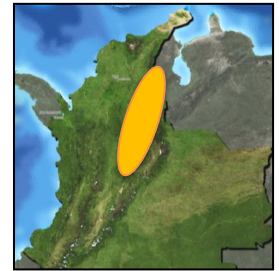
- ★ **Cartagena – Barranquilla - Malambo (152 km)**
- Barranquilla – Santa Marta (93km)
- San Roque - Paraguachón (474 km)
- Caucasia – Cruz del Viso (434 km)
- Cereté - Ponedera (334 km)



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Ministerio de Transporte

Eastern Mountain Range

Fondo Adaptación



SPECIFICATIONS

Kilometers: 2,266 Km
Existing Toll Booths: 11
TOTAL CAPEX (Billion USD): \$ 5.43

CORRIDORS:

- Manizales – Honda –Villeta (220km)
- Bogotá –Bucaramanga – Pamplona (543 km)
- Tunja –Chiquinquirá – Puerto Boyacá (315 km)
- Puerto Gaitán – Puerto Araujo (571 km)
- ★ Duitama – Pamplona –Cúcuta (309 km)
- ★ Cúcuta –Aguaclara- Puerto Capulco (257 km)
- Cúcuta – Puerto Santander (51km)

Existing Toll Booth Early Victory

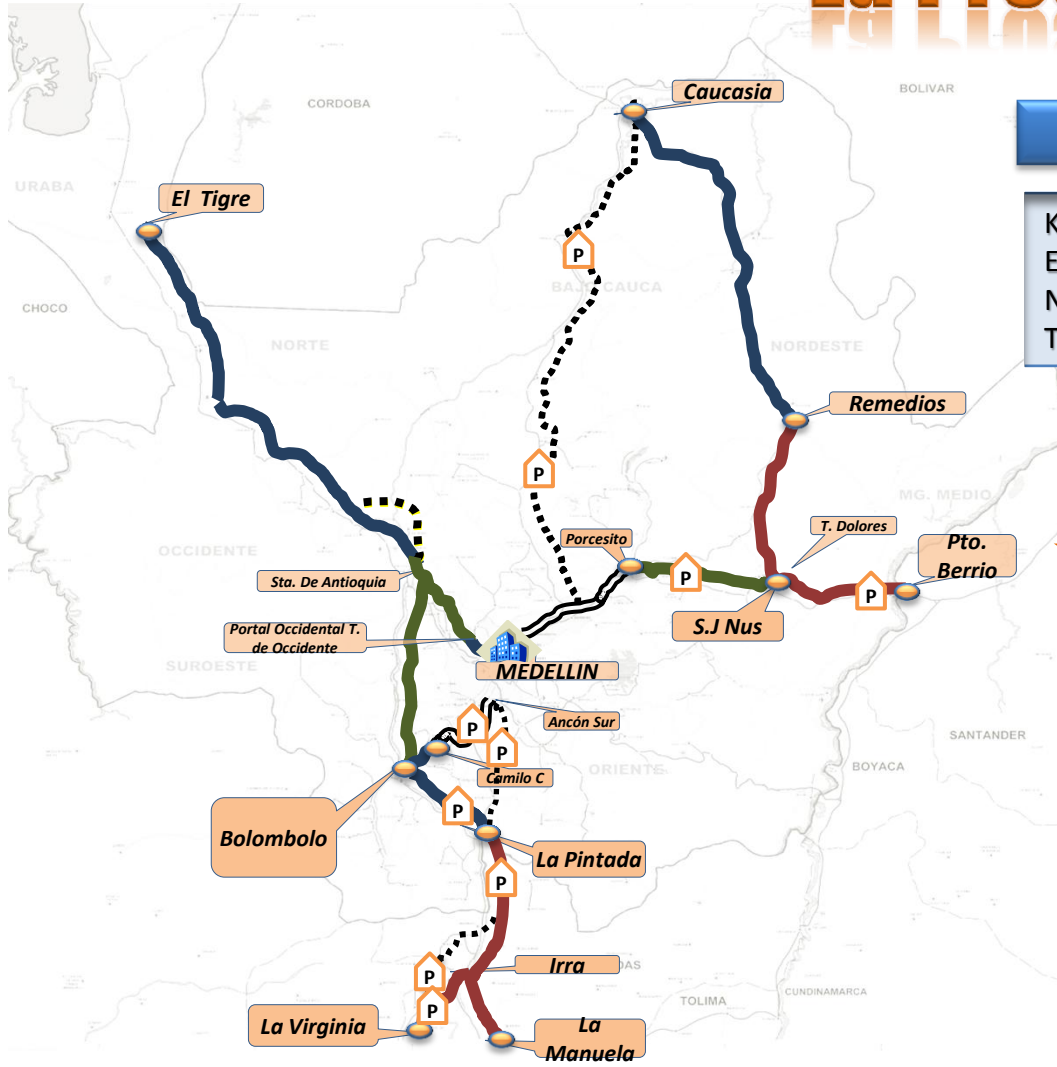
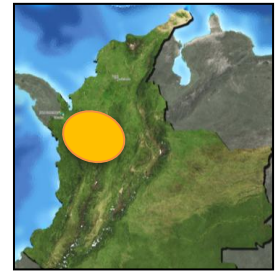
* Estimated figures, subject to change





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Ministerio de Transporte

Autopistas para La Prosperidad



SPECIFICATIONS

Kilometers: 1,160 Km
Existing Toll Booths: 10
New Toll Booths: 14-18
TOTAL CAPEX (Billion USD): \$7.25

CORRIDORS:

- ★ Grupo 1
- Grupo 2
- Grupo 3

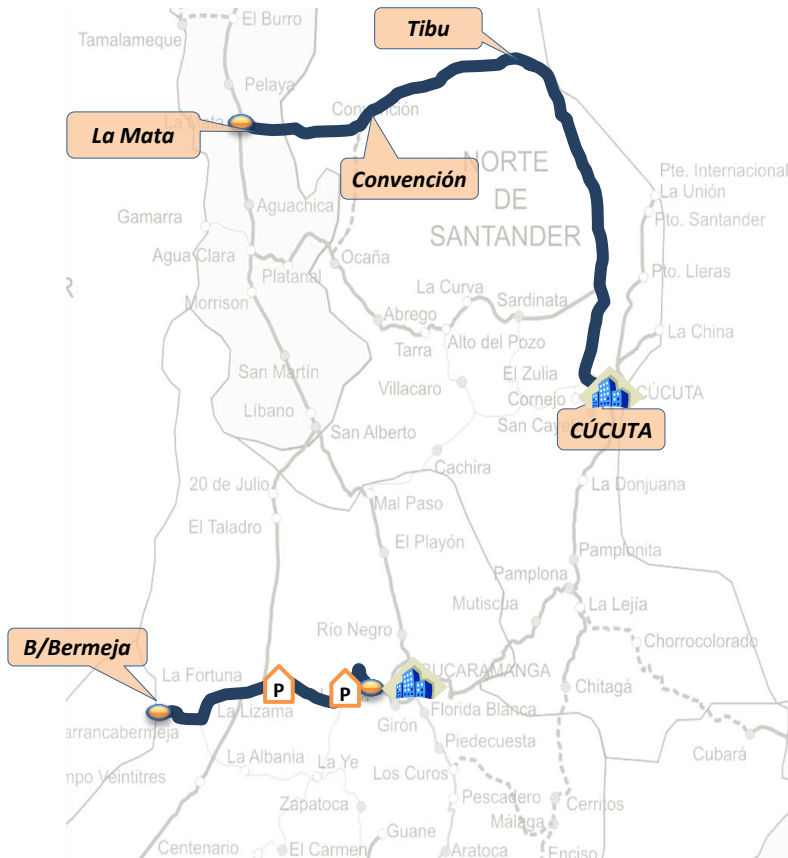
Existing Toll Booth Early Victory

* Estimated figures, subject to change





Other Corridors



SPECIFICATIONS

Kilometers: 459 Km
Existing Toll Booths: 2
TOTAL CAPEX (Billion USD): \$0.87

CORRIDORS:

Cúcuta – Tibú – La Mata (331 Km)

Bucaramanga – Barrancabermeja – Yondó (128 Km)

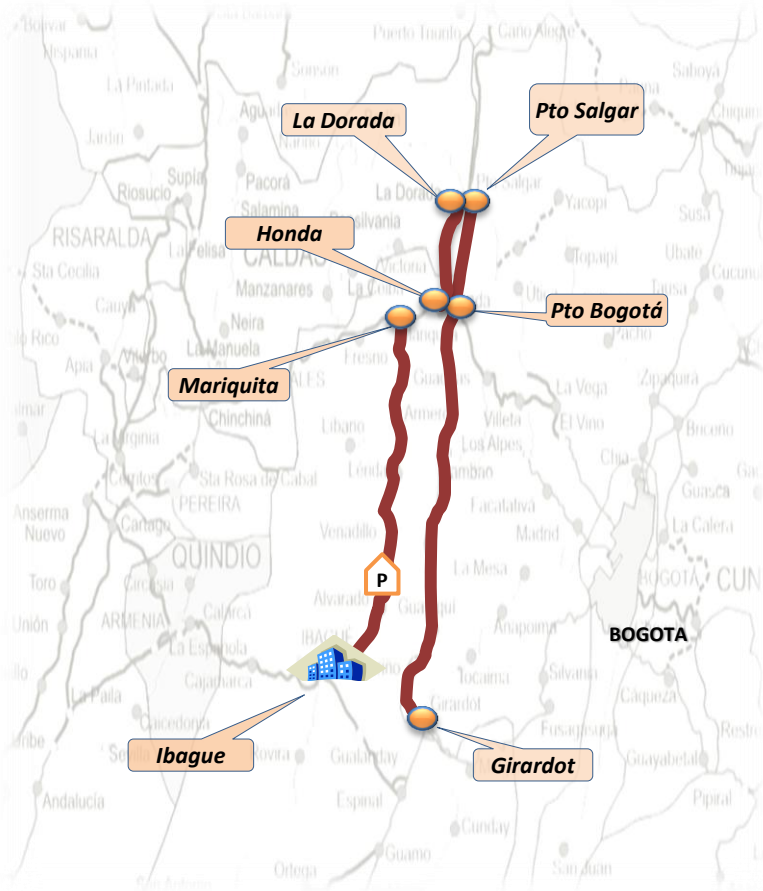
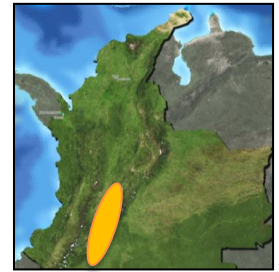


OUTLINE

1. GOVERNMENT OBJECTIVES
2. FOURTH GENERATION OF ROAD CONCESSIONS PROGRAM
3. **EARLY VICTORIES**



Early Victory Center-South Group 1



★ Ibagué – Puerto Salgar – Girardot

TOTAL KM	313
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TOTAL CAPEX (MM USD)	\$524.99
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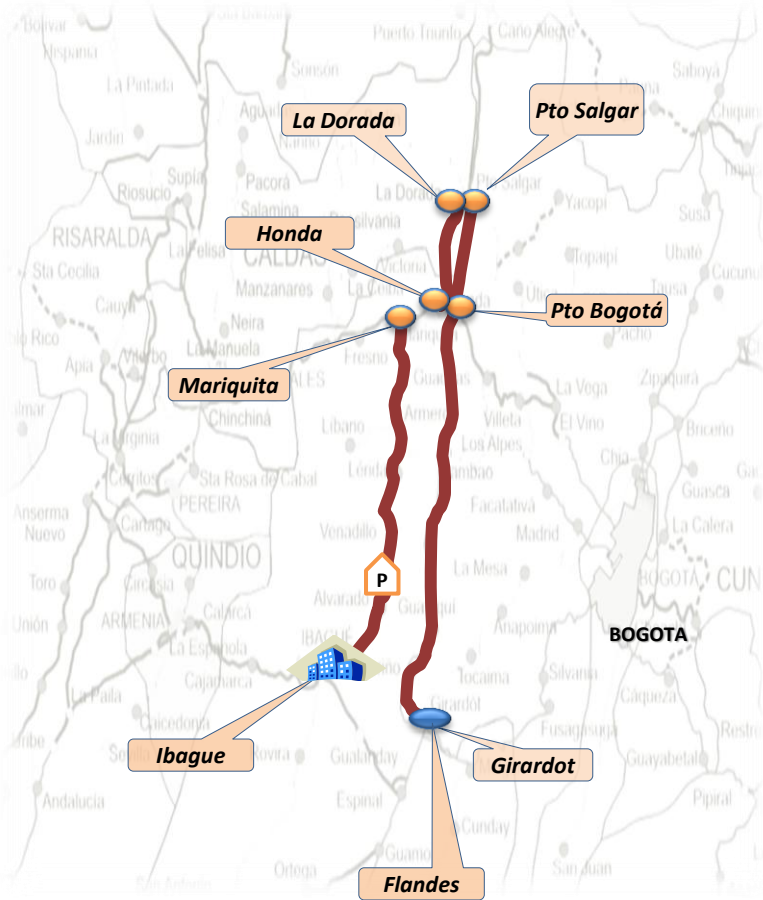
Existing Toll Booths	1
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New Toll Booths*	3
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Type of Activity:
 Rehabilitation of existing roads
 Construction of bridges over Magdalena river
 Construction of two additional lanes
 Road improvement



Early Victory Center-South Group 1



★ Flandes – Girardot

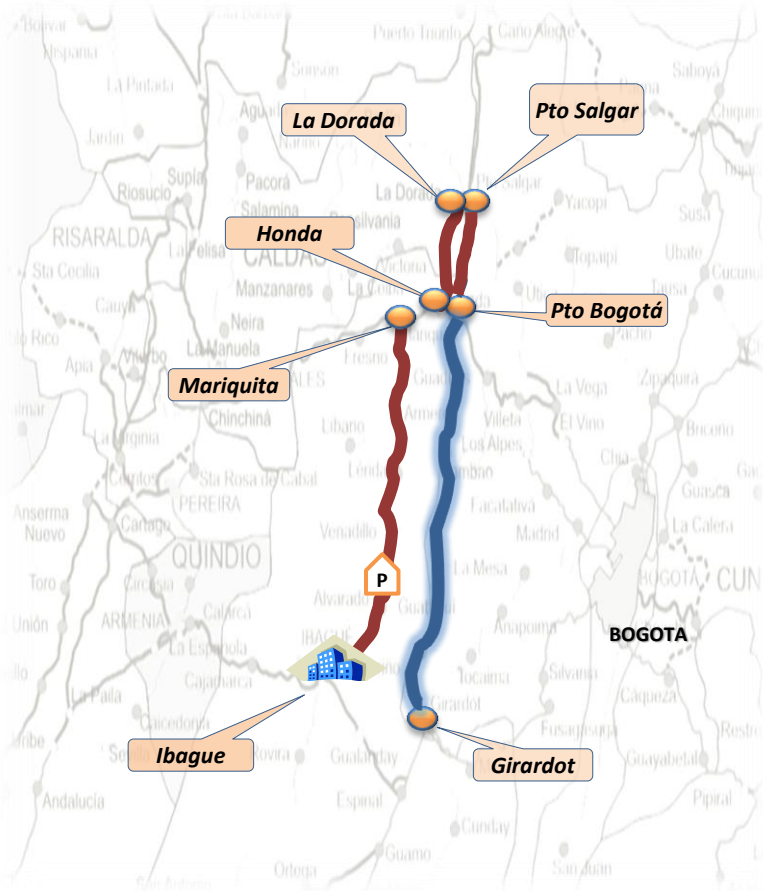
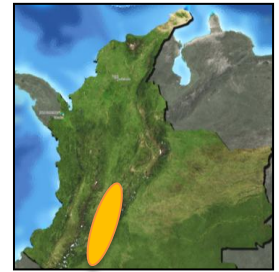
KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
6	\$58.83	Bridge + Construction of two additional lanes	Undulated

SPECIFICATIONS

Road length	6km
Design speed	70 km/h
Maximum slope	5%
Minimum curve radius	160m
Bridge and viaduct length	399m
Length of tunnels	
Traffic (2012)	



Early Victory Center-South Group 1



★ Girardot – Puerto Bogotá

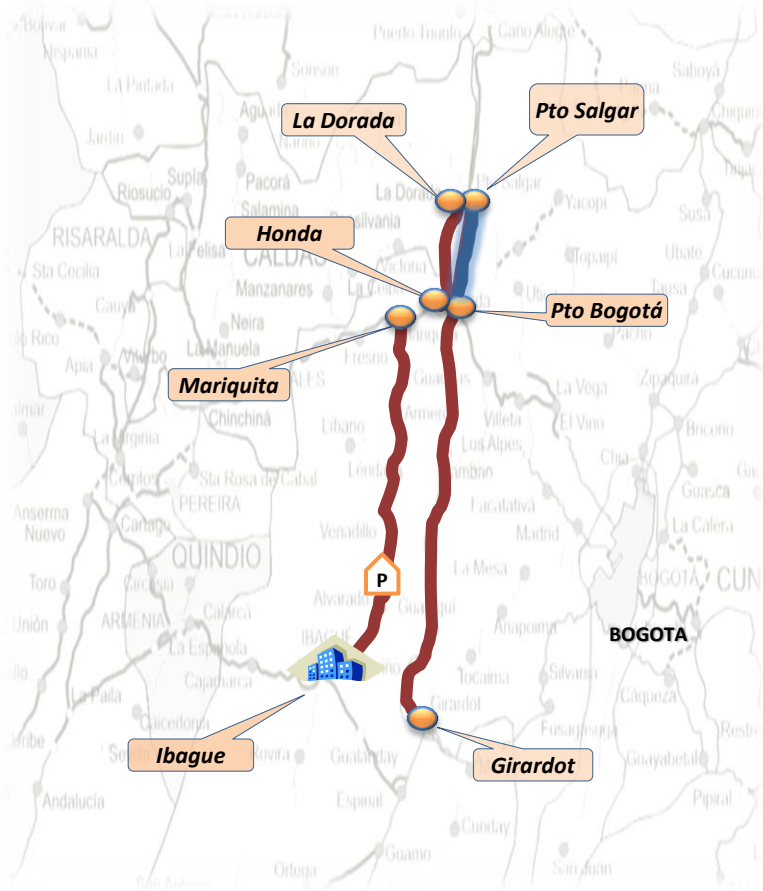
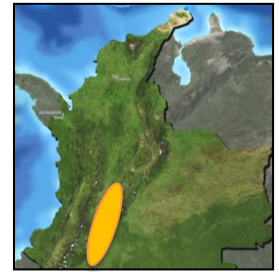
KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
126	\$267.57	Improvement	Undulated

SPECIFICATIONS

Road length	126 km
Design speed	70km/h
Maximum slope	5%
Minimum curve radius	160m
Bridge and viaduct length	
Length of tunnels	
Traffic (2012)	2,808



Early Victory Center-South Group 1



Puerto Bogotá – Puerto Salgar

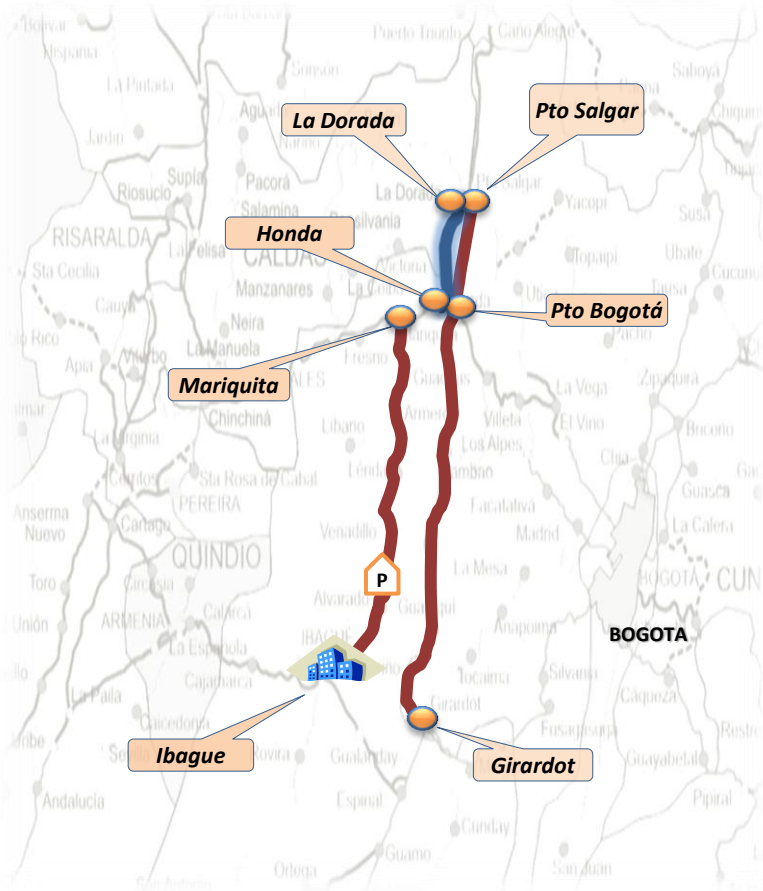
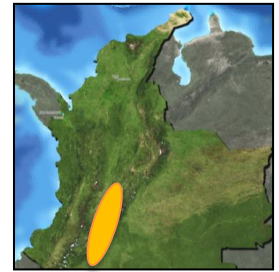
KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
35	\$130.23	Improvement	Undulated

SPECIFICATIONS

Road length	35Km
Design speed	70km/h
Maximum slope	5%
Minimum curve radius	160m
Bridge and viaduct length	
Length of tunnels	
Traffic (2012)	2,808



Early Victory Center-South Group 1



★ Honda – Puerto Salgar

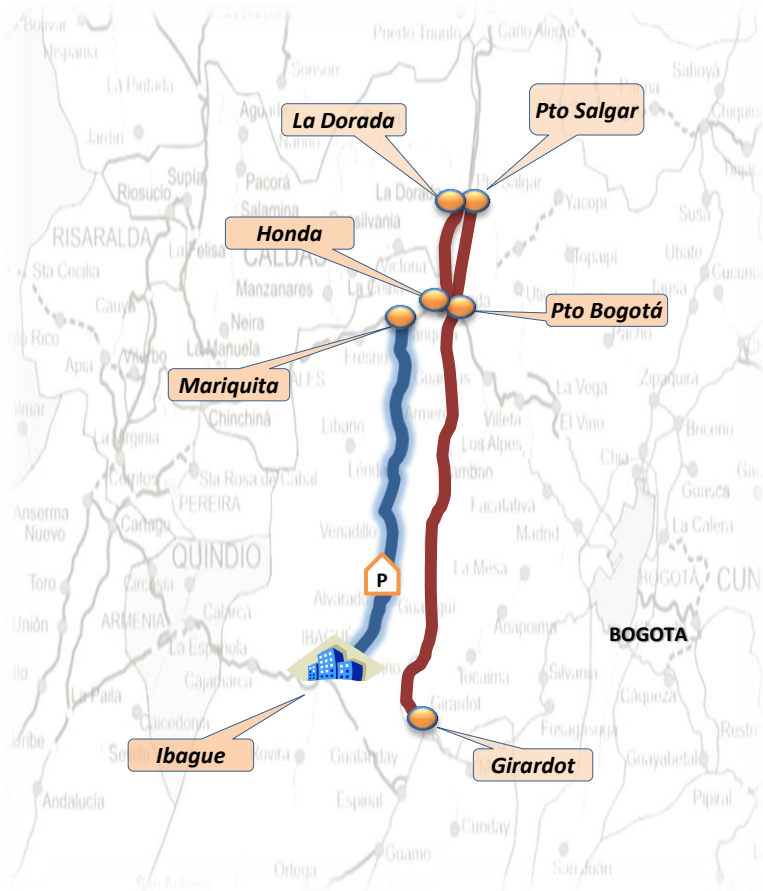
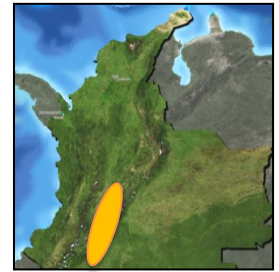
KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
39	\$29.18	Bridge + rehabilitation	Flat

SPECIFICATIONS

Road length	39km
Design speed	70km/h
Maximum slope	5%
Minimum curve radius	160m
Bridge and viaduct length	
Length of tunnels	
Traffic (2012)	6,679



Early Victory Center-South Group 1



★ Ibagué – Mariquita

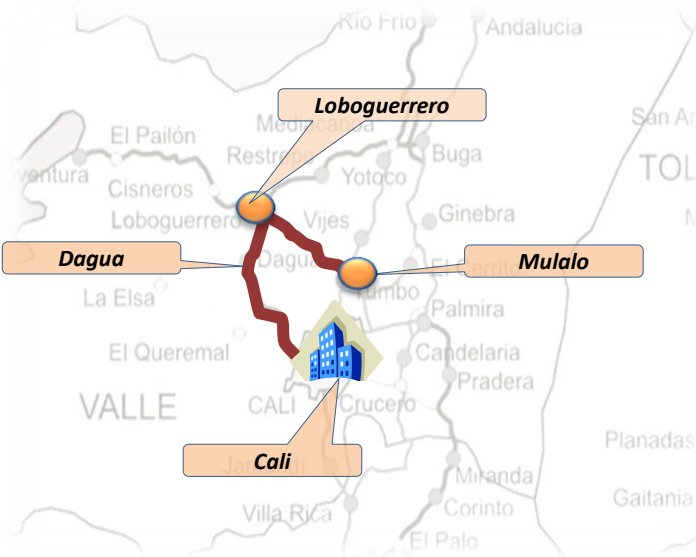
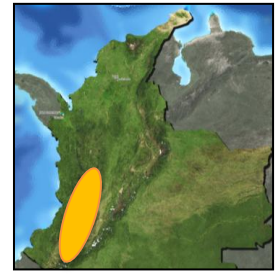
KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
107	\$39.18	Rehabilitation	Flat

SPECIFICATIONS

Road length	107km
Design speed	70km/h
Maximum slope	5%
Minimum curve radius	160m
Bridge and viaduct length	
Length of tunnels	
Traffic (2012)	2,874



Early Victory Center-West Group 2



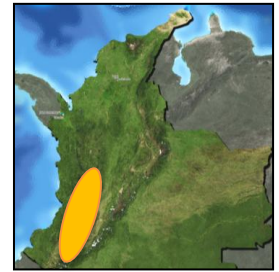
★ Mulaló – Loboguerrero - Cali

TOTAL KM	90	TOTAL CAPEX (MM USD)	\$585.27
Existing Toll Booths	-	New Toll Booths*	2

Type of Activity:
Rehabilitation of existing road
Construction of new two-way single lane road



Early Victory Center-West Group 2



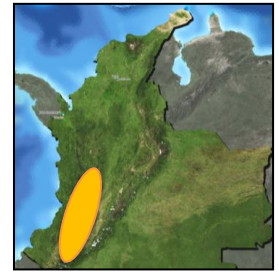
★ Mulaló – Loboguerrero

KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
32	\$573.18	New single lane road	Mountainous

SPECIFICATIONS	
Road length	32 km
Design speed	80 km/h
Maximum slope	9%
Minimum curve radius	235
Bridge and viaduct length	5,715 m
Length of tunnels	11,075 m
Traffic (2017)	2,694



Early Victory Center-West Group 2



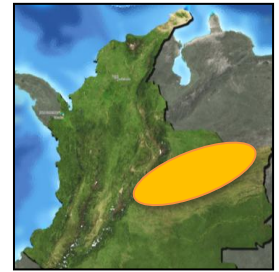
★ Cali- Dagua - Loboguerrero

KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
58	\$12.09	Rehabilitation	Mountainous

SPECIFICATIONS	
Road length	58 km
Design speed	40-60km/h
Maximum slope	9%
Minimum curve radius	
Bridge and viaduct length	
Length of tunnels	
Traffic (2017)	4,956



Early Victory Center-East Group 3



★ Perimetral del Oriente Corridor

TOTAL KM	154
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TOTAL CAPEX (MM USD)	\$339.13
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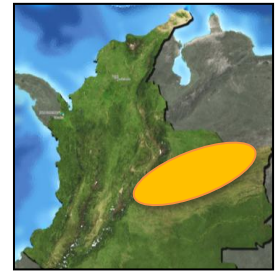
Existing Toll Booths	2
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New Toll Booths*	2
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Type of Activity:
Rehabilitation of existing road
Construction of two additional lanes
Road improvement



Early Victory Center-East Group 3



★ Briceño -Sopo

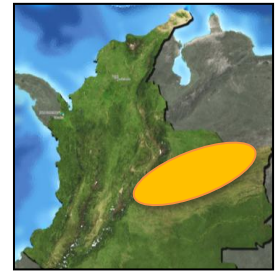
KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
4	\$10.44	Construction of additional two lanes, rehabilitation	Flat

SPECIFICATIONS

Road length	4 km
Design speed	60 km/h
Maximum slope	5%
Minimum curve radius	200 m
Bridge and viaduct length	
Length of tunnels	
Traffic (2012)	5,080



Early Victory Center-East Group 3



★ Sopo – La Calera

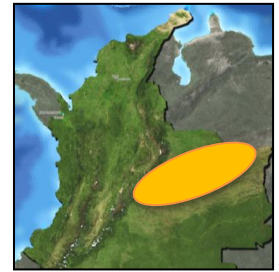
KM	CAPEX (MM USD)	Activities	Terrain
25	\$43.72	Rehabilitation + Improvement in critical areas	Undulated

SPECIFICATIONS

Road length	25 km
Design speed	60-80 km/h
Maximum slope	6%
Minimum curve radius	200 m
Bridge and viaduct length	
Length of tunnels	
Traffic (2012)	3,698



Early Victory Center-East Group 3



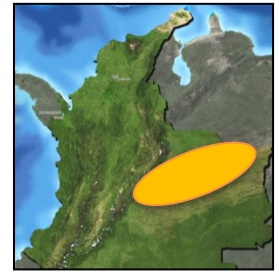
★ Salitre - Guasca

KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
14	\$10.69	Rehabilitation	Mountainous

SPECIFICATIONS	
Road length	14 km
Design speed	60-80 km/h
Maximum slope	8%
Minimum curve radius	200 m
Bridge and viaduct length	
Length of tunnels	
Traffic (2012)	3,068



Early Victory Center-East Group 3



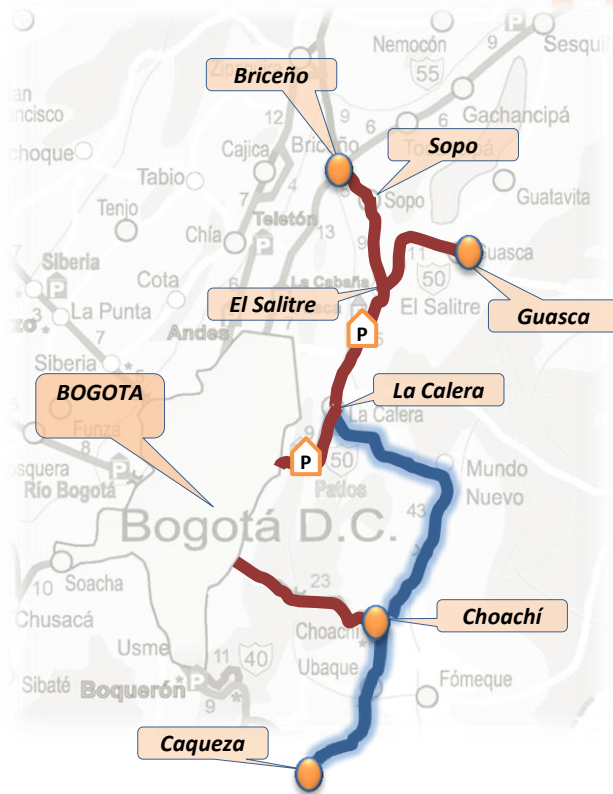
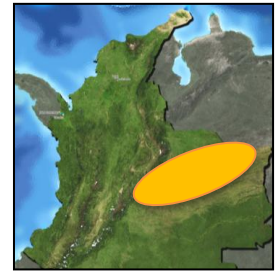
★ La Calera - Bogotá

KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
16	\$14.48	Rehabilitation	Mountainous

SPECIFICATIONS	
Road length	16 km
Design speed	60 km/h
Maximum slope	8%
Minimum curve radius	113 m
Bridge and viaduct length	
Length of tunnels	
Traffic (2012)	8,636



Early Victory Center-East Group 3



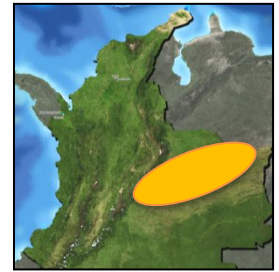
★ La Calera – Choachí - Caqueza

KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
53	\$221.30	Improvement	Mountainous

SPECIFICATIONS	
Road length	53 Km
Design speed	60 km/h
Maximum slope	8%
Minimum curve radius	113 m
Bridge and viaduct length	700 m
Length of tunnels	
Traffic (2012)	507



Early Victory Center-East Group 3



★ Bogotá -Choachí

KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
42	\$38.50	Rehabilitation	Mountainous

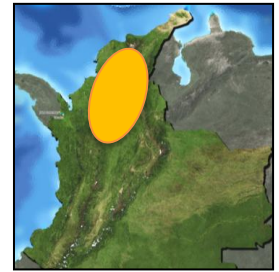
SPECIFICATIONS

Road length	42km
Design speed	60 km/h
Maximum slope	8%
Minimum curve radius	113 m
Bridge and viaduct length	
Length of tunnels	
Traffic (2012)	1,544



Early Victory

North – Group 4



★ Cartagena – Barranquilla - Malambo

TOTAL KM	152		
Existing Toll Booths	2	New Toll Booths*	1

Type of Activity:

Construction of two additional lanes

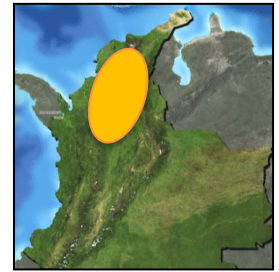
Rehabilitation and maintenance

Construction of new road

Improvement of roads with poor technical specifications



Early Victory North – Group 4



★ Cartagena - Barranquilla

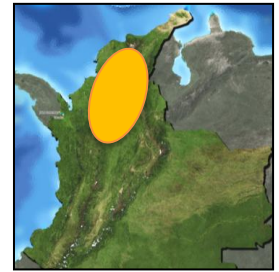
KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
78	\$527.83	Construction of two additional lanes, rehabilitation and maintenance	Flat

SPECIFICATIONS

Road length	78 km
Design speed	80 km/h
Maximum slope	4%
Minimum curve radius	250 m
Bridge and viaduct length	721 m
Length of tunnels	
Traffic (2012)	10,797



Early Victory North – Group 4

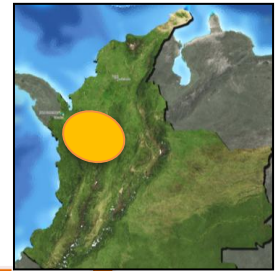


★ Barranquilla - Malambo

KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
74	\$224.33	Construction of new road	Flat

SPECIFICATIONS

Road length	74 km
Design speed	80 km/h
Maximum slope	4%
Minimum curve radius	250 m
Bridge and viaduct length	580 m
Length of tunnels	
Traffic (2012)	17,200



Early Victory

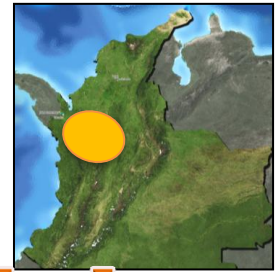
Autopistas Prosperidad



★ GROUP 1

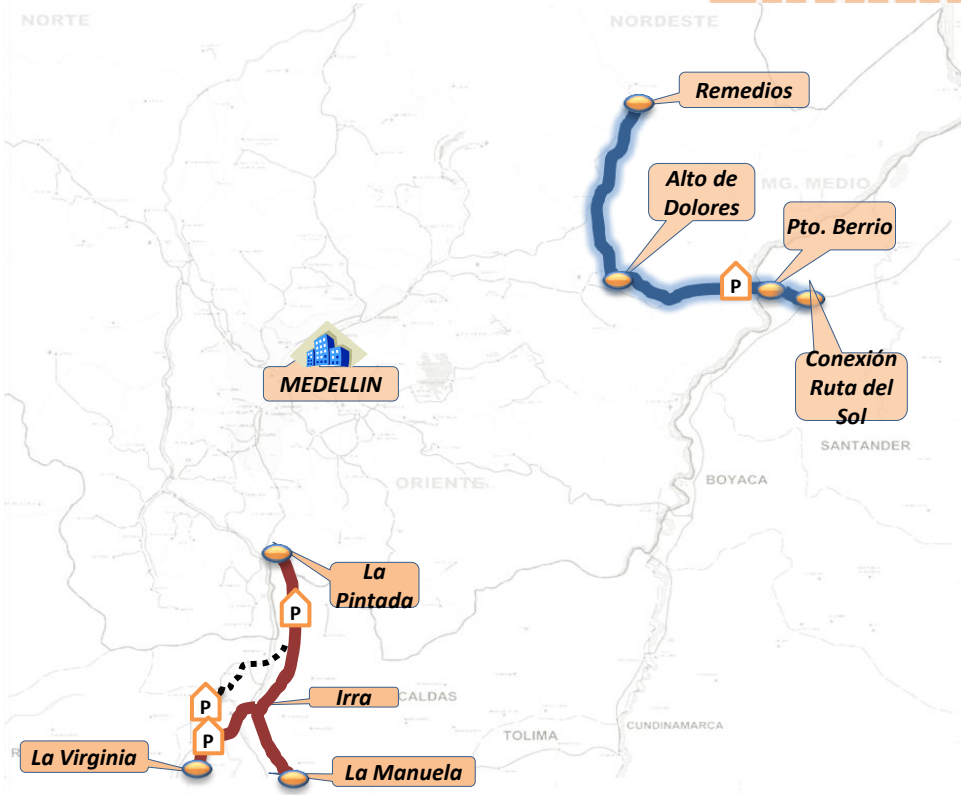
TOTAL KM	268	TOTAL CAPEX (MM USD)	\$2,095.23
Existing Toll Booths	4	New Toll Booths*	TBD

Type of activity:
Construction of new road
Improvement of existing road



Early Victory

Autopistas Prosperidad

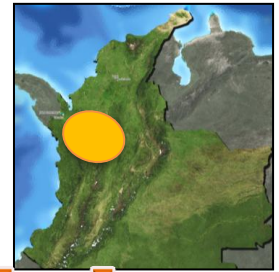


★ Remedios - Alto Dolores - Puerto Berrío - Conexión Ruta del Sol

KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
126	\$1,356.09	Construction of new road	Undulated, Mountainous

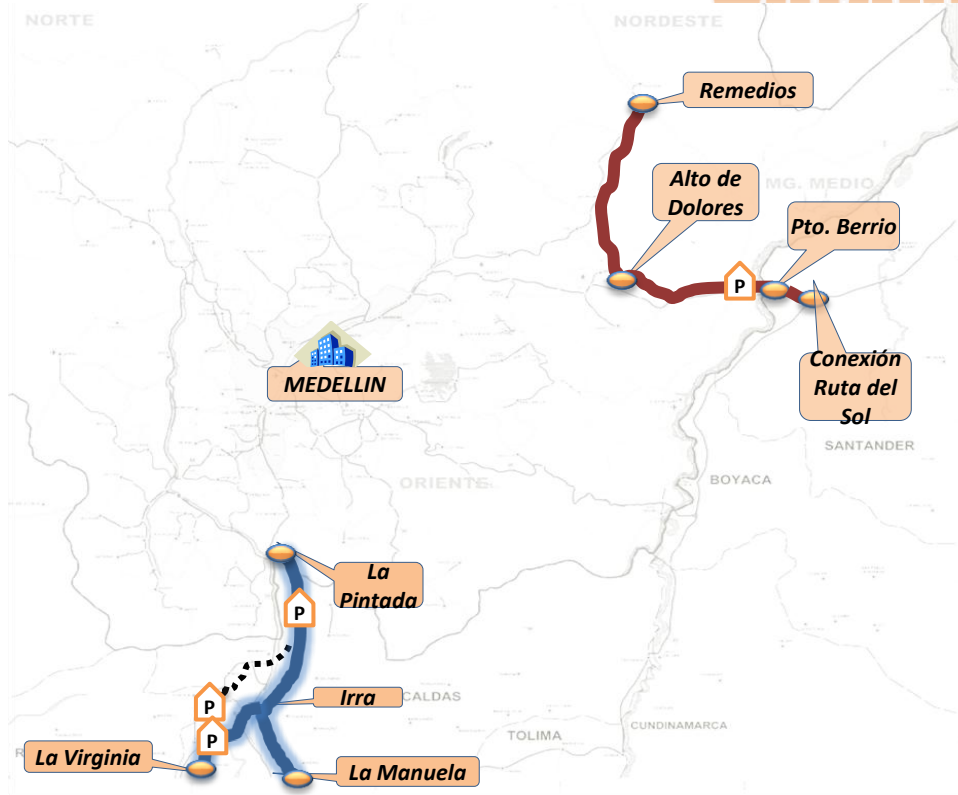
SPECIFICATIONS

Road length	126 km
Design speed	80 km/h
Maximum slope	4%
Minimum curve radius	250 m
Bridge and viaduct length	
Length of tunnels	4,430 m
Traffic (2012)	1,274



Early Victory

Autopistas Prosperidad



La Pintada – Irra – La Manuela , La Virginia – Irra

KM	CAPEX (MM USD)	ACTIVITY	TERRAIN
142	\$739.14	Improvement of existing road and construction of new road	Undulated, Mountainous

SPECIFICATIONS	
Road length	142 km
Design speed	80 km/h
Maximum slope	6%
Minimum curve radius	229 m
Bridge and viaduct length	680 m
Length of tunnels	3,740 m
Traffic (2012)	4,799



Time Line

Early Victories

Time Line

PROJECT STRUCTURING AND COMPLEMENTARY STUDIES

Integral
structuring of
the projects
Dec 2012

CONCESSION - ANI

Prequalification
Dec 2012 – Jan
2013

Tender
process
opens
Ene 2013

Tender
process
ends
May 2013

Award of the
concession
Jun 2013

DURATION OF THE CONCESSION PROJECT

Phase III designs,
environmental permits and
studies,
land purchases –
Jul 2013-Jul 2014

Construction
–
2-5 years

Operation and
maintenance –
20-25 years



Event Panels

Contractual Scheme

Insurance and Real Estate, Social, and Environmental Risks

Financing for the Fourth Generation of Road Concessions (Infrastructure Bonds)

The Vision of Multilaterals Regarding the Fourth Generations of Road Concessions

Ensuring Transparency in the Fourth Generation of Road Concessions



**Prosperidad
para todos**
GRACIAS

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