

# PPP Highways and Safe Routes Network

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December 4<sup>th</sup>, 2017

**VIALIDAD  
NACIONAL**



Ministerio de Transporte  
Presidencia de la Nación



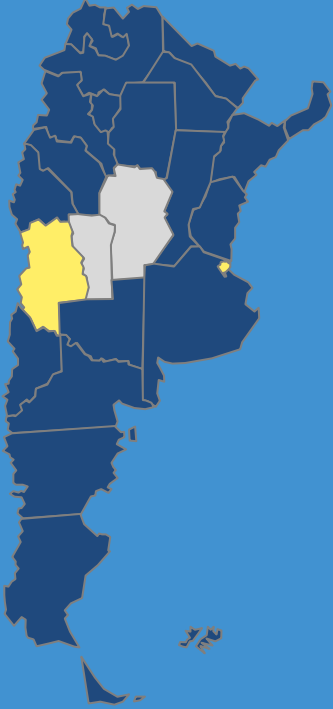
Ministerio de Finanzas  
Presidencia de la Nación



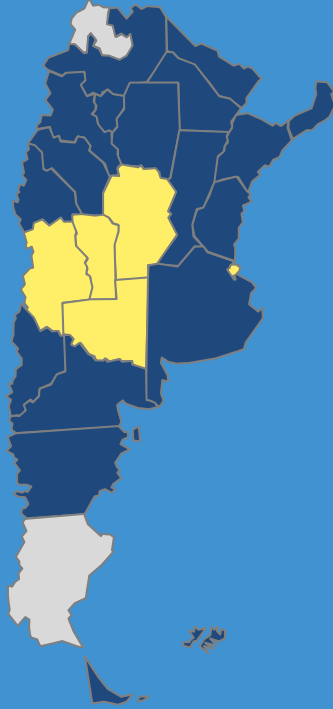
Agencia Argentina  
de Inversiones  
y Comercio Internacional

# Growing popular support

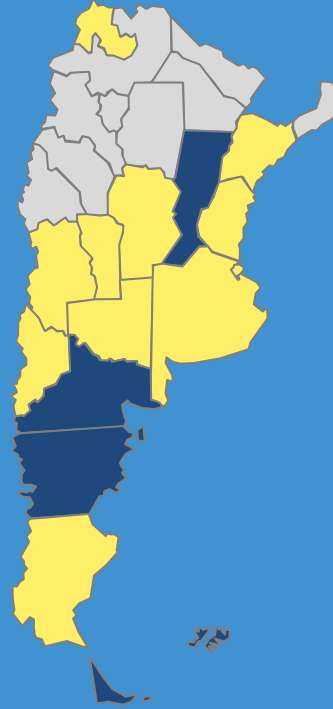
2015 legislative primaries



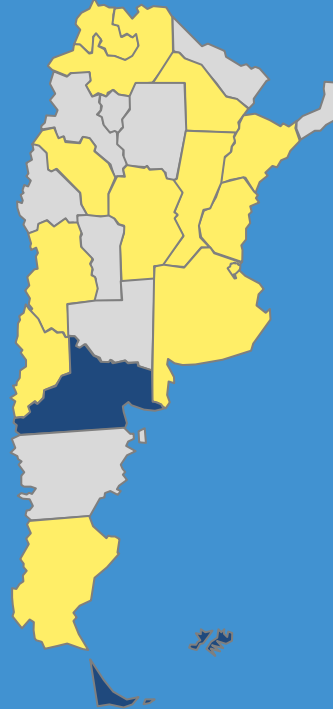
2015 legislative elections



2017 legislative primaries



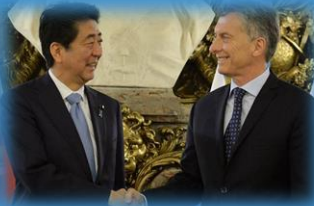
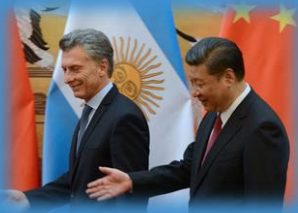
2017 legislative elections



Cambiemos has shown strong and sustained growth in the electoral base in most recent elections

 Cambiemos  FPV (Kirchnerist)

# A higher profile in the global community for 2018



# President Macri's new administration has a clear plan to unveil full potential

## Key reforms and initiatives

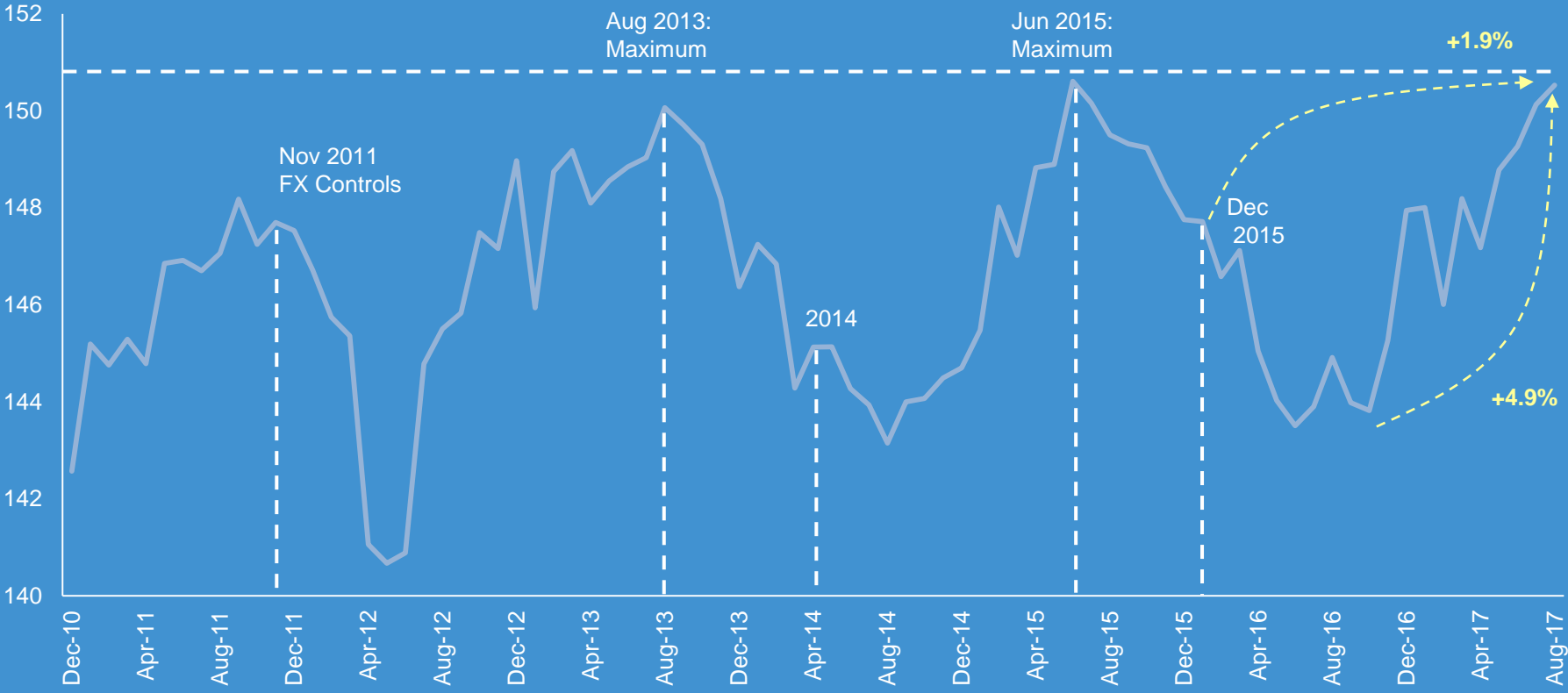
- ✓ Removed capital control and repatriation restrictions
- ✓ Floated exchange rate and recovered monetary reserves
- ✓ Resolved defaulted debt and regained access to financial markets
- ✓ Introduced Central Bank independence
- ✓ Re-launched the National Statistics Bureau
- ✓ Instituted inflation targeting policy to reduce inflation
- ✓ Established plan to eliminate the primary fiscal deficit
- ✓ New Public-Private Partnerships (PPP) regulatory framework
- ✓ Implemented an unprecedented tax amnesty scheme

## Consensus and support on key regulations

- ✓ Antitrust Law
- ✓ Capital Markets Law
- ✓ Labor Reform Law
- ✓ Tax Reform Law
- ✓ Pension Reform Law
- ✓ Fiscal Responsibility Law

# Economic recovery – breaking historic patterns

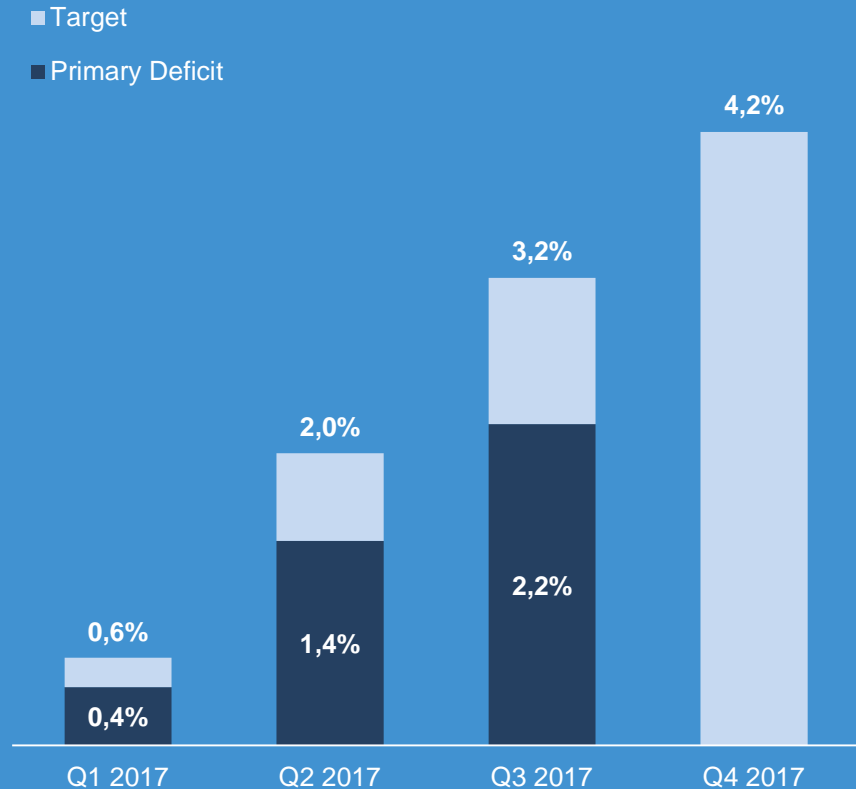
Monthly Estimator of Economic Activity (EMAE) Index (2004 = 100)



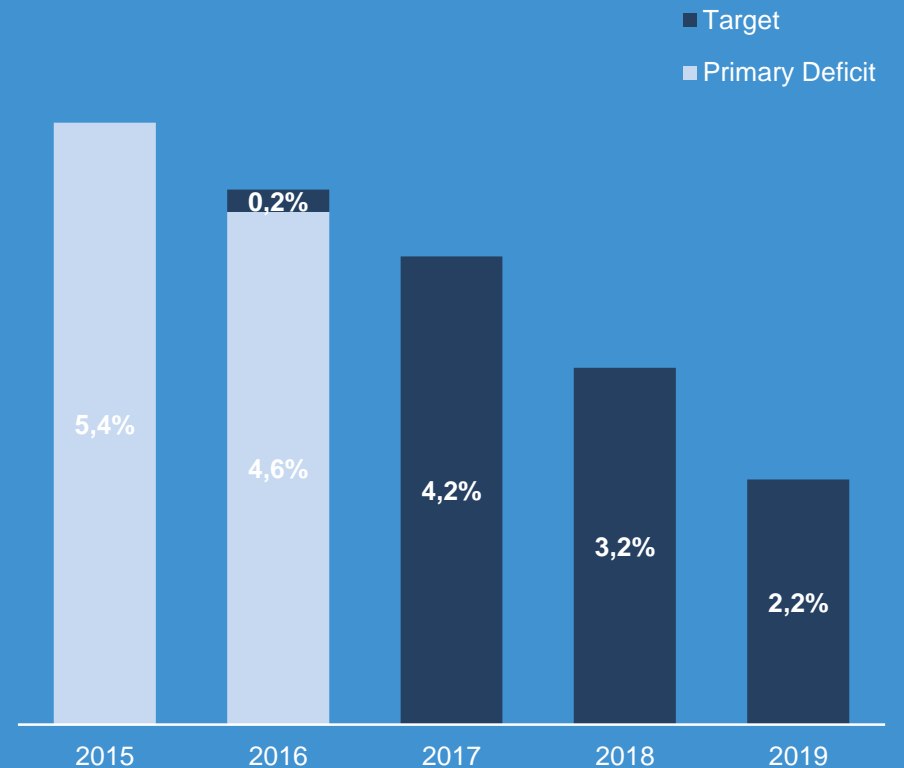
Source: INDEC, Ministry of Finance

# Convergence to fiscal balance

## Quarterly accumulated primary deficit and targets (% of GDP)



## Primary deficit and targets (% of GDP)



# 2017 in perspective: we have not seen this type of reform

First time in 100 years that these results have occurred simultaneously...

- ✓ Primary fiscal deficit/GDP decreases
- ✓ Real public expenditure decreases
- ✓ Tax pressure decreases
- ✓ Inflation decreases
- ✓ GDP grows

# Argentina - Vialidad Nacional



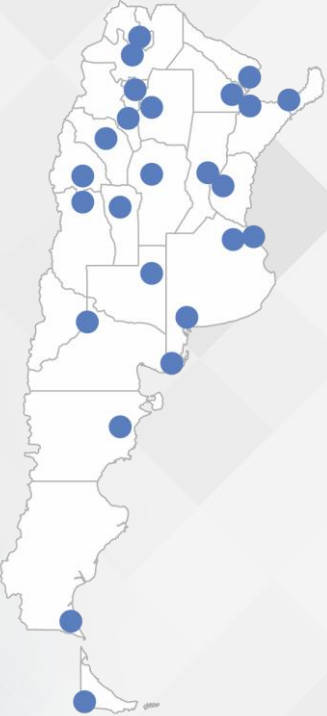


# Argentina - Vialidad Nacional

Video



# VIALIDAD NACIONAL: PPP CONTRACTING AUTHORITY



**1**  
Headquarter

**6.000**  
Workers

**24**  
Districts

**20**  
Auscultation  
and Surveying  
Equipment

**158**  
Camps

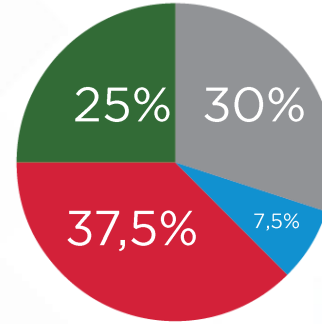
**107**  
Weighing  
Scales

**10**  
New  
Laboratories

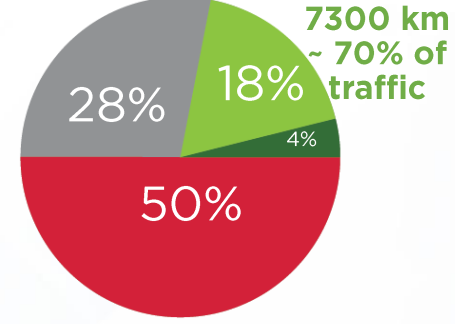
**252**  
Maintenance  
Equipments

## National Road Network

**2015**  
40.000 Km



**2018**  
40.332 Km



- Maintenance Vialidad Nacional
- Concessions
- TFO - Maintenance with provinces
- GIM (CREMA) - 5 year maintenance contracts
- New PPP System

# NATIONAL ROAD NETWORK PLAN: AMBITIOUS PLAN ONGOING

## Long-Term Plan

2016 - 2027 USD 35 B PUBLIC INVESTMENT

## 1st Stage

2016 - 2019 USD 12 B PUBLIC INVESTMENT

2,800 Km  
highways

4,000 Km  
safe routes

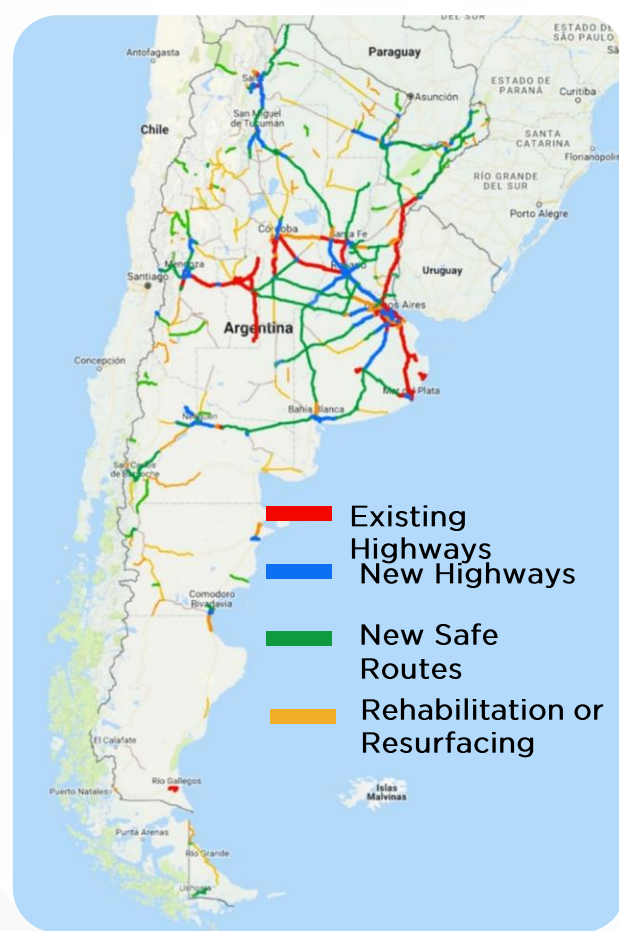
13,000 Km  
rehabilitation

Road widening and  
additional lanes  
construction to convert  
single carriage way  
roads to freeways

Additional lanes for  
takeover

To date:  
1,200 km  
under  
construction  
300 km  
finished

To date:  
11,000 km  
under  
construction  
4,000 km  
finished



# RESULTS TO DATE

- **New transparent online bidding**

Leading to increased competition and significant cost efficiency  
(c-30/40% in USD over last 18 months)

- **New processes for engineering, planning, designing, bidding and construction**

Delivery time reduction by c-30% to c-70%

- **Historical Record of asphalt consumption in Argentina**

53,500 tn in March 2017

445,000tn (estimated 2017)

15% corresponds to modified asphalt

- **Incorporation of technology: new asphalt plants and new equipment**

- **Integrity Policy: Transparency, Honesty, teamwork and professionalism**

Creation of the Ethics and Transparency Unit



# Access Network Buenos Aires



## **GCO S.A. and AUSOL S.A.**

- The State settled the contractual conflict that lasted for more than 15 years.

### **Agreement:**

Works plan of USD 380 M (Acceso Norte) and USD 250 M (Acceso Oeste) to be recovered by a contract extension to 2030. Companies to give up their claims at the ICSID USD 1.135 M (AUSOL S.A) and USD 1.700 (GCO S.A).

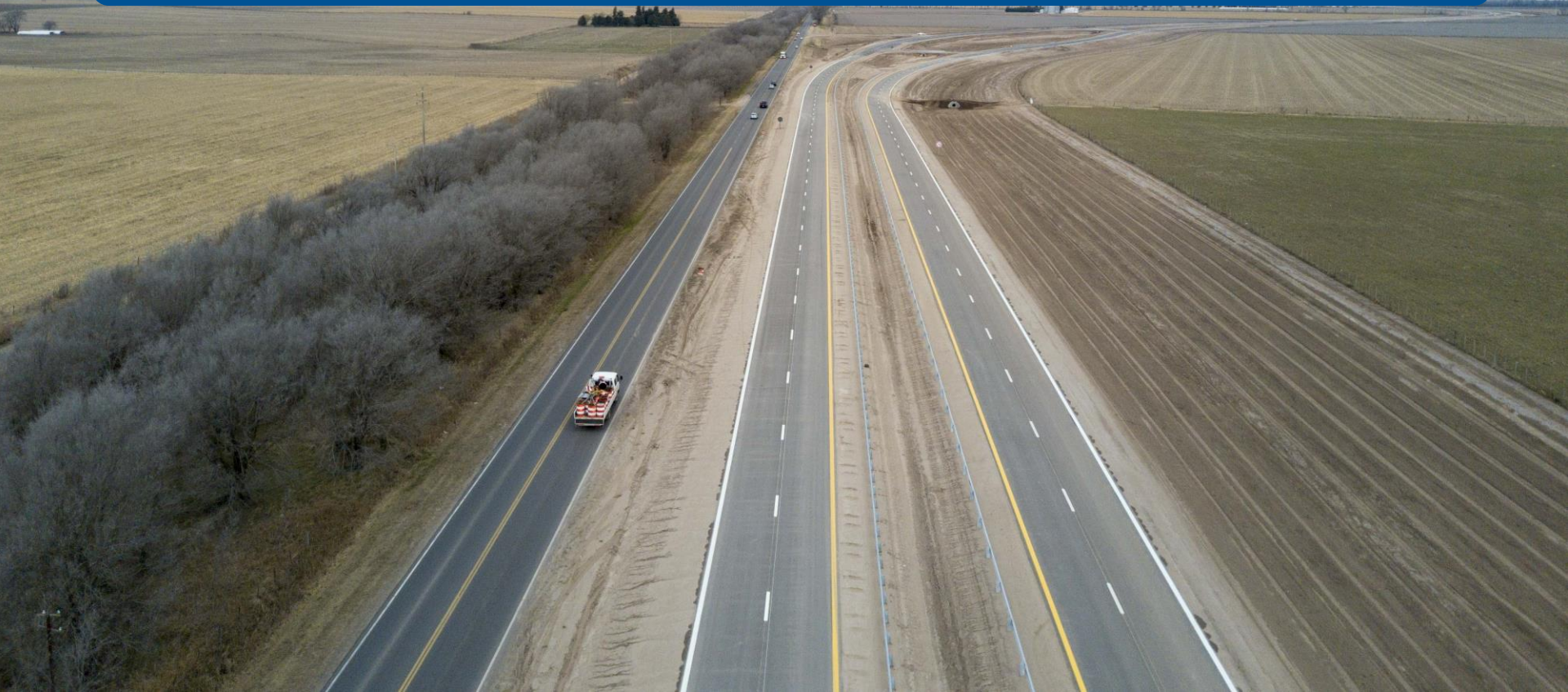
## **AEC S.A.**

- >> Termination for breach of contract.
- >> Inclusion of the South Corridor in the PPP scheme, first stage.

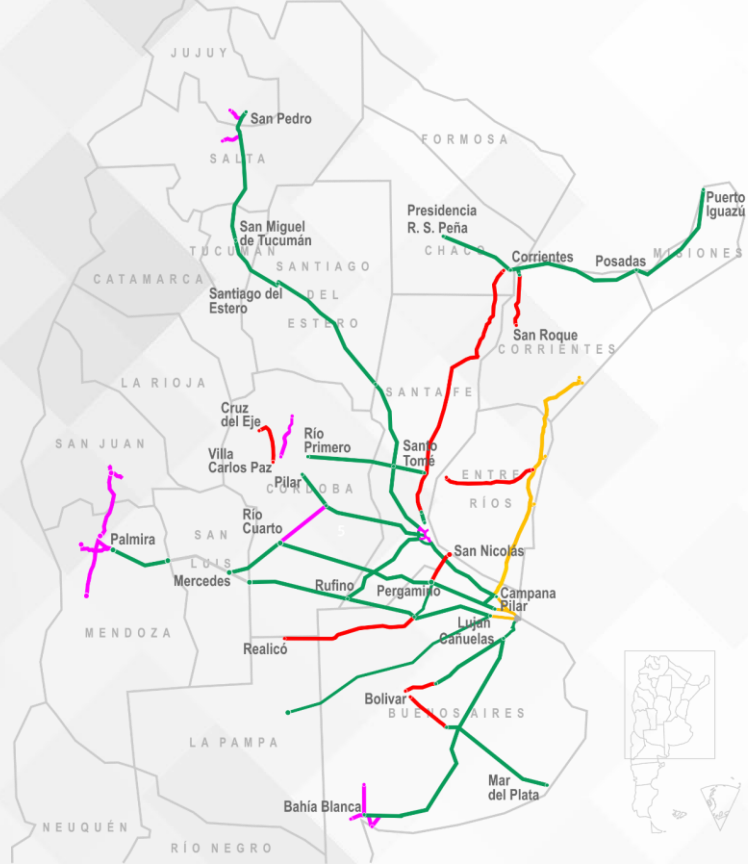
# ROADS PPP PROGRAM – STARTING POINT





1. High investment required throughout the current concessioned toll roads due to undercapacity and substandard safety conditions. Lack of access to ports and other major economic infrastructure.
2. Current concessions system only requires operation and some maintenance (tariff scheme insufficient) – State subsidies of 200 MMUSD/year
3. Current concessions expire in April 2018 allowing for a timely PPP scheme implementation
4. Availability of Gasoil Tax Trust SIT to fund PPP Trust ~ 1300 MMUSD/year
  - Tax created in 1932 in order to develop National Road Network

# Highways and Safe Routes **PPP Network**



# From Concessions to PPP



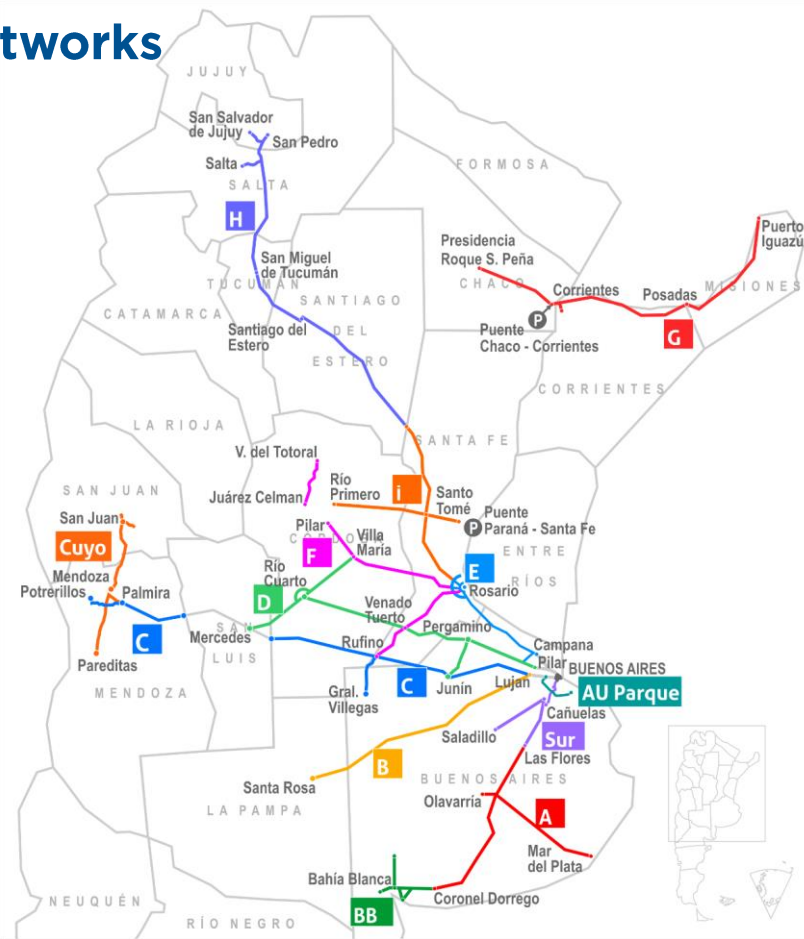
-  From Concession to PPP
-  From Concession to Vialidad Nacional Administration
-  To continue under Concession
-  From other systems to PPP



# 15 New PPP Highways and Safe Routes Networks

PPP	NATIONAL ROUTE N°	LONG. KM	TOTAL AADT Veh/Day Year 2016	MAX Veh / Day Year 2016	MIN Veh / Day Year 2016	STAGE
A	3 , 226	707	24.400	6.200	1.900	I
B	5	538	23.500	11.700	3.600	I
C	7, 33	877	28.600	8.800	2.900	I
D	8, 36, A-005, 158, 188	911	27.500	12.400	2.200	II
E	9, 11, 34, 193, A-008, A-012	389	56.400	24.200	4.900	I
F	9 Rosario - Córdoba HWY, 33	635	32.100	11.100	2.800	I
G	12, 16	780	31.100	11.200	3.300	II
H	34, 9, 66, 1V66	887	19.100	4.600	3.100	II
I	19, 34	664	26.700	6.400	3.200	II
Sur	Riccheri HWY, J. Newbery Ave., Ezeiza - Cañuelas HWY, 3, 205	299	231.900	147.000	4.700	I
BB	3, 33, 229, 249, 252, 1V252, 1V3	247	7.100	3.700	3.400	II
Cuyo	7, 20, 40	342	9.400	6.000	3.400	II
Parque HWY	Parque HWY	82	42.000	22.000	20.000	III
Paraná Santa Fe Bridge	Paraná - Santa Fe Bridge	30	11.000	—	—	III
Chaco Corrientes Bridge	Chaco - Corrientes Bridge	34	7.000	—	—	III

Total 7422 km



# COMPARISON OF BOTH SYSTEMS

	Current Concessions	PPP New Contracts
<b>CONCESSION TERM</b>	6 years (It was extended to April 21, 2018)	15 years
<b>EXTENTION</b>	8.702Km (without access to CABA y CV N18)	7.422 km
<b>WORKS</b>	Without capacity expansion works. Resurfacing as Public Work	Capacity expansion and Resurfacing Works at the contractor's expense
<b>REGULATORY FRAMEWORK</b>	Law 17.520 (Concessions)	New Regulatory Framework Law 27.328 (PPP)
<b>OPERATION AND MAINTENANCE</b>	Toll collection does not cover operating and maintenance expenses. The difference is paid by the contribution of SISVIAL. (\$ 3.500 M per year)	Balance between user's income and operating and maintenance expenses
<b>CONTRACTOR'S INCOME</b>	By toll Collection and the National Treasury Funds.	Compensation for use (Toll) and public compensation (existing gasoil tax)
<b>RISKS</b>	Minimal Risks for the contractor	Construction risks, maintenance and financing are contractor's responsibilities
<b>WORKS FINANCING</b>	100% by the State	100% by the Contractor
<b>TOLL TARIFFS</b>	Different rates unrelated to light -heavy goods vehicles	Tariff uniformity. Better relation between light and heavy goods vehicles.

# PPP PLANNED INFRASTRUCTURE

Current network under concession

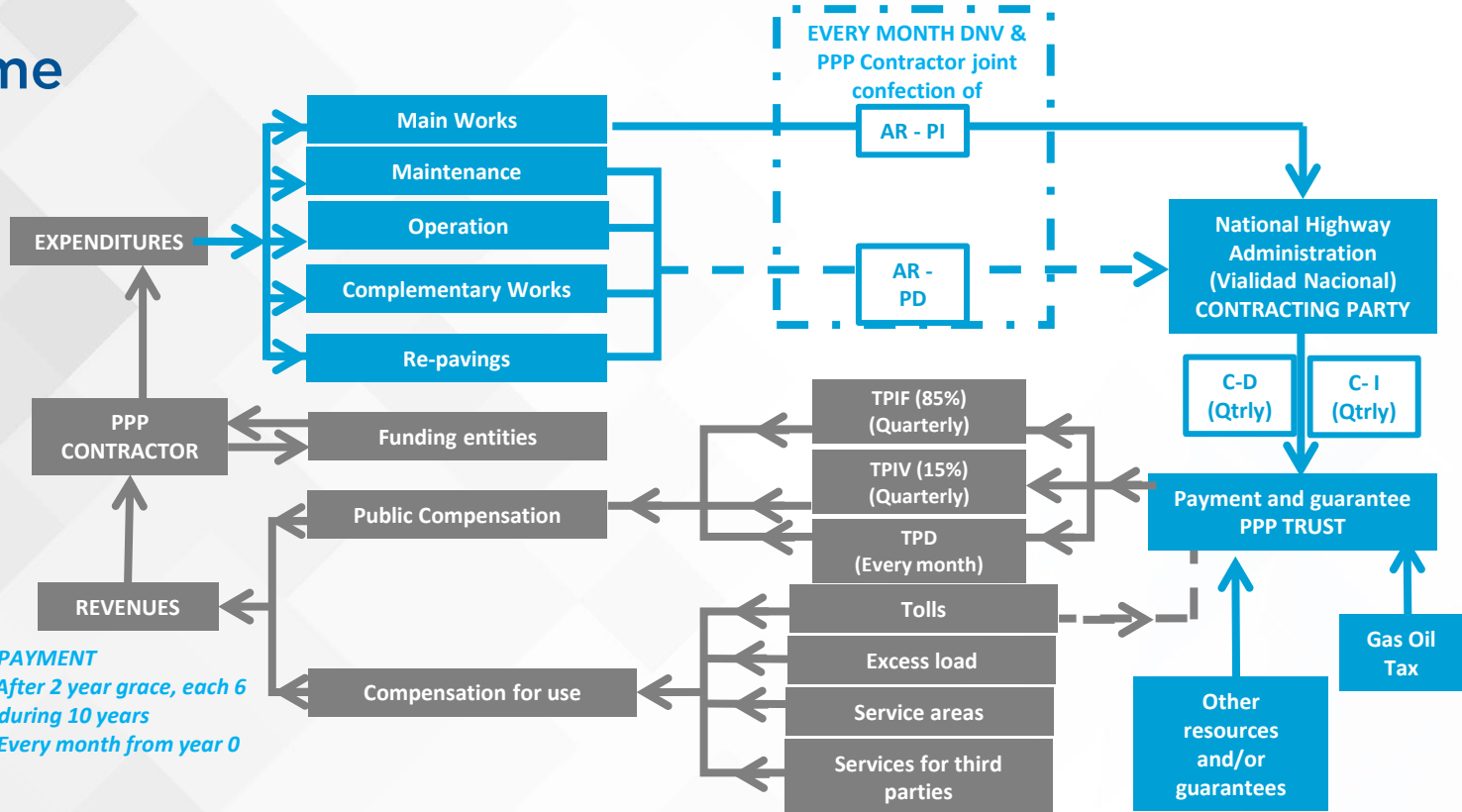
- 12%** Highway
- 6%** Semihighways
- 82%** Standard Routes

System covered by PPP contracts

- 54%** Highway
- 4%** Semihighway
- 42%** Safe Routes
- 0%** Standard Routes



# PPP Scheme



**REPAYMENT**  
*TPI Investments: After 2 year grace, each 6 months during 10 years*  
*TPD Availability: Every month from year 0*

**AR-PI: Recognition of investment act**  
**AR-PD: Recognition of availability act**  
**C-D: Communication of availability**

**C-IR: Communication of investment**  
**TPI: Payment investment title**  
**TPIF: Fixed Payment investment title**

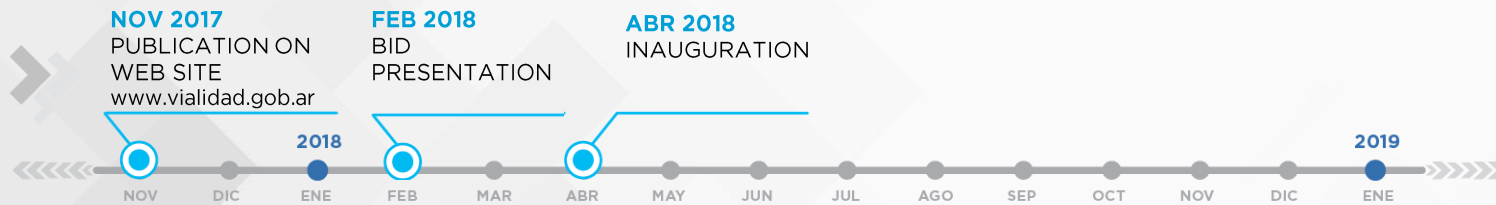
**TPIV: Variable Payment investment title**  
**TPD: Payment availability title (in some PPP contracts, depending if Tolls are enough to operate and maintain)**

# TENDER

- 1 Requirements:**  
Technical - Financial -Legal  
Technical: Routes construction  
experience/routes concessions  
operator/infrastructure PPP/Project Finance  
operator
- 2 Bid: Annual Value of the Public Compensation**  
Payment Investment Titles (TPI) /  
Payment Availability Titles (TPD)
- 3 Winner: bidder asking for the minimum value**  
of Public Compensation (TPI / TPD)



# GENERAL SCHEDULE OF TENDER PPP



# Work Plan



# MAIN WORKS

PPP	HIGHWAY Km	SAFE ROUTES Km	SPECIAL Km	City Bypass #	STA GE
A	116	494	56	5	I
B	143	372	19	4	I
C	14	546	0	2	I
D	62	655	0	1	II
E	124	32	163	3	I
F	238	0	0	1	I
G	187	435	0	3	II
H	147	447	0	1	II
I	171	137	0	1	II
Sur	175	50	14	2	I
BB	138	33	0	0	II
Cuyo	45	109	7	1	II
AU Parque	50	—	—	0	III
PARANÁ SANTA FE BRIDGE	—	—	30	1	III
CHACO CORRIENTES BRIDGE	—	—	34	1	III
TOTAL	1.610 Km	3.310 Km	324 Km	26	
STG I	810 Km	1.494 Km	252 Km	17	
STG II	750 Km	1.816 Km	7 Km	7	
STG III	50 Km	—	64 Km	2	



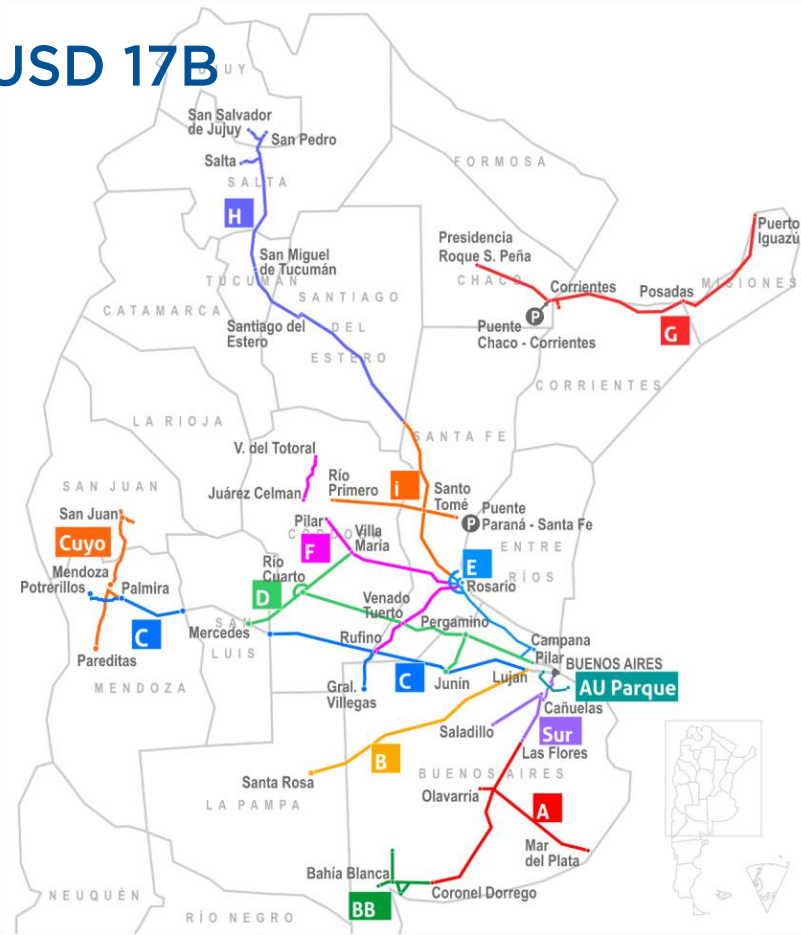


# TOTAL ESTIMATED INVESTMENTS ~ USD 17B

PPP	ESTIMATED INVESTMENTS IN WORKS FIRST 4 YEARS USD M	ESTIMATED INVESTMENT IN ADDITIONAL WORKS, RESURFACING AND MAINTENANCE FROM YEAR 5 TO 15 USD M	STAGE
A	984	346	I
B	989	244	I
C	631	455	I
D	1.063	298	II
E	1.342	370	I
F	1.114	372	I
G	1.039	456	II
H	991	510	II
i	778	427	II
Sur	975	236	I
BB	638	169	II
Cuyo	278	181	II
Parque HWY	500	55	III
Paraná Santa Fe Bridge	650	21	III
Chaco Corrientes Bridge	700	32	III

**USD 12.572 M**

**USD 4.172 M**



# HIGHWAY



**Horizontal Road Signalling**  
Pavement Demarcation

**Modified asphalt mixture**  
- Avoid Spray and aquaplanin  
- Greater adhesion

**Collector**

**Road 7,30mts**  
two lanes each way of 3,65 mts

**Center island**

**Vertical Road Signalling**

**Paved Shoulder**  
of 1,80 mts

# SAFE ROUTE

**Horizontal Road Signalling**  
Pavement Demarcation

**Paved Shoulder**  
of 1,80 mts

**Modified asphalt mixture**  
- Avoid Spray and aquaplanin  
- Greater adhesion

**Vertical Road Signalling**

**Third Lane**  
3,65mts

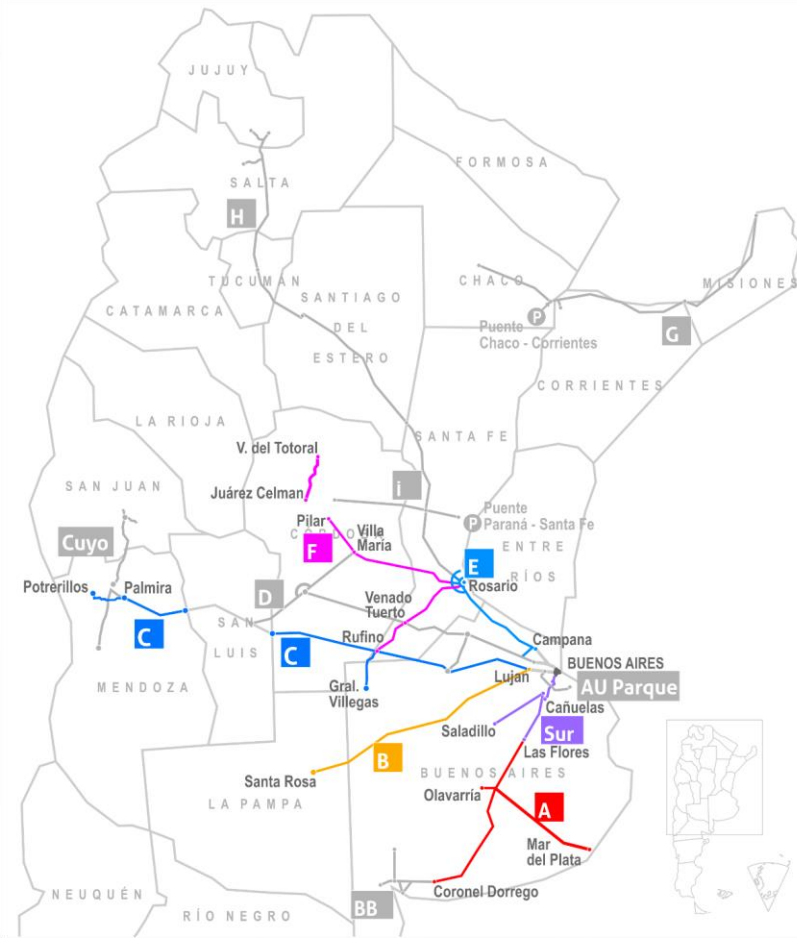
**Road 7,30mts**  
two lanes each way of 3,65 mts

# Stage I - First Tender



# MAIN WORKS STAGE I

PPP	HIGHWAYS Km	SAFE ROUTES Km	SPECIALS Km	BYPASS Amount
A	116	494	56	5
B	143	372	19	4
C	14	546	0	2
E	124	32	163	3
F	238	0	1	1
Sur	175	50	14	2
<b>TOTAL</b>	<b>810 Km</b>	<b>1.494 Km</b>	<b>253 Km</b>	<b>17</b>

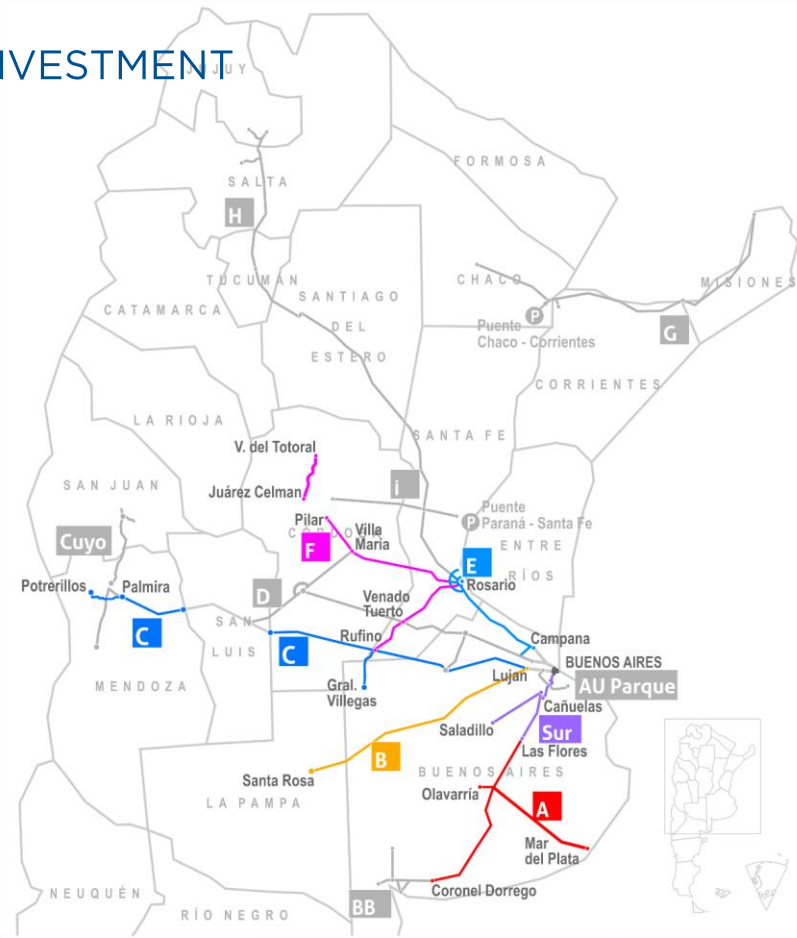


# MAIN WORKS STAGE I ~ 8BUSD ESTIMATED INVESTMENT

PPP	ESTIMATED INVESTMENTS IN WORKS FIRST 4 YEARS USD M	ESTIMATED INVESTMENT IN ADDITIONAL WORKS, RESURFACING AND MAINTENANCE FROM 5 TO 15 YEARS USD M
A	984	346
B	989	244
C	631	455
E	1.342	370
F	1.114	372
Sur	975	236

**USD 6.035 M**

**USD 2.023 M**



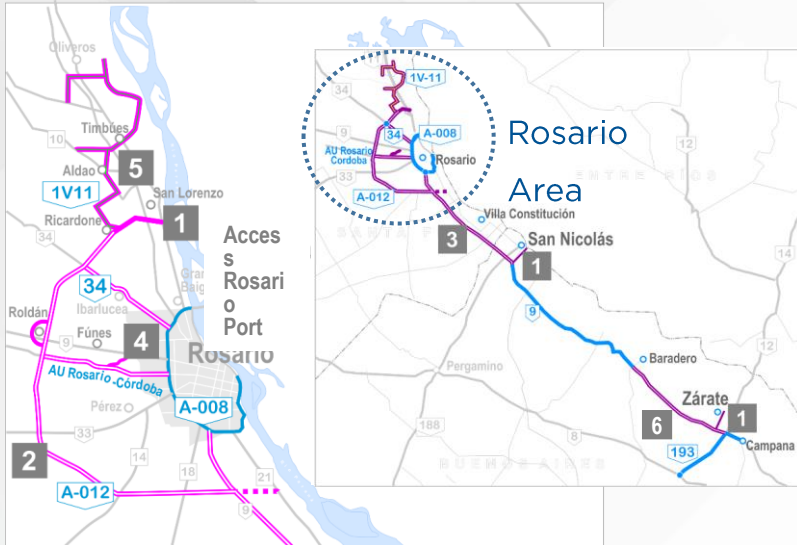
# ROAD CORRIDOR E CAPEX, OPEX AND MAIN WORKS

**E**

Length: **390 Km** AADT year 2016: **56,400**

Estimated investment first 4 years: **USD 1,342 M**

Estimated investment from year 5 to 15 in additional works, resurfacing and maintenance: **USD 370 M**



N°	Area Type of work	Section	NR N°	L Km	Progress											
					2018	'19	'20	'21	'22	'23	'24	'25				
1	Port access	Rosario San Nicolás Zárate	A-012 9 9	—												
2	Highway	NR N° A-012 belt highway, it includes Ricardone and Roldan bypass	A - 012	73												
3	Specials	3er Lane San Nicolás - Rosario	9	61												
4	Highway	Access Rosario Airport	Connection	4												
5	Highway	New NR N° 11	R1V11	37												
6	Specials	3er Lane Zárate - Baradero	9	69												

New Highway

Safe Route

Semi HWY

Bypass in HWY

Bypass in safe route

# ROAD CORRIDOR A CAPEX AND MAIN WORKS

**A** Length: **707 Km**      AADT Year 2016: **24.400**  
 Estimated investment first 4 years: USD 984 M  
 Estimated investment from year 5 to 15 in additional works, resurfacing and maintenance: USD 346 M




N°	Area Type of work	Section	NR N°	L Km	Progress										
					2018	'19	'20	'21	'22	'23	'24	'25			
1	Highway	Las Flores Azul	3	116											
2	Specials	Split level junction Azul - Olavarría	226	41											
3	Safe Route	Tandil bypass	226	24											
4	Safe Route	Tres Arroyos bypass	3	26											
5	Safe Route	Balcarce Azul	226	174											
6	Safe Route	Azul Cnel. Dorrego	3	270											

 New Highway

 Safe Route

 Semi HWY

 Bypass in HWY

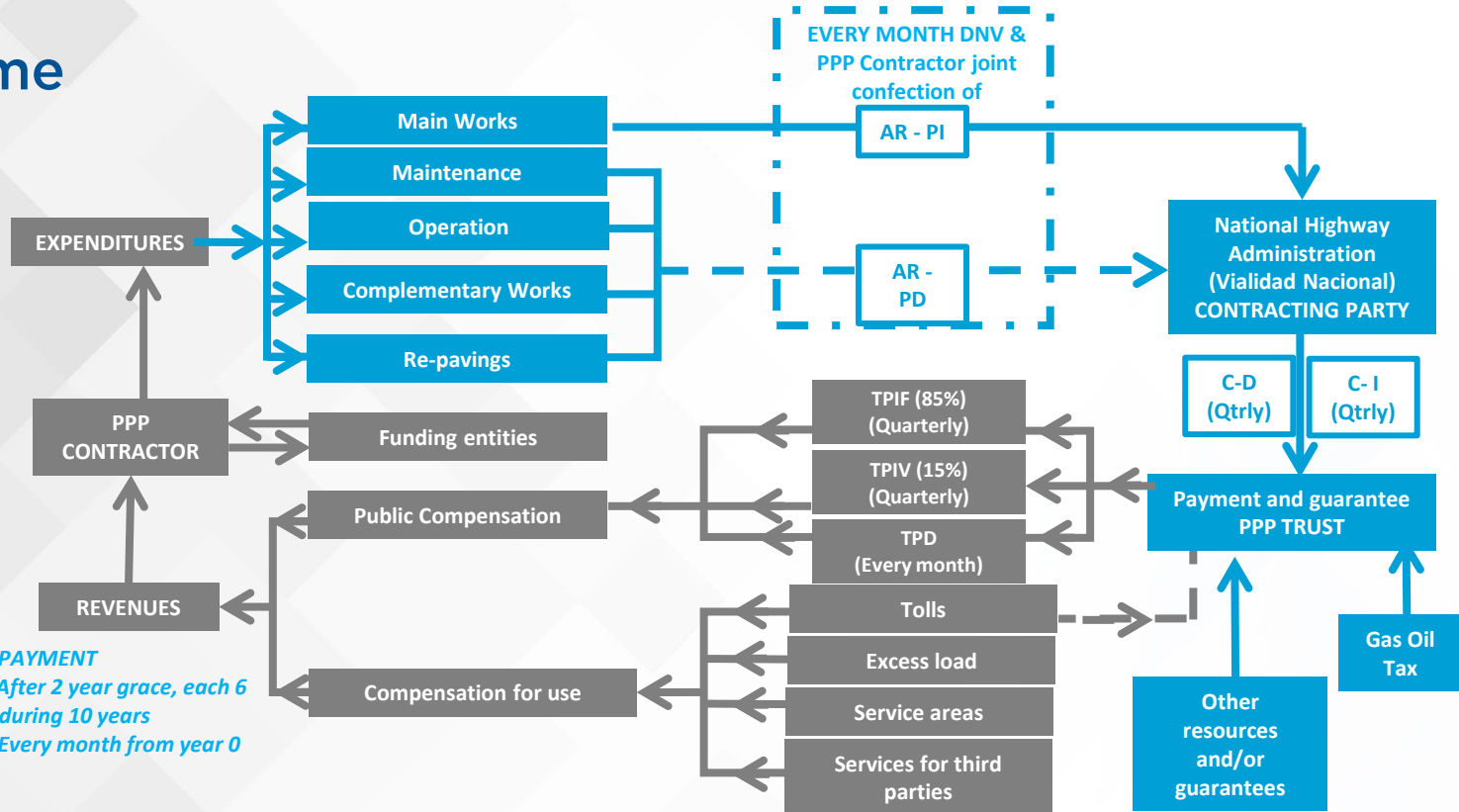
 Bypass in safe route



All information available  
at [ppp.vialidad.gob.ar](http://ppp.vialidad.gob.ar)



# PPP Scheme



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**TPI: Payment investment title**  
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**TPIV: Variable Payment investment title**  
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# How to mitigate construction and operational risks

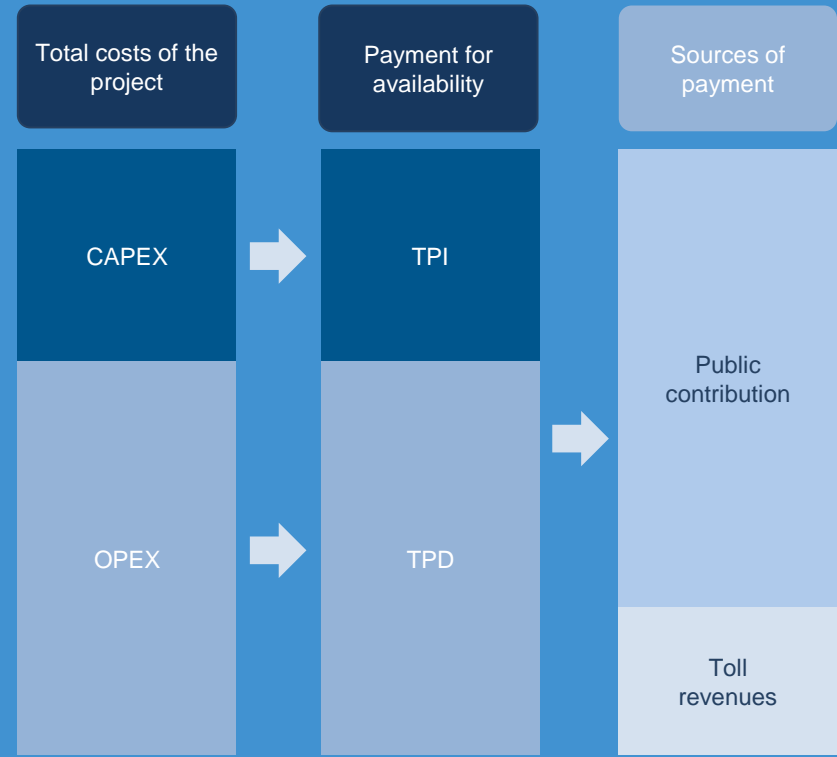
- Repayment of investments incurred both during construction and operation of the project
- Establishment of service and infrastructure availability payments, applying penalties and fines in case of breaches
- Separate repayment, with distinction between TPI and TPD:



- ✓ Linked to investment obligations, recoverable in the long term
- ✓ Linked to the construction phase risks only



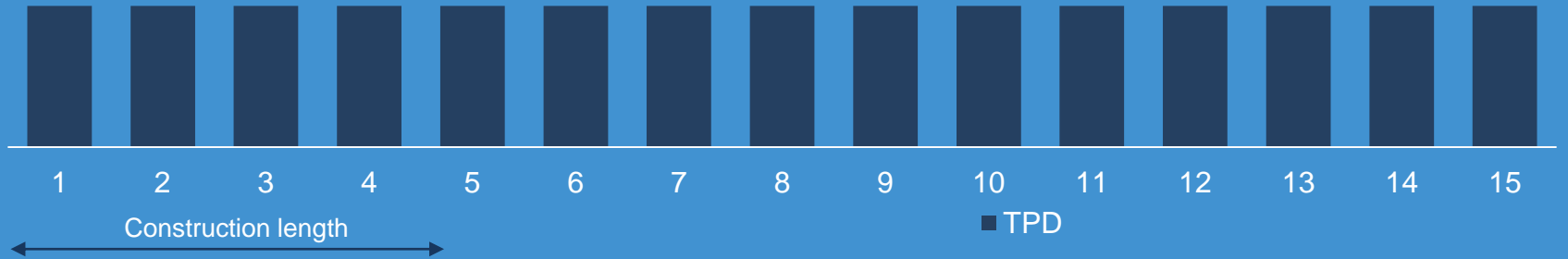
- ✓ Linked to obligations to provide the service of operation and maintenance
- ✓ Linked to the operational phase risks only



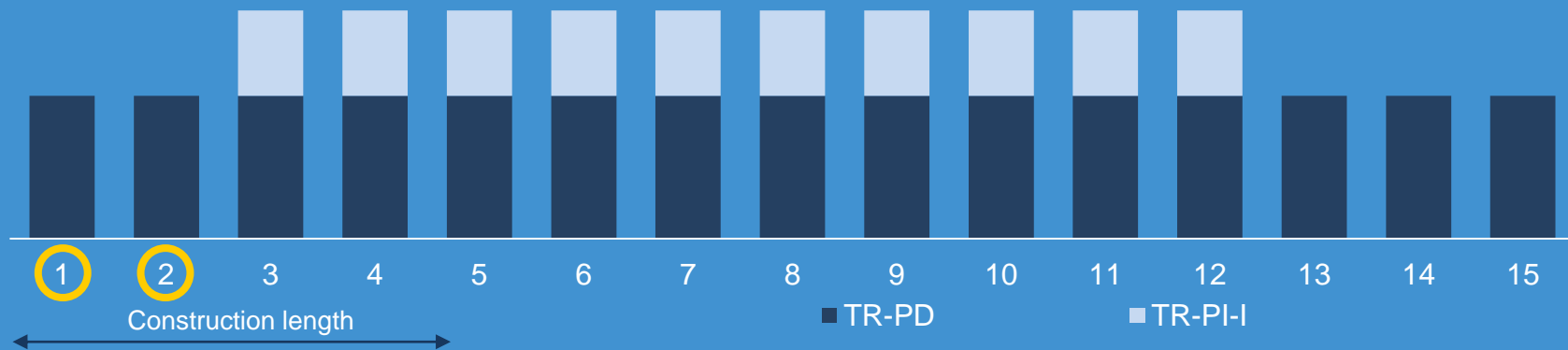
# Argentina — Application to road infrastructure PPPs



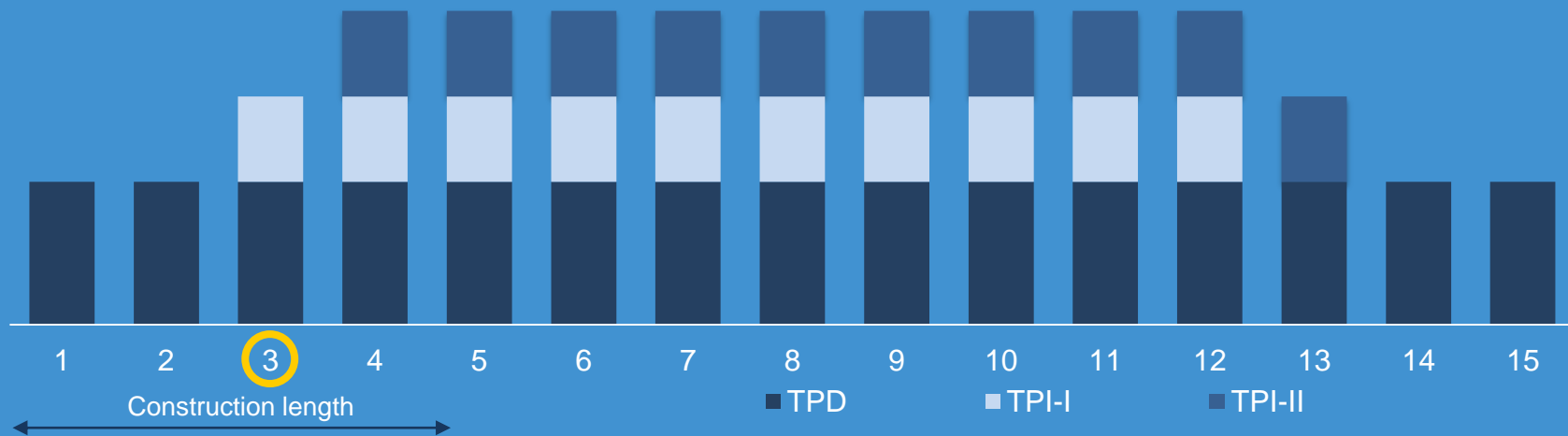
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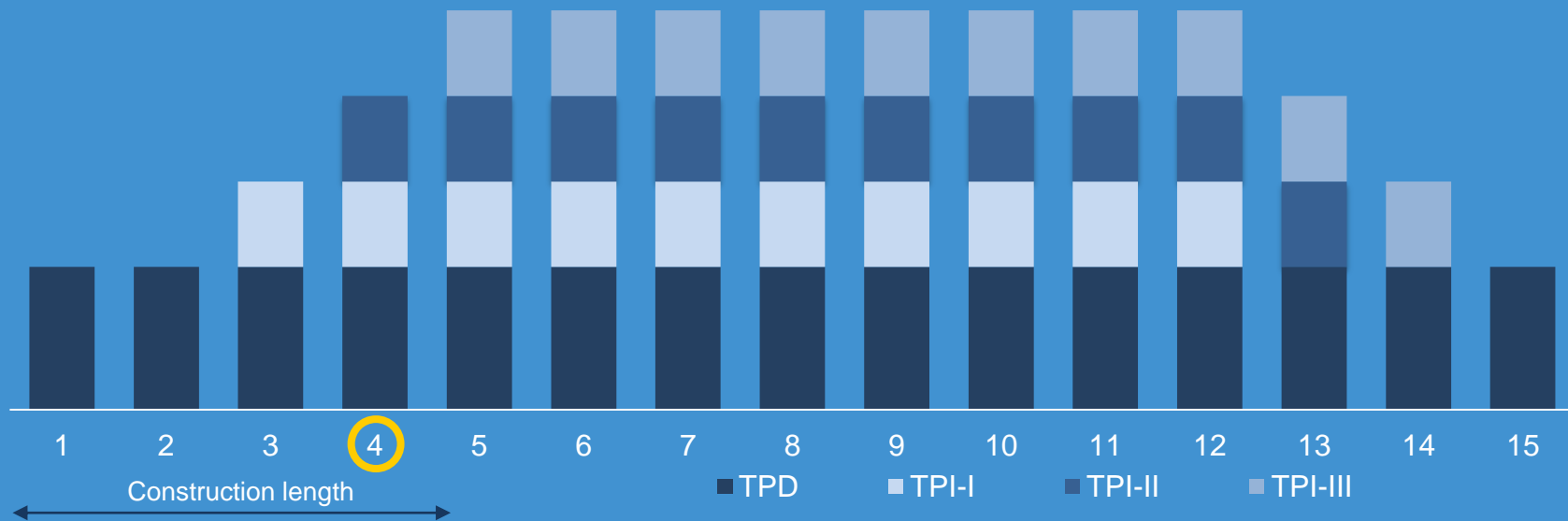
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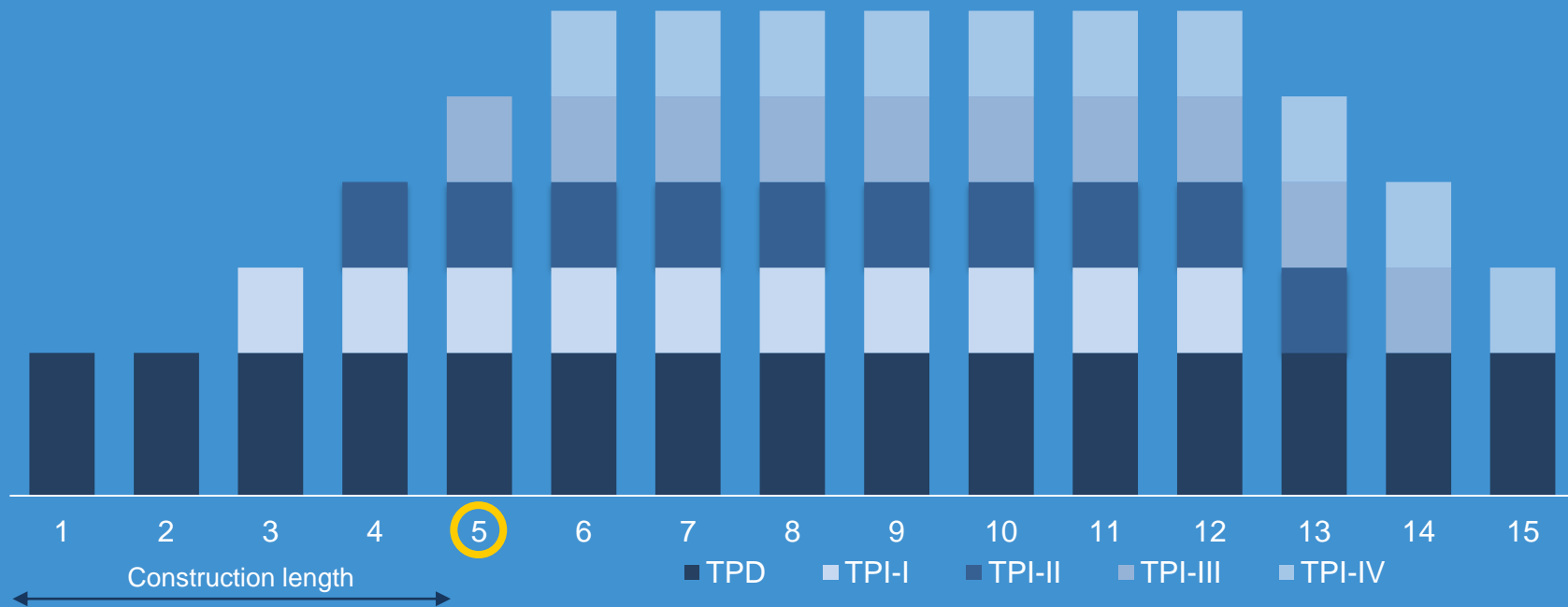


# Argentina — Application to road infrastructure PPPs

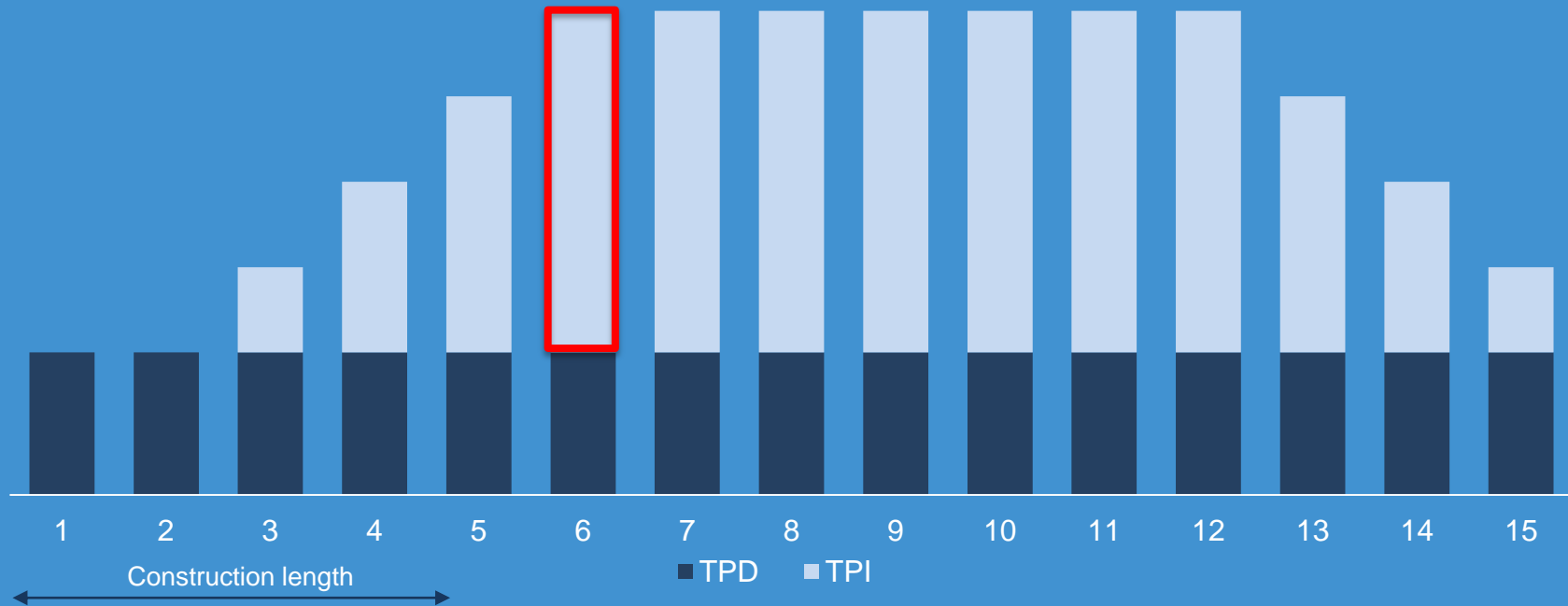




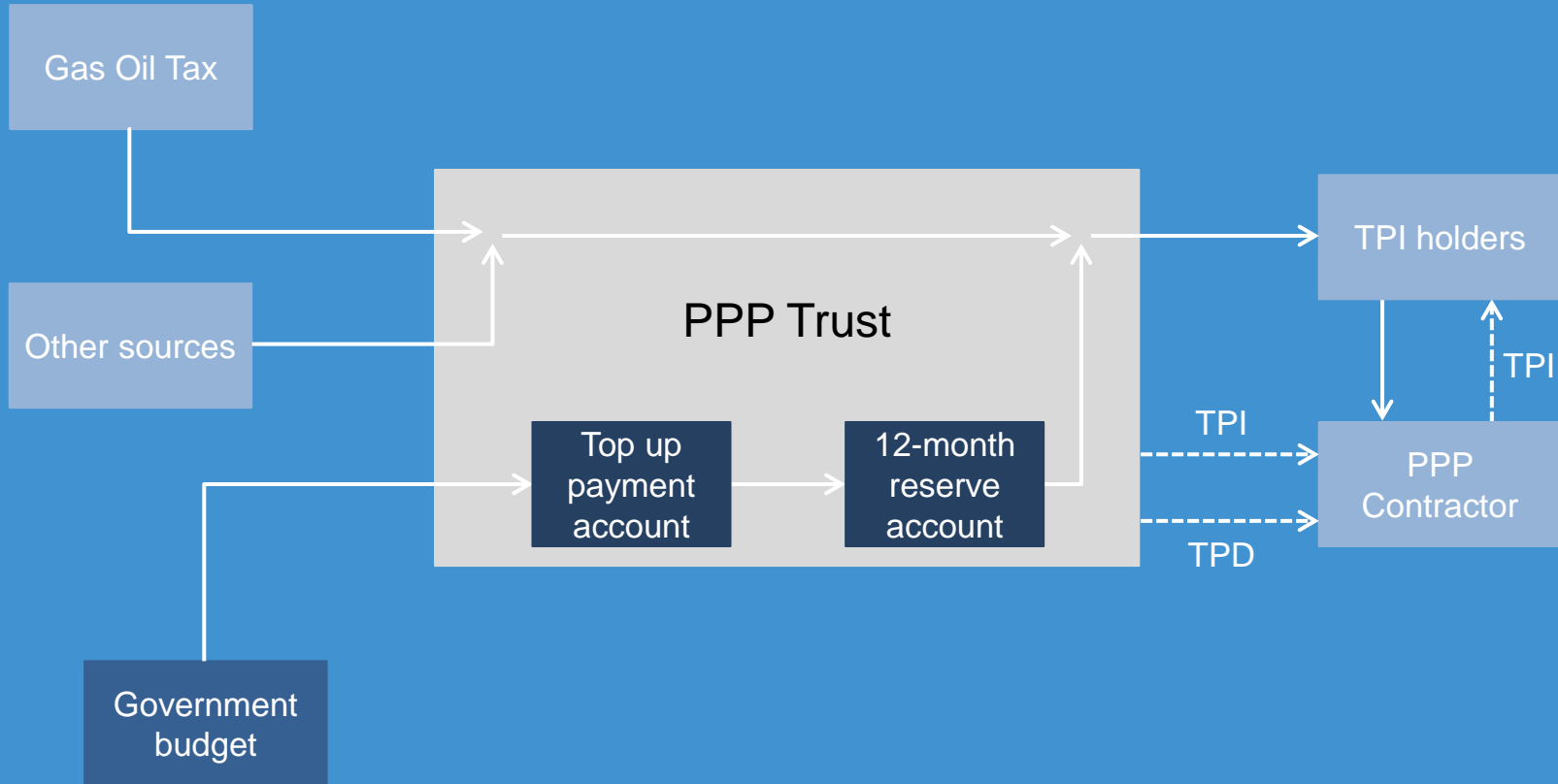
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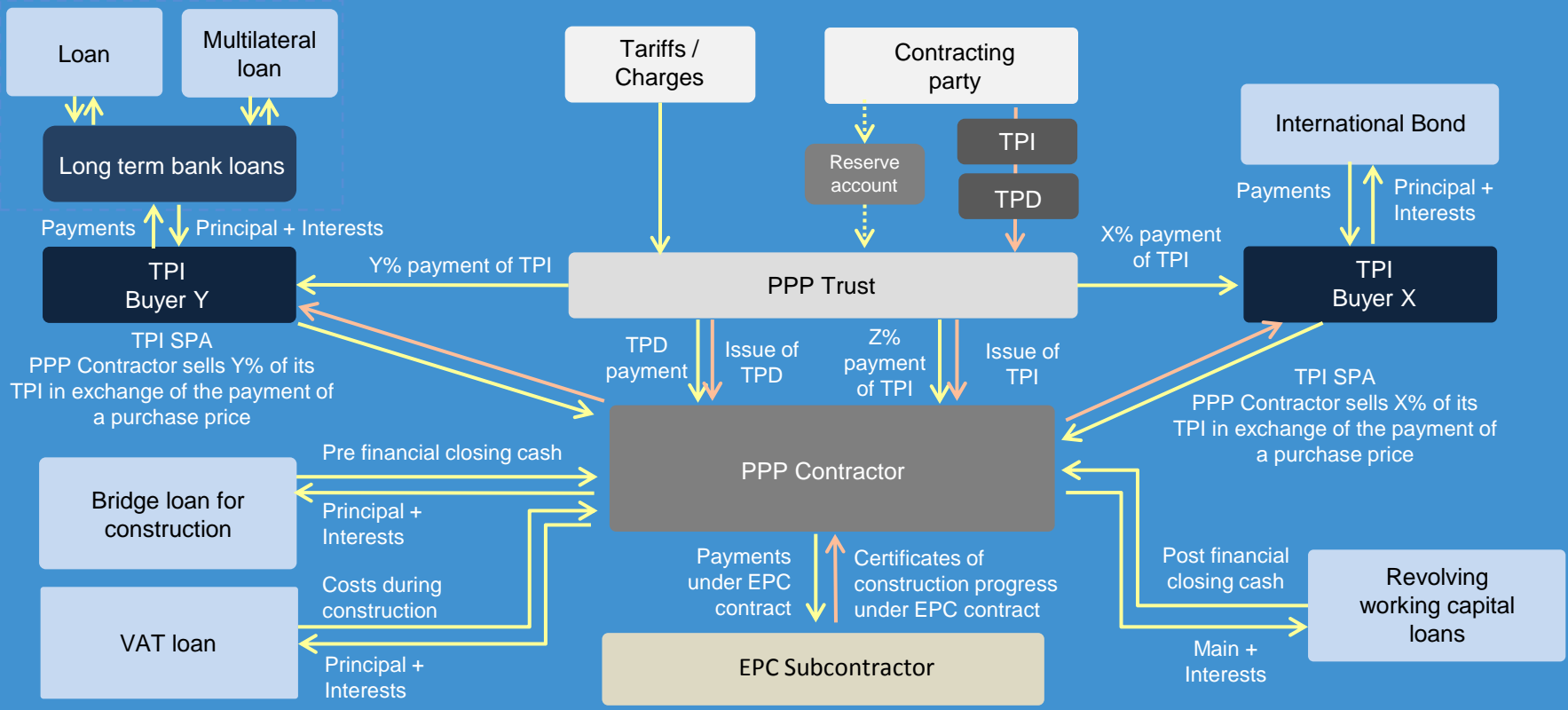
# Argentina — Application to road infrastructure PPPs



# PPP Trust to manage issuance and payment of TPI's and TPD's



# A structure to enable the optimization of multiple financing sources



# Structural Considerations



# Structural Considerations

## Bidding and award criteria

- No limits on quantity of projects bid
- Lowest annual repayment bid wins
- No more than 2 projects awarded to a single bidder
- Bid with highest spread to runner-up's bid will be awarded in case of 3 or more projects won by single bidder

## Performance Bonds

- Bid bond until contract signing
- Financial closing bond up to 12 months
- Main works performance bond
- Main services performance bond

## Financial closing and equity

- 6-month initial deadline
- 2 consecutive 3-month extension at the option of PPP contractor
- Rising financial close bond with every extension
- Evidence of availability of funds needs to be presented

## Penalties and fines

- 100% irrevocable and unconditional TPI's if penalties and fines backed by on-demand bonds
- 85% irrevocable and unconditional TPI's, and 15% irrevocable but conditional TPI's, if penalties and fines not backed by on-demand bonds

## Currency risk

- TPI's paid in US dollars
- Optional FX collar offered to mitigate deviations above and below 10% real FX fluctuation
- TPD's paid in local currency, adjusted by official indices

## Termination payment

- Monthly investment advancement acts (ARAI's) issued by DNV
- ARAI's included automatically in the calculation of the termination payment
- Dispute resolution mechanisms through Technical Board, then Arbitration Court

# Argentina — Risk assessment of the Road infrastructure PPP program



# Argentina — Risk assessment of the Road infrastructure PPP program

## Traffic

- Known traffic history
- More than 20 years of records available
- +3% growth historical trend
- Low competition of other forms of transport

## Gas Oil Tax

- High correlation with gas oil price
- High correlation with asphalt price
- High correlation of the amount collected to exchange rate
- Collection security and funds application through the Integrated Transport System Trust (SIT)

## Environmental impact

- Low environmental risk because they are known ways
- Original approvals issued
- Broad experience of the National Road Directory (DNV) in mitigating environmental impact
- Early intervention of the Ministry of Environment approved

## Right of way

- Low expropriation risk as it is an existing plan
- Legal framework allows to go forward first and face controversies later

## Toll collection

- Long experience in local toll collection
- More than 20 years of records available
- Toll complemented by the government
- User acceptance of toll updates

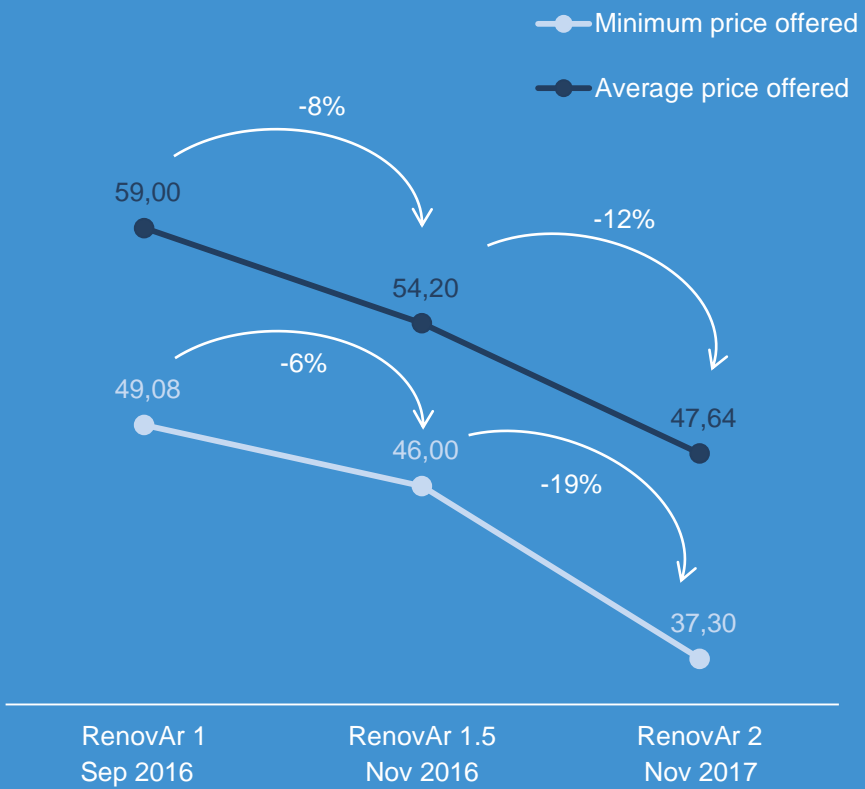
## HLRM transparency framework

- PPP Road infrastructure pilot program
- High level report mechanism implemented jointly with OECD
- Possibility to raise early alarms in anonymity

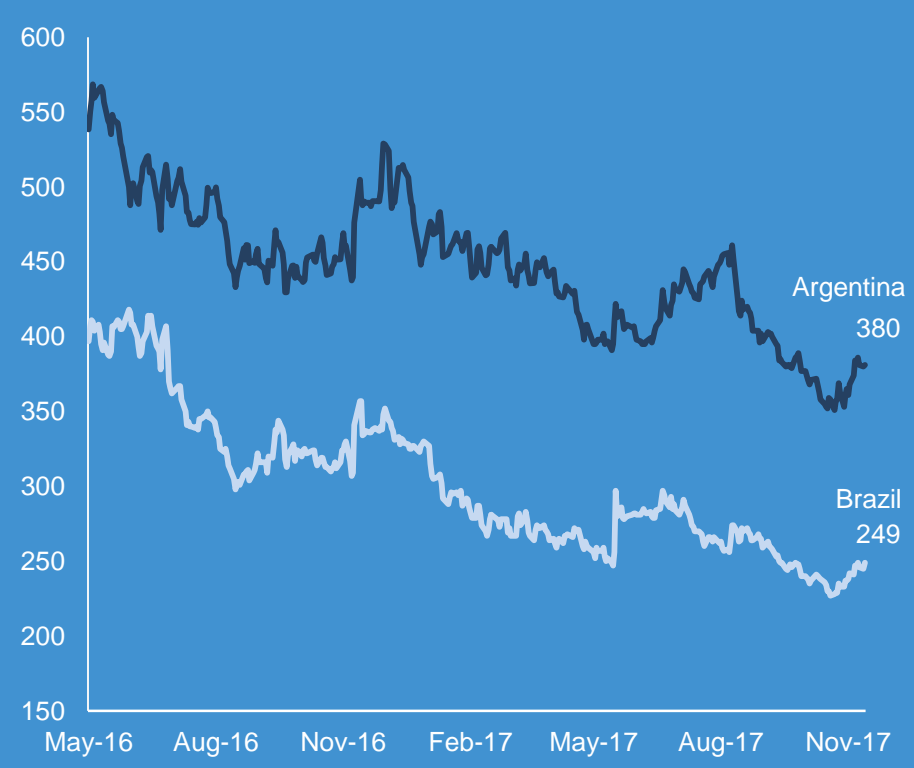


# RenovAr as a witness case

## Renewable energy auctions



## Argentina sovereign bond spread



Source: Bloomberg as of November 14th, 2017 and CAMMESA; Note: Auctions correspond to wind energy



# Q&A

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**VIALIDAD  
NACIONAL**



Ministerio de Transporte  
Presidencia de la Nación



Ministerio de Finanzas  
Presidencia de la Nación



Agencia Argentina  
de Inversiones  
y Comercio Internacional

## Contacts:

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PPP Unit - Ministry of Finance  
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Argentina Investment Agency  
[ppp@invest.org.ar](mailto:ppp@invest.org.ar)

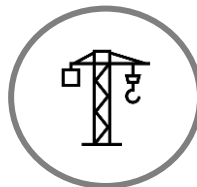


# The Argentina Investment & Trade Promotion Agency was created to accelerate the process of inserting Argentina into the world



## **Opportunities & location**

We survey and assist potential investors to identify attractive sectors and opportunities  
We also provide relevant information to assist the search for an adequate location



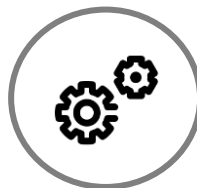
## **Investment**

We assist investors through the execution of the investment, supporting and facilitating administrative procedures and bureaucratic processes



## **Networking**

We schedule and accompany the investor in meetings with the government, business chambers and other relevant organisms



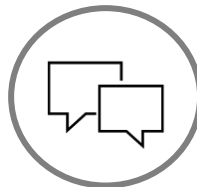
## **Improvement of the business climate**

We work together with investors to identify obstacles in the investment process as to reduce execution times and costs



## **Due diligence support**

We produce reports regarding the economy and regulations of Argentina, sub national regions and business sectors to support business plans



## **Aftercare**

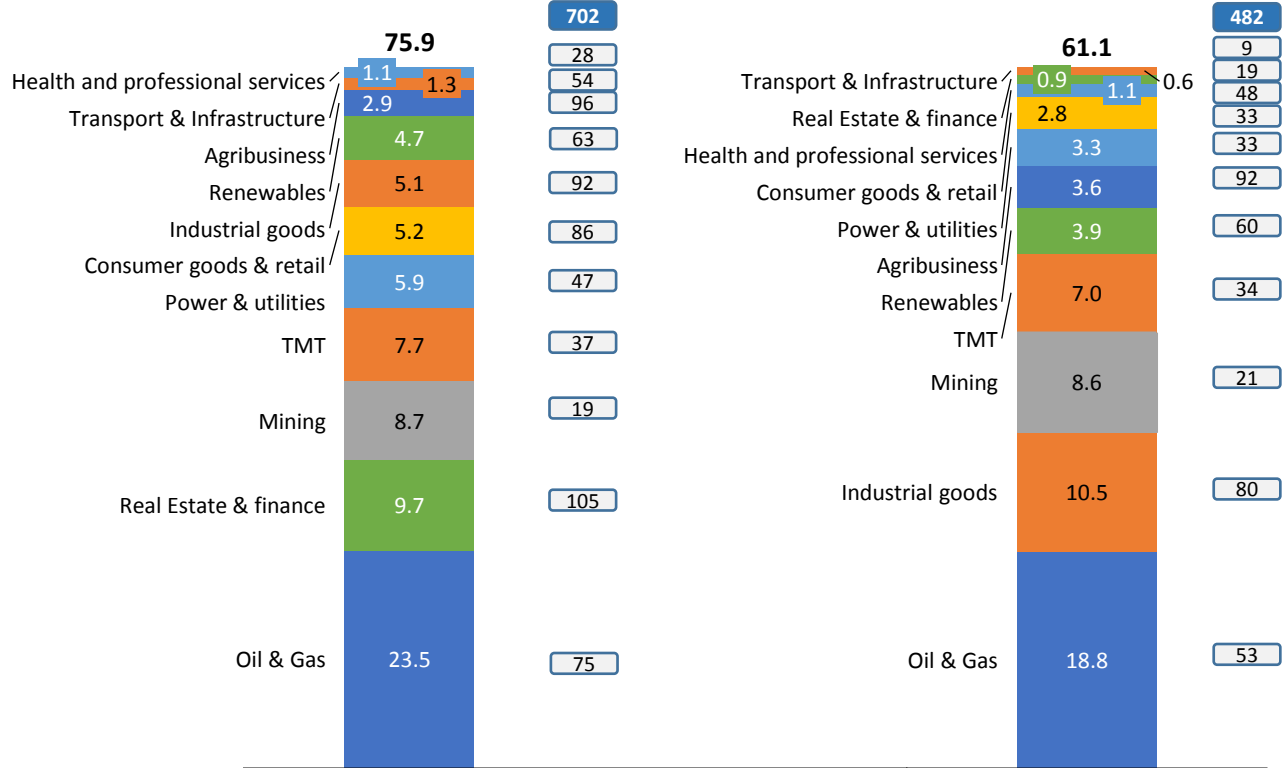
Once the investment is finalized, we keep supporting investors, assisting them if needed

# There are private investment announcements for USD 76 Bn. The Agency is assisting projects for USD 61 Bn

USD Billion

# Projects

# Projects



Announced Investments\*

Etiqueta

Investments assisted  
by the Agency\*\*

\* From 12/11/15 to 10/10/2017. Includes only projects with a declared monetary amount.

\*\* Includes projects already announced and yet not announced but assisted by the Agency.

# Thank you

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