



PMR Operational Report

Operation Number	PE-L1147	Chief of Operations Validation Date										
Year- PMR Cycle	First period Jan-Jun 2022	Division Chief Validation Date										
Last Update	03/30/22	Country Representative Validation Date										
PMR Validation Stage	Draft											
Basic Data												
Operation Profile												
Operation Name	Line 2 and 4, Lima Metro	Loan Number	3373/OC-PE									
Executing Agency	MINISTERIO DE TRANSPORTES Y COMUNICACIONES	Sector/Subsector	TRANSPORT-PUBLIC TRANSPORT (BUS / TRAIN / CABLE). INFRASTRUCTURE AND EQUIPMENT									
Team Leader	MUNOZ GARCIA, PALOMA	Overall Stage	Closed/Pending AFRs									
Operation Type	Loan Operation	Country	Peru									
Lending Instrument	Investment Loan	PMR required	YES									
Borrower	REPUBLICA DEL PERU	Convergence related Operation(s)										
Events Data		Objective										
Supervision		The project consists of the construction of the Line 2 Lima Metro (East-West) and a segment of the line 4 to the International Airport. The project will be executed through a cofinanced concession										
Signature											04/30/15	
Ratification												
		Environmental and Social Safeguards			Expense Categories by Loan Contract (cumulative values)							
Legal Effectiveness	04/30/15	Impacts Category	A	Was/Were the objective(s) of this operation reformulated?		NO						
Total Eligibility	01/05/16	Risk	Substantial	Date of approval								
Partial Eligibility	01/05/16	Safeguard Performance Rating	Partially Unsatisfactory									
First Disbursement	02/17/16	Safeguard Performance Rating - Rationale	El Proyecto aún no ha implementado las medidas correspondientes para mitigar y evitar impactos económicos en los comercios adyacentes a los frentes de obra (estaciones y pozos de ventilación). Se ha venido coordinado con la nueva agencia ejecutora Autoridad Transporte Urbano (ATU), un plan de acción correctivo (PAC) que incluya entre otros un plan de ataque de frente de obras, así como las medidas correspondientes para mitigar riesgos e impactos socioambientales.									
Original Disbursement Expiration	10/30/19											
Current Disbursement Expiration	12/31/21											
Preparation												
On pipeline	07/03/13											
Start date	08/12/13											
PP Approved	06/11/14											
ERM Approved	05/13/14											
POD Approved	10/14/14	Operations	Original IDB	Current IDB	Local Counterpart	Co-Financing / Country	Total Original Cost	Current IDB	Disb. Amount to Date	% Disbursed	Undisbursed Amount	
DLP Approved by OPC	10/23/14	PE-L1147	300,000,000	190,588,410	3,885,510,000	0	4,185,510,000	190,588,410	190,588,409.53	100.00%	-	
Negotiation	11/03/14	Aggregated	300,000,000	190,588,410	3,885,510,000	0	4,185,510,000	190,588,410	190,588,409.53	0.00%	-	
Operation Approved	12/03/14											

Development Effectiveness Matrix		Expense Categories by Loan Contract (cumulative values)									
Economic Analysis											
Undefined	No										
Cost benefit analysis	Yes										
Cost effectiveness analysis	No										
General economic analysis (Economic rate of return)	No										
Evaluation											

Undefined	No
Random assignment	No
Non-experimental method	No
Ex-post cost benefit analysis	Yes
Ex-post cost effectiveness analysis	No
Before/after or With/without comparison	No

OBRAS 1

020406080100

Disbursed Amount  
Undisbursed

Printed on: October 26, 2022 4:47:10 PM

RESULTS MATRIX
General Development Objectives

General Development Objectives Nbr. 0: Contribución a mantener la participación modal del transporte público en viajes motorizados

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement	EOP 2021	
0.0	Porcentaje de participación modal del transporte público en viajes motorizados	%	79	2007		P	-
						A	-

Details
---------

Means of Verification:

Observations:

The General Development Objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO): No

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

RESULTS MATRIX
Specific Development Objectives

Specific Development Objectives Nbr. 0: El objetivo del proyecto es mejorar la calidad del sistema de transporte público en el Área Metropolitana de Lima (AML) y Callao a través del aumento en cobertura del transporte masivo de pasajeros, brindando mejor conectividad con otros sistemas de transporte masivo teniendo como resultado un sistema de transporte público de pasajeros integrado, seguro y de buena calidad. Este proyecto reducirá los tiempos de viaje, disminuirá los costos operacionales del servicio de transporte, mejorará la conectividad, la seguridad y reducirá las emisiones de gases de efecto invernadero.

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2019	2020	2021	EOP 2021
0.0	Tiempo de Viaje para Usuarios del Metro	min	120	2012	P	-	45	-	-
					A	-	-	-	-

Details
---------

Means of Verification:

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Indicator		Unit of Measure	Baseline	Baseline Year		2019	2020	2021	EOP 2021
0.1	Costo de Operación de la Flota Vehicular de Lima	(US\$ millones por año)	855.3	2012	P	-	711.7	-	-
					A	-	-	-	-
Details									
Means of Verification:									
Observations:									
Evaluation Methodology: -									
Pro-Gender	No	Pro-Ethnicity	No	CRF indicator					
Indicator		Unit of Measure	Baseline	Baseline Year		2019	2020	2021	EOP 2021
0.2	Emisión de Gases de Efecto Invernadero – Específicamente CO2	Ton/Año	687.12	2012	P	-	605.36	-	-
					A	-	-	-	-
Details									
Means of Verification:									
Observations:									
Evaluation Methodology: -									
Pro-Gender	No	Pro-Ethnicity	No	CRF indicator					
Indicator		Unit of Measure	Baseline	Baseline Year		2019	2020	2021	EOP 2021
0.3	Pasajero por día en el Sistema Metro Línea 2 - 4	Und	0	2012	P	-	662	-	-
					A	-	-	-	-
Details									
Means of Verification:									
Observations:									
Evaluation Methodology: -									
Pro-Gender	No	Pro-Ethnicity	No	CRF indicator					
Indicator		Unit of Measure	Baseline	Baseline Year		2019	2020	2021	EOP 2021
0.4	Índice de Satisfacción de Usuario en el Metro	%	0	2012	P	-	70	-	-
					A	-	-	-	-
Details									
Means of Verification:									
Observations:									
Evaluation Methodology: -									
Pro-Gender	No	Pro-Ethnicity	No	CRF indicator					
Indicator		Unit of Measure	Baseline	Baseline Year		2019	2020	2021	EOP 2021
0.5	Porcentaje de Pasajeros Internacionales que entran o salen del Aeropuerto Jorge Chávez y Utilizan el Metro	%	0	2012	P	-	15	-	-
					A	-	-	-	-
Details									
Means of Verification:									
Observations:									
Evaluation Methodology: -									
Pro-Gender	No	Pro-Ethnicity	No	CRF indicator					

#### Details

**Means of Verification:**

**Observations:**

<b>Pro-Gender</b>	No	<b>Pro-Ethnicity</b>	No	CRF indicator	

	Indicator	Unit of Measure	Baseline	Baseline Year		2019	2020	2021	EOP 2021
0.7	Índice de Percepción de Seguridad de las Mujeres en el Metro	%	0	2012	P	-	60	-	-
					A	-	-	-	-
Details									

**Means of Verification:**

**Observations:**

<b>Pro-Gender</b>	No	<b>Pro-Ethnicity</b>	No	CRF indicator	

## RESULTS MATRIX

## OUTPUTS PHYSICAL PROGRESS

Component Nbr. 1: Obra civil, instalaciones y suministros

Output	Unit of Measure		2014	2015	2016	2017	2018	2019	2020	2021	EOP 2021	
Expropiaciones	und	P	-	33	95	168	137	-	-	-	433	
		P (a)	-	33	200	180	68	53	20	60	616	
		A	-	65	199	205	39	35	13	28	584	

Details

Means of Verification:			
Pro-Gender	No	CRF indicator	
Pro-Ethnicity	No		

1.2

1.3

1.4

Output	Unit of Measure		2014	2015	2016	2017	2018	2019	2020	2021	EOP 2021
Reubicación de interferencias	%	P	-	10	50	40	-	-	-	-	100
		P (a)	-	10	50	48	15	33	5	5	100
		A	-	10	42	10	5	25	3	2	97

Details

Means of Verification:

Pro-Gender	No	CRF indicator	
Pro-Ethnicity	No		

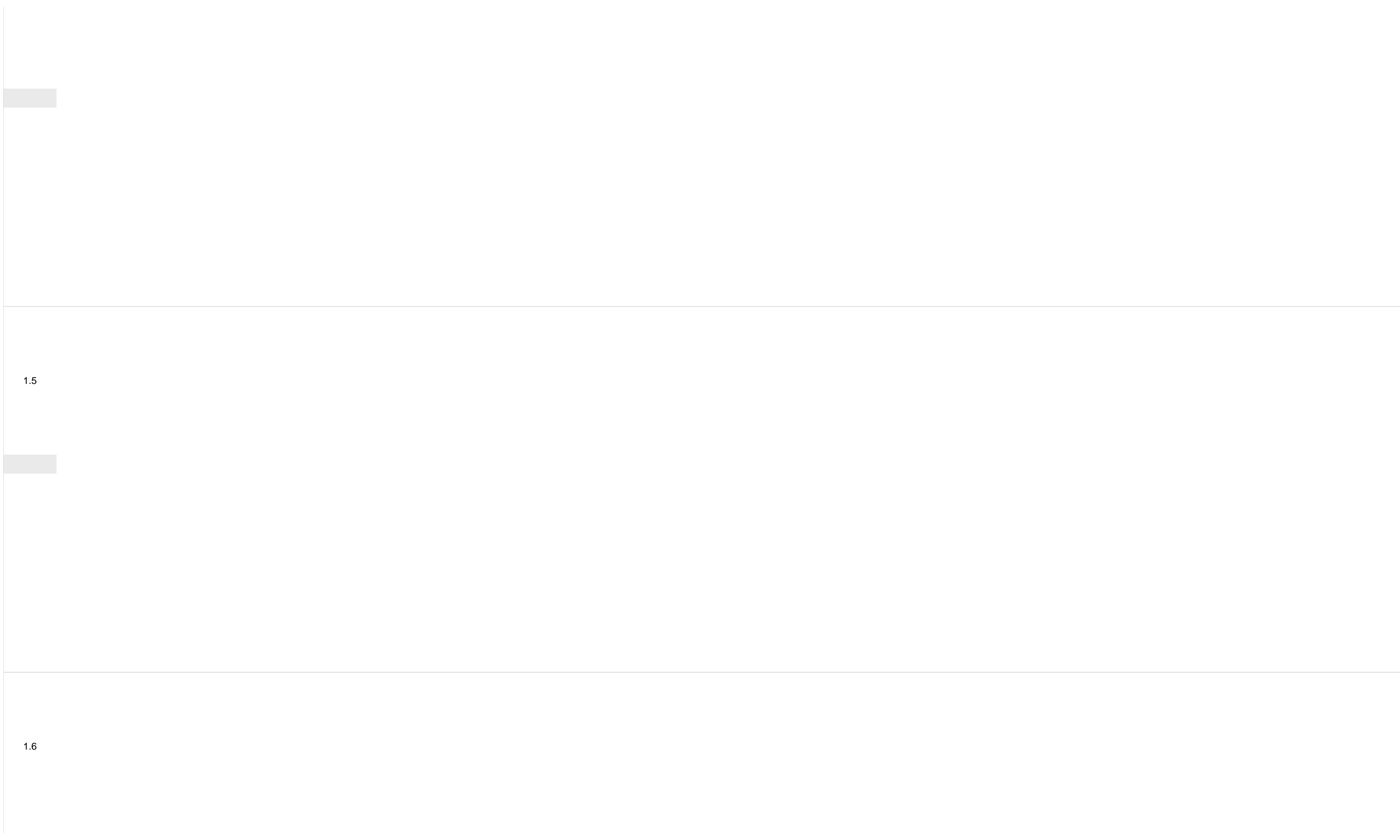
Output	Unit of Measure		2014	2015	2016	2017	2018	2019	2020	2021	EOP 2021
Construcción de estaciones con instalaciones acabadas	und	P	-	0	0	5	3	15	12	-	35
		P (a)	-	-	-	2	4	15	1	7	12
		A	-	-	0	1	2	2	0	0	5

Details

Means of Verification:

Pro-Gender	No	CRF indicator	
Pro-Ethnicity	No		

Output	Unit of Measure		2014	2015	2016	2017	2018	2019	2020	2021	EOP 2021
Construcción de infraestructura ferroviaria	Roads (km)	P	-	0	0	0	5	11	19	-	35





Details									
---------	--	--	--	--	--	--	--	--	--

## Details

Details			
Means of Verification:			
Pro-Gender	No	CRF indicator	
Pro-Ethnicity	No		

Component Nbr. 2: Material Rodante

2.1	
-----	--

OUTPUTS FINANCIAL PROGRESS

Component Nbr. 1: Obra civil, instalaciones y expropiaciones

Component revised cost: 2,180,716,094.84

1.1	
-----	--

Output	Unit of Measure		2014	2015	2016	2017	2018	2019	2020	2021	EOP 2021	
Entrega de Material Rodante	Vagones de tren	P	-	0	0	-	120	0	132	-	252	
		P (a)	-	-	-	30	90	-	0	60	252	
		A	-	-	-	50	82	0	60	12	204	

Details

Means of Verification:

Pro-Gender	No	CRF indicator	
Pro-Ethnicity	No		

Output	Unit of Measure		2014	2015	2016	2017	2018	2019	2020	2021	EOP 2021	
Expropiaciones	und	P	5,011,310	12,630,533	25,887,984	18,300,707	12,054,824	-	-	-	73,885,358	
		P (a)	5,011,310	12,630,533	50,540,000	37,263,865	3,000,000	12,000,000	958,000	204,331,477	392,852,502.87	

1.2	
1.3	

Expropiaciones	und	A	5,011,310	12,630,533	21,486,182	31,500,000	10,250,000	691,421.87	106,951,579	120,792,867	309,313,892.87
----------------	-----	---	-----------	------------	------------	------------	------------	------------	-------------	-------------	----------------

## Details

**Means of Verification:**

Pro-Gender	No	CRF indicator	
Pro-Ethnicity	No		

Output	Unit of Measure		2014	2015	2016	2017	2018	2019	2020	2021	EOP 2021	
Reubicación de interferencias	%	P	108,955,578	37,837,225	28,928,793	38,524,691	34,370,790	-	-	-	248,617,077	
		P (a)	108,955,578	37,837,225	52,150,000	49,524,691	20,000,000	7,000,000	1,200,000	52,425,279	312,242,933.6	
		A	108,955,578	37,837,226	22,486,182	20,000,000	15,052,244	25,552,477.6	29,933,947	15,872,894	275,690,548.6	

## Details

**Means of Verification:**

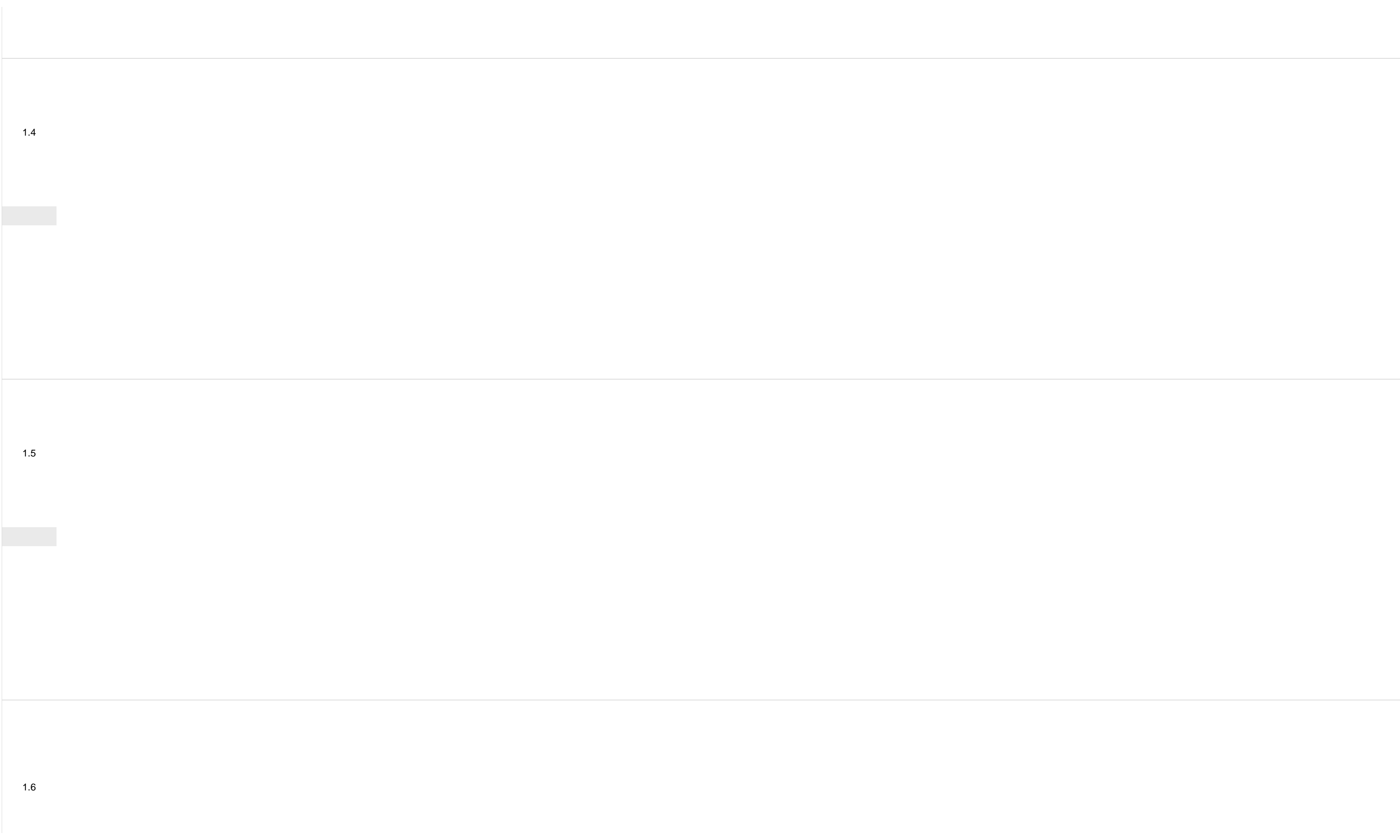
Pro-Gender	No	CRF indicator	
Pro-Ethnicity	No		

Output	Unit of Measure		2014	2015	2016	2017	2018	2019	2020	2021	EOP 2021	
Construcción de estaciones con instalaciones acabadas	und	P	-	249,000,000	434,000,000	301,000,000	200,000,000	210,000,000	-	-	1,394,000,000	
		P (a)	-	249,000,000	110,000,000	20,000,000	150,000,000	158,000,000	8,996,000	220,478,360	475,255,348.81	
		A	-	9,652,846	85,000,000	25,000,000	46,500,000	9,103,721.22	79,520,421.59	190,524,784	445,301,772.81	

## Details

**Means of Verification:**

Pro-Gender	No	CRF indicator	
Pro-Ethnicity	No		



Output	Unit of Measure		2014	2015	2016	2017	2018	2019	2020	2021	EOP 2021	
Construcción de infraestructura ferroviaria	Roads (km)	P	-	98,000,000	670,000,000	480,000,000	453,000,000	480,000,000	-	-	2,181,000,000	
		P (a)	-	98,000,000	90,000,000	95,000,000	153,000,000	98,000,000	12,500,000	29,540,635	320,519,712.15	
		A	-	72,630,762	95,000,000	85,000,000	17,500,000	5,646,611.9	15,201,703.25	26,348,694	317,327,771.15	

Details

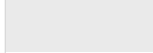
Means of Verification:			
Pro-Gender	No	CRF indicator	Urban rail and bus mass transit systems built or upgraded (km) ()
Pro-Ethnicity	No		

Output	Unit of Measure		2014	2015	2016	2017	2018	2019	2020	2021	EOP 2021	
Construcción de patios talleres	unid	P	50,687,320	69,000,000	150,000,000	50,000,000	50,000,000	50,000,000	-	-	419,687,320	
		P (a)	50,687,320	69,000,000	85,000,000	60,000,000	50,000,000	20,000,000	3,500,000	29,256,473	231,987,726.2	
		A	50,687,320	27,618,763	65,000,000	35,000,000	5,600,000	1,152,369.78	17,672,800.42	25,456,548	228,187,801.2	

Details

Means of Verification:			
Pro-Gender	No	CRF indicator	
Pro-Ethnicity	No		

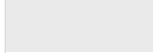
Output	Unit of Measure		2014	2015	2016	2017	2018	2019	2020	2021	EOP 2021	
Pozos de ventilacion	unid	P	-	110,000,000	250,000,000	150,000,000	130,000,000	100,000,000	-	-	740,000,000	
		P (a)	-	110,000,000	161,572,000	110,000,000	100,000,000	68,000,000	2,500,000	111,795,345	447,857,871.21	



Component Nbr. 2: Material Rodante

Component revised cost: 336,079,870

2.1



Other Costs

Total Costs										
		2014	2015	2016	2017	2018	2019	2020	2021	Cost
Total Cost	P	348,518,269	576,467,758	1,580,705,356	1,067,010,170	945,091,350	927,554,315	224,722,741	-	5,670,069,959
	P (a)	348,518,269	576,467,758	571,150,579	400,973,328	501,665,736	402,399,358	29,654,000	660,960,716	2,516,795,964.84
	A	348,518,269	235,734,075	434,860,244	271,300,000	178,967,980	85,464,101.61	300,990,579.23	484,683,436	2,340,518,684.84





No Information available for the section.

Change Matrix

No information available for the section

IMPLEMENTATION STATUS AND LEARNING

No Information available for this section.

RISKS AND PLANNED RESPONSES

Risk ID	Risk Status	Risk Description	Probability	Impact	Risk Level	Risk Taxonomy	
1	Active	Retrasos en la ejecucion del proyecto	4 - High	4 - High	High	Organizational Structure	
	Details						
	Associated Outputs	- Construcción de estaciones con instalaciones acabadas - Construcción de infraestructura ferroviaria - Construcción de patios talleres - Expropiaciones - Reubicación de interferencias	Source of Risk	Executing Agency	Type of Impact	- Time - Cost	
	Associated Outcomes	- El objetivo del proyecto es mejorar la calidad del sistema de transporte público en el Área Metropolitana de Lima (AML) y Callao a través del aumento en cobertura del transporte masivo de pasajeros, brindando mejor conectividad con otros sistemas de transporte masivo teniendo como resultado un sistema de transporte público de pasajeros integrado, seguro y de buena calidad. Este proyecto reducirá los tiempos de viaje, disminuirá los costos operacionales del servicio de transporte, mejorará la conectividad, la seguridad y reducirá las emisiones de gases de efecto invernadero.	Responsible	Contraparte y Concesionaria	Probability Factors	El coronograma actual esta desactualizado y los retrasos continuan acumulandose	
	Description of Impact	Producciones mensuales menores a las definidas en el cronograma vigente. Retrasos acumulados. Indefinicion del camino critico					
	Response Actions						
	1	Response Description			Management Strategy		Status
		Redefinir gobernanza del proyecto y sincerar cronogramas			ENHANCE		ACTIVE
		Details					
Estimated Completion Date		-	Budget	0	Responsible	-	
Completion Date			Funding Source	-	Status Description	-	



Risk ID	Risk Status	Risk Description	Probability	Impact	Risk Level	Risk Taxonomy		
4	Active	Inadecuado cumplimiento de los estandares socioambientales del Programa.	3 - Medium High	4 - High	High	Environmental and Social Safeguards		
	Details							
	Associated Outputs	- Construcción de estaciones con instalaciones acabadas - Expropiaciones - Reubicación de interferencias	Source of Risk	Project	Type of Impact	- Time		
	Associated Outcomes	- El objetivo del proyecto es mejorar la calidad del sistema de transporte público en el Área Metropolitana de Lima (AML) y Callao a través del aumento en cobertura del transporte masivo de pasajeros, brindando mejor conectividad con otros sistemas de transporte masivo teniendo como resultado un sistema de transporte público de pasajeros integrado, seguro y de buena calidad. Este proyecto reducirá los tiempos de viaje, disminuirá los costos operacionales del servicio de transporte, mejorará la conectividad, la seguridad y reducirá las emisiones de gases de efecto invernadero.	Responsible	Contraparte y Concesionaria	Probability Factors	Cumplimiento salvaguardas		
	Description of Impact	Impacto pagos comercios afectados						
	Response Actions							
	1	Response Description			Management Strategy		Status	
		Contratación a firma de supervision socioambiental independiente			ENHANCE		ACTIVE	
		Details						
Estimated Completion Date		-		Budget	0	Responsible	Executing Agency	
Completion Date				Funding Source	-	Status Description	-	
MATERIALIZED RISKS								

EVALUATION TRACKING

Evaluacion económica Ex-post

Evaluation			
Evaluation Methodology as per DEM:		Cost-Benefit Analysis Ex Post	
Current Evaluation Methodology:		Cost-Benefit Analysis Ex Post	
Stage:		Pre-Internvention (Ex Ante)	
Main Topic of the Intervention:		TRANSPORT	
Other Topics of the Intervention:			
Main Topic of the Evaluation:		TRANSPORT	
Other Topics of the Evaluation:			
Funding			
Source of funding:			
Amount in USD (Thousands):			
Code:			
Total amount in USD (Thousands) spent to date in data collection:		0	

Status of the evaluation:		Active
Expected Date of Final Evaluation Report:		10/14/2021
Responsible:		Project Team
Information on Responsible:		

Comments	
3/23/2016	
rcapristan	

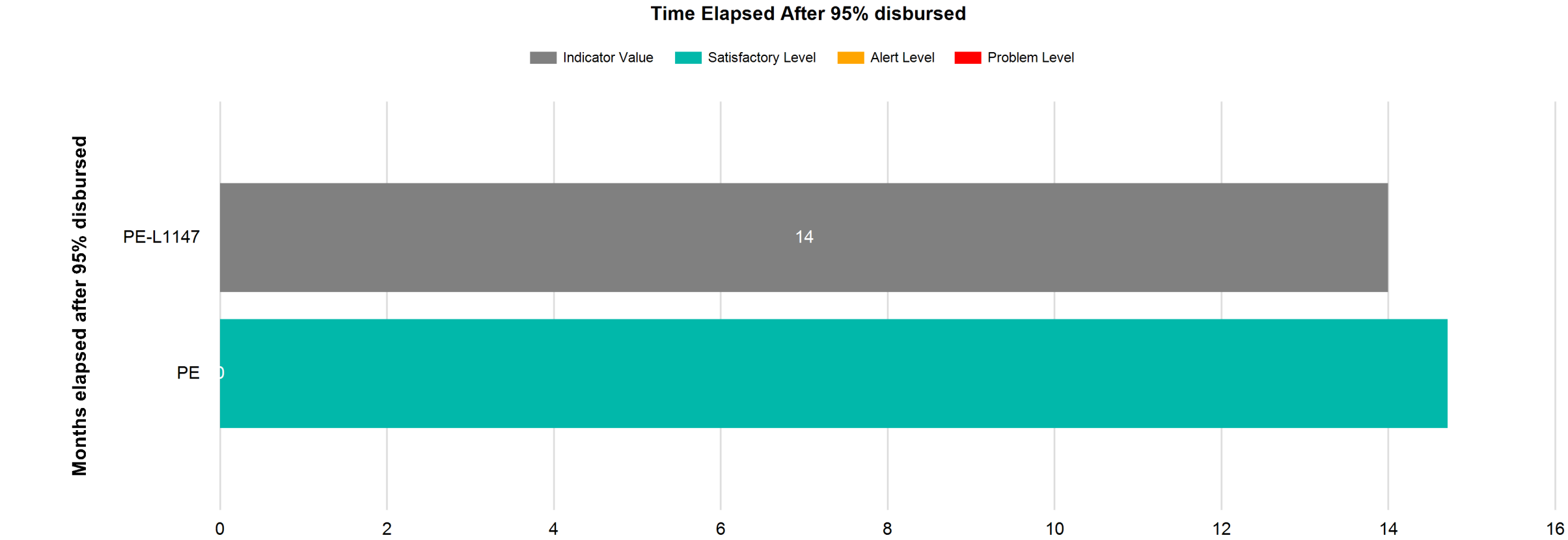
Documents							
Stage	Type of document	Name	Document Description	Document Date	Document Number	Document Permissions	Document User

No information available for the section

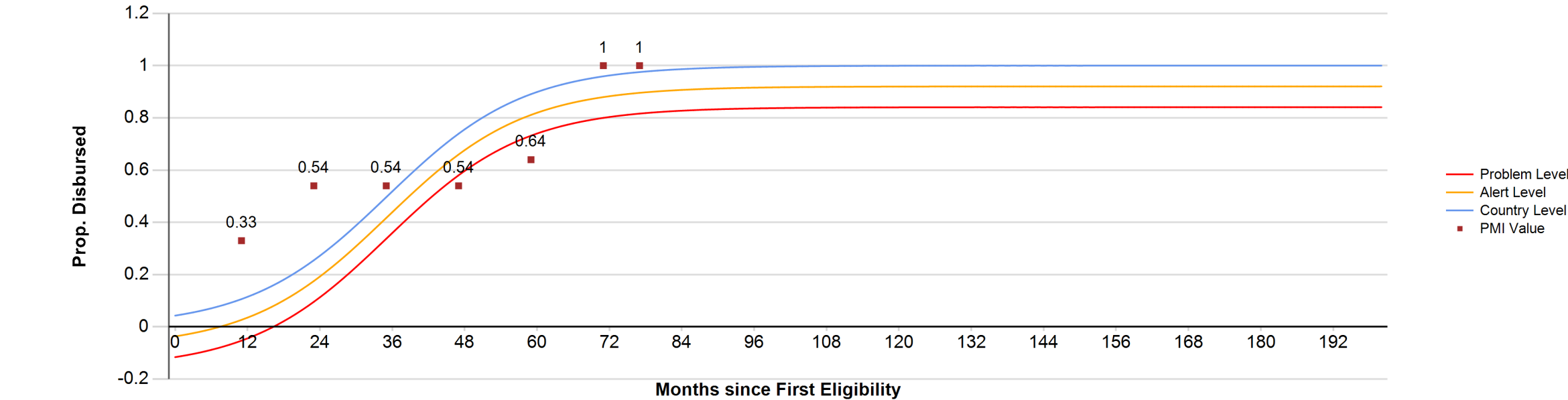
MONITORING INDICATORS    Show

Stage 3: After Operation Reaches 95% of total Disbursements

		Benchmark Indicator Value			
Indicator (I)	Project Indicator Value	Satisfactory	Alert	Problem	Traffic Light
Synthetic Indicator (SI)	2.40	2.5 <= I	2<=I<2.5	I<2	ALERT
# of months elapsed after 95% disbursements reached	14.00	I <=14.71	14.71I <=14.71	I>14.71	SATISFACTORY
Accumulated disbursements to country's historic disbursements	1.00	1 >= I >=0.9	0.9 > I >=0.82	0.82 > I >= 0	SATISFACTORY
Expected additional execution duration (months)	151.27	N/A	N/A	N/A	For tracking purpose only
Environmental and social safeguards performance rating	Partially Unsatisfactory	N/A	N/A	N/A	For tracking purpose only

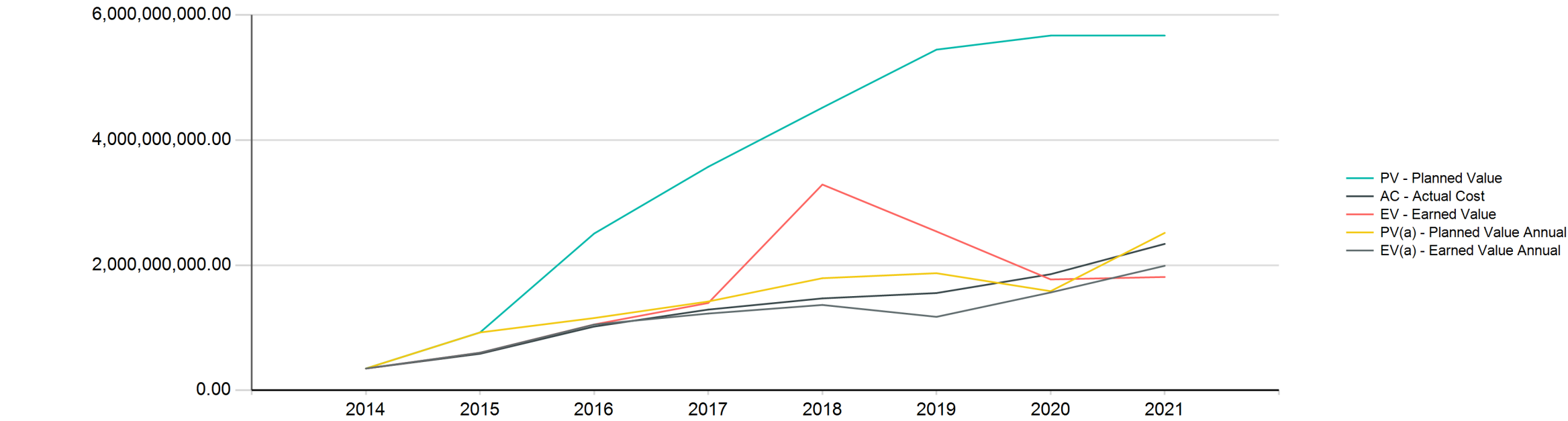


Accumulated disbursements as proportion of the total amount



PV, AC, EV, PV(a), EV(a)

	2014	2015	2016	2017	2018	2019	2020	2021
PV	348,518,269.00	924,986,027.00	2,505,691,383.00	3,572,701,553.00	4,517,792,903.00	5,445,347,218.00	5,670,069,959.00	5,670,069,959.00
AC	348,518,269.00	584,252,344.00	1,019,112,588.00	1,290,412,588.00	1,469,380,568.00	1,554,844,669.61	1,855,835,248.84	2,340,518,684.84
EV	348,518,269.00	601,359,584.70	1,052,777,895.05	1,395,983,375.42	3,288,919,957.19	2,538,736,485.30	1,772,288,377.96	1,811,223,297.18
PV(a)	348,518,269.00	924,986,027.00	1,155,402,923.00	1,420,085,916.00	1,792,078,324.00	1,871,779,926.00	1,584,498,585.61	2,516,795,964.84
EV(a)	348,518,269.00	601,359,584.70	1,051,047,226.83	1,227,233,833.23	1,364,761,465.56	1,174,488,497.07	1,564,202,907.61	1,990,216,497.96



	2014	2015	2016	2017	2018	2019	2020	2021
CPI	1.00	1.03	1.03	1.08	2.24	1.63	0.95	0.77
CPI(a)	1.00	1.03	1.03	0.95	0.93	0.76	0.84	0.85
SPI	1.00	0.65	0.42	0.39	0.73	0.47	0.31	0.32
SPI(a)	1.00	0.65	0.91	0.86	0.76	0.63	0.99	0.79

