

ANÁLISIS DEL MODELO FINANCIERO DE ADICIÓN DE LOS CONTRATOS DE CONCESIONES
EN CUNDINAMARCA, PARA MEDIR LA EFICIENCIA DE LA INVERSIÓN DE LOS RECURSOS
PÚBLICOS”

RECONSTRUCCION MODELO ADICIONAL 15 CONTRATO No 001-96 DEBISAB.

MODELO BONUS

Para la realización de este modelo, se toma como base los inputs presentados en el informe financiero presentado por la Secretaria de Hacienda Departamento de Cundinamarca.

RESULTADOS

Rentabilidades

TIR Nominal	15.04%	CORRIENTES	AFFECTADO POR EL IPC EN EL TIEMPO
TIR Real*	11.69%	CONSTANTES	NO SE AFECTA

* Valor Calculado con valores constantes de Jun-2010

Valor Presente de los Ingresos

Tasa de Descuento	11.00%	
VPN Ingresos *	#¡REF!	VALOR DEL CONTRATO

* Valor Calculado con valores constantes de Dic-2010

\$ 139,000,000,000.00 ADICIONAL

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Crecimiento Tráfico		6.00%	7.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
IPC		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Inflación Acumulada (Ene-Jun 2010)	2.47%		0.27%								
IPC de Auto-ChC		1.00	1.00	1.00	1.00	1.13	1.16	1.19	1.23	1.27	1.30
Deflactor Dto 2010		1.00	1.04	1.04	1.10	1.13	1.17	1.20	1.24	1.27	1.30
Deflactor Junio 2010		1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30
Deflactor Dic 2009											1.34

INGRESOS

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3169.343.284.000 3179.611.284.000 3189.889.284.000 3199.977.284.000 3210.075.284.000 3220.183.284.000 3230.291.284.000 3240.409.284.000 3250.537.284.000 3260.675.284.000 3270.823.284.000 3280.981.284.000 3291.149.284.000 3301.327.284.000 3311.515.284.000 3321.713.284.000 3331.921.284.000 3342.139.284.000 3352.367.284.000 3362.605.284.000 3372.853.284.000 3383.111.284.000 3393.379.284.000 3403.657.284.000 3413.945.284.000 3424.243.284.000 3434.551.284.000 3444.869.284.000 3455.197.284.000 3465.535.284.000 3475.883.284.000 3486.241.284.000 3496.609.284.000 3506.987.284.000 3517.375.284.000 3527.773.284.000 3538.181.284.000 3548.599.284.000 3559.027.284.000 3569.465.284.000 3579.913.284.000 3590.371.284.000 3600.839.284.000 3611.317.284.000 3621.805.284.000 3632.303.284.000 3642.811.284.000 3653.329.284.000 3663.857.284.000 3674.395.284.000 3684.943.284.000 3695.491.284.000 3706.049.284.000 3716.617.284.000 3727.195.284.000 3737.783.284.000 3748.381.284.000 3758.989.284.000 3769.607.284.000 3780.235.284.000 3790.873.284.000 3801.521.284.000 3812.179.284.000 3822.847.284.000 3833.525.284.000 3844.213.284.000 3854.911.284.000 3865.619.284.000 3876.337.284.000 3887.065.284.000 3897.803.284.000 3908.551.284.000 3919.309.284.000 3930.077.284.000 3940.855.284.000 3951.643.284.000 3962.441.284.000 3973.249.284.000 3984.067.284.000 3994.895.284.000 4005.733.284.000 4016.581.284.000 4027.439.284.000 4038.307.284.000 4049.185.284.000 4060.073.284.000 4070.971.284.000 4081.879.284.000 4092.797.284.000 4103.725.284.000 4114.663.284.000 4125.611.284.000 4136.569.284.000 4147.537.284.000 4158.515.284.000 4169.503.284.000 4180.501.284.000 4191.509.284.000 4202.527.284.000 4213.555.284.000 4224.593.284.000 4235.641.284.000 4246.699.284.000 4257.767.284.000 4268.845.284.000 4279.933.284.000 4291.031.284.000 4302.139.284.000 4313.257.284.000 4324.385.284.000 4335.523.284.000 4346.671.284.000 4357.829.284.000 4368.997.284.000 4380.175.284.000 4391.363.284.000 4402.561.284.000 4413.769.284.000 4424.987.284.000 4436.215.284.000 4447.453.284.000 4458.701.284.000 4469.959.284.000 4481.227.284.000 4492.505.284.000 4503.793.284.000 4515.091.284.000 4526.409.284.000 4537.737.284.000 4549.075.284.000 4560.423.284.000 4571.781.284.000 4583.149.284.000 4594.527.284.000 4605.915.284.000 4617.313.284.000 4628.721.284.000 4640.139.284.000 4651.567.284.000 4663.005.284.000 4674.453.284.000 4685.911.284.000 4697.379.284.000 4708.857.284.000 4720.345.284.000 4731.843.284.000 4743.351.284.000 4754.869.284.000 4766.397.284.000 4777.935.284.000 4789.483.284.000 4801.041.284.000 4812.609.284.000 4824.187.284.000 4835.775.284.000 4847.373.284.000 4858.981.284.000 4870.599.284.000 4882.227.284.000 4893.865.284.000 4905.513.284.000 4917.171.284.000 4928.839.284.000 4940.517.284.000 4952.205.284.000 4963.903.284.000 4975.611.284.000 4987.329.284.000 4999.057.284.000 5010.795.284.000 5022.543.284.000 5034.301.284.000 5046.069.284.000 5057.847.284.000 5069.635.284.000 5081.433.284.000 5093.241.284.000 5105.059.284.000 5116.887.284.000 5128.725.284.000 5140.573.284.000 5152.431.284.000 5164.299.284.000 5176.177.284.000 5188.065.284.000 5199.963.284.000 5211.871.284.000 5223.789.284.000 5235.717.284.000 5247.655.284.000 5259.603.284.000 5271.561.284.000 5283.529.284.000 5295.507.284.000 5307.495.284.000 5319.493.284.000 5331.501.284.000 5343.519.284.000 5355.547.284.000 5367.585.284.000 5379.633.284.000 5391.691.284.000 5403.759.284.000 5415.837.284.000 5427.925.284.000 5440.023.284.000 5452.131.284.000 5464.249.284.000 5476.377.284.000 5488.515.284.000 5500.663.284.000 5512.821.284.000 5524.989.284.000 5537.167.284.000 5549.355.284.000 5561.553.284.000 5573.761.284.000 5585.979.284.000 5598.207.284.000 5610.445.284.000 5622.693.284.000 5634.951.284.000 5647.219.284.000 5659.497.284.000 5671.785.284.000 5684.083.284.000 5696.391.284.000 5708.709.284.000 5721.037.284.000 5733.375.284.000 5745.723.284.000 5758.081.284.000 5770.449.284.000 5782.827.284.000 5795.215.284.000 5807.613.284.000 5820.021.284.000 5832.439.284.000 5844.867.284.000 5857.305.284.000 5869.753.284.000 5882.211.284.000 5894.679.284.000 5907.157.284.000 5919.655.284.000 5932.163.284.000 5944.681.284.000 5957.209.284.000 5969.747.284.000 5982.295.284.000 5994.853.284.000 6007.421.284.000 6020.009.284.000 6032.607.284.000 6045.215.284.000 6057.833.284.000 6070.461.284.000 6083.099.284.000 6095.747.284.000 6108.405.284.000 6121.073.

Inversiones

PERIODO

Defactor Dic 2010

Defactor Junio 2010

CAPEX Adicional

\$ 139,238,813,189.00

Porcentaje de inversión anual

Inversión Inicial (Corrientes)

Inversión Inicial (Constantes Dic 2010)

Negociación Rubros de Inversión

Rubros Inversión (Corrientes)

Inversión

Total

Total Inversión Corrientes

Total Inversión Constantes

	2010	2011	2012	2013	2014	2015	2016
	1	2	3	4	5	6	7
	1.00	1.03	1.06	1.09	1.13	1.16	1.19
	1.01	1.04	1.07	1.10	1.13	1.17	1.20

	10.75%	69.25%	20.00%				
	14,968,172,418	99,315,564,477	29,543,691,382	-	-	-	-
	14,968,172,418	96,422,878,133	27,847,762,638	-	-	-	-

	14,968,172,418	99,315,564,477	29,543,691,382	-	-	-	-
	14,968,172,418	99,315,564,477	29,543,691,382	-	-	-	-
	14,968,172,418	99,315,564,477	29,543,691,382	-	-	-	-
	14,968,172,418	96,422,878,133	27,847,762,638	-	-	-	-

CIERRE FINANCIERO

2029	2030	2031	2032	2033	2034
20	21	22	23	24	25
1.75	1.81	1.86	1.92	1.97	2.03
1.76	1.82	1.87	1.93	1.98	2.04

- - - - -
- - - - -

-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

	2009	2010	2011
		1	2
Tasa Impositiva	33.00%	33.00%	33.00%
IPC	2.00%	3.00%	3.00%
Deflactor	-	1.00	1.03

IMPUESTOS

GMF (4xmil)		0.40%	0.40%
Renta Presuntiva		3.00%	3.00%
Tasa impositiva		33.00%	33.00%
Renta		25.00%	25.00%
Anticipo Impuesto de Renta		75.00%	75.00%
Deducción sobre activos fijos		30.00%	30.00%

GMF-GASTA DE LOS MOVIMIENTOS FINANCIEROS

Egresos		15,524,494,063	99,883,922,766
GMF 100%		62,097,976	399,535,691
GMF 75%		46,573,482	299,651,768

Utilidad/Pérdida del Ejercicio

Utilidad/Perdida del ejercicio	-	137,404,445	- 1,219,148,393
Ajuste GMF		15,524,494	99,883,923
Utilidad/Perdida del ejercicio AJ. GF	-	121,879,951	- 1,119,264,471

Cálculo Renta presuntiva

Renta Líquida		41,771,643,957	41,771,643,957
Base Renta Presuntiva		1,253,149,319	1,253,149,319
Renta presuntiva		413,539,275	413,539,275

Flujo Renta Presuntiva

Base Renta Presuntiva Año Anterior		-	1,253,149,319
(-) Beneficio Usado		-	-
Saldo Final Renta Presuntiva		-	1,253,149,319

Utilidad/Perdida del ejercicio AJ. RP	-	121,879,951	- 1,119,264,471
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Flujo Beneficio Act. Fijos Productivos

(+) Beneficio del Periodo		4,490,451,725	29,794,669,343
(+) Beneficio Periodo Anterior		-	4,490,451,725
(-) Beneficio Usado		-	-
Saldo Final Beneficio		4,490,451,725	34,285,121,069

Utilidad/Perdida del ejercicio Aj. AFP	-	121,879,951	- 1,119,264,471
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Saldo inicial Ut/Pérdida Acum.		-	121,879,951
Ut/Pérdida del Ejercicio	-	121,879,951	- 1,119,264,471
Saldo Final Ut/Pérdida Acum.	-	121,879,951	- 1,241,144,422

Imporenta Bruto		413,539,275	413,539,275
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Anticipo

Imporenta Generado		413,539,275	413,539,275
Anticipo Año Anterior		-	155,077,228
Impuesto generado en el año (75%)		310,154,456	310,154,456
Impuesto año actual-año ant.		155,077,228	310,154,456
Anticipo Próximo Año		155,077,228	310,154,456
Imporenta por pagar		568,616,503	568,616,503

2018	2019	2020	2021	2022	2023
9	10	11	12	13	14
33.00%	33.00%	33.00%	33.00%	33.00%	33.00%
3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
1.27	1.30	1.34	1.38	1.43	1.47
0.40%	0.40%	0.40%	0.40%	0.40%	0.40%
3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
33.00%	33.00%	33.00%	33.00%	33.00%	33.00%
25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
75.00%	75.00%	75.00%	75.00%	75.00%	75.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6,581,287,478	6,781,411,562	10,004,876,472	50,686,147,360	89,341,816,736	45,693,084,236
26,325,150	27,125,646	40,019,506	202,744,589	357,367,267	182,772,337
19,743,862	20,344,235	30,014,629	152,058,442	268,025,450	137,079,253
4,646,535,332	5,130,467,092	5,628,975,513	60,812,641,920	91,419,788,936	87,324,630,387
6,581,287	6,781,412	10,004,876	50,686,147	89,341,817	45,693,084
4,653,116,619	5,137,248,503	5,638,980,390	60,863,328,067	91,509,130,753	87,370,323,471
41,771,643,957	41,771,643,957	41,771,643,957	41,771,643,957	41,771,643,957	41,771,643,957
1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319
413,539,275	413,539,275	413,539,275	413,539,275	413,539,275	413,539,275
1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319
1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319
-	-	-	-	-	-
3,399,967,301	3,884,099,185	4,385,831,071	59,610,178,749	90,255,981,434	86,117,174,152
-	-	-	-	-	-
5,180,097,868	1,780,130,567	-	-	-	-
3,399,967,301	1,780,130,567	-	-	-	-
1,780,130,567	-	-	-	-	-
-	2,103,968,617	4,385,831,071	59,610,178,749	90,255,981,434	86,117,174,152
- 1,241,144,422	- 1,241,144,422	862,824,196	5,248,655,267	64,858,834,016	155,114,815,450
-	2,103,968,617	4,385,831,071	59,610,178,749	90,255,981,434	86,117,174,152
- 1,241,144,422	862,824,196	5,248,655,267	64,858,834,016	155,114,815,450	241,231,989,602
413,539,275	694,309,644	1,447,324,254	19,671,358,987	29,784,473,873	28,418,667,470
413,539,275	694,309,644	1,447,324,254	19,671,358,987	29,784,473,873	28,418,667,470
310,154,456	310,154,456	415,443,345	803,112,711	7,919,506,215	18,545,937,323
310,154,456	520,732,233	1,085,493,190	14,753,519,240	22,338,355,405	21,314,000,603
310,154,456	415,443,345	803,112,711	7,919,506,215	18,545,937,323	21,826,178,004
310,154,456	415,443,345	803,112,711	7,919,506,215	18,545,937,323	21,314,000,603
413,539,275	799,598,532	1,834,993,620	26,787,752,491	40,410,904,981	31,186,730,750

2024	2025	2026	2027	2028	2029
15	16	17	18	19	20
33.00%	33.00%	33.00%	33.00%	33.00%	33.00%
3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
1.51	1.56	1.60	1.65	1.70	1.75
0.40%	0.40%	0.40%	0.40%	0.40%	0.40%
3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
33.00%	33.00%	33.00%	33.00%	33.00%	33.00%
25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
75.00%	75.00%	75.00%	75.00%	75.00%	75.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
48,196,476,209	53,019,081,639	74,734,408,388	106,181,147,194	55,798,984,502	58,036,036,035
192,785,905	212,076,327	298,937,634	424,724,589	223,195,938	232,144,144
144,589,429	159,057,245	224,203,225	318,543,442	167,396,954	174,108,108
91,736,826,215	68,242,494,613	71,995,700,674	75,417,924,274	78,157,297,878	82,473,074,449
48,196,476	53,019,082	74,734,408	106,181,147	55,798,985	58,036,036
91,785,022,691	68,295,513,695	72,070,435,082	75,524,105,421	78,213,096,862	82,531,110,485
41,771,643,957	41,771,643,957	41,771,643,957	41,771,643,957	41,771,643,957	41,771,643,957
1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319
413,539,275	413,539,275	413,539,275	413,539,275	413,539,275	413,539,275
1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319
1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319
-	-	-	-	-	-
90,531,873,372	67,042,364,376	70,817,285,764	74,270,956,102	76,959,947,543	81,277,961,167
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
90,531,873,372	67,042,364,376	70,817,285,764	74,270,956,102	76,959,947,543	81,277,961,167
241,231,989,602	331,763,862,974	398,806,227,350	469,623,513,114	543,894,469,216	620,854,416,760
90,531,873,372	67,042,364,376	70,817,285,764	74,270,956,102	76,959,947,543	81,277,961,167
331,763,862,974	398,806,227,350	469,623,513,114	543,894,469,216	620,854,416,760	702,132,377,926
29,875,518,213	22,123,980,244	23,369,704,302	24,509,415,514	25,396,782,689	26,821,727,185
29,875,518,213	22,123,980,244	23,369,704,302	24,509,415,514	25,396,782,689	26,821,727,185
21,314,000,603	21,860,319,631	16,592,985,183	17,060,131,705	17,954,669,931	18,714,824,326
22,406,638,660	16,592,985,183	17,527,278,227	18,382,061,635	19,047,587,017	20,116,295,389
21,860,319,631	19,499,811,921	17,060,131,705	17,954,669,931	18,714,824,326	19,581,941,203
21,860,319,631	16,592,985,183	17,060,131,705	17,954,669,931	18,714,824,326	19,581,941,203
30,421,837,241	16,856,645,796	23,836,850,824	25,403,953,740	26,156,937,085	27,688,844,062

2030	2031	2032	2033	2034
21	22	23	24	25
33.00%	33.00%	33.00%	33.00%	33.00%
3.00%	3.00%	3.00%	3.00%	3.00%
1.81	1.86	1.92	1.97	2.03
0.40%	0.40%	0.40%	0.40%	0.40%
3.00%	3.00%	3.00%	3.00%	3.00%
33.00%	33.00%	33.00%	33.00%	33.00%
25.00%	25.00%	25.00%	25.00%	25.00%
75.00%	75.00%	75.00%	75.00%	75.00%
0.00%	0.00%	0.00%	0.00%	0.00%
64,457,830,889	90,505,703,586	126,281,669,319	67,953,074,970	23,541,928,468
257,831,324	362,022,814	505,126,677	271,812,300	94,167,714
193,373,493	271,517,111	378,845,008	203,859,225	70,625,785
87,062,445,385	91,471,258,647	92,038,802,692	77,118,304,854	2,663,390,057
64,457,831	90,505,704	126,281,669	67,953,075	23,541,928
87,126,903,215	91,561,764,350	92,165,084,362	77,186,257,929	2,686,931,985
41,771,643,957	41,771,643,957	41,771,643,957	41,771,643,957	41,771,643,957
1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319
413,539,275	413,539,275	413,539,275	413,539,275	413,539,275
1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319
1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319	1,253,149,319
-	-	-	-	-
85,873,753,897	90,308,615,032	90,911,935,043	75,933,108,610	1,433,782,666
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
85,873,753,897	90,308,615,032	90,911,935,043	75,933,108,610	1,433,782,666
702,132,377,926	788,006,131,823	878,314,746,855	969,226,681,898	1,045,159,790,508
85,873,753,897	90,308,615,032	90,911,935,043	75,933,108,610	1,433,782,666
788,006,131,823	878,314,746,855	969,226,681,898	1,045,159,790,508	1,046,593,573,174
28,338,338,786	29,801,842,960	30,000,938,564	25,057,925,841	473,148,280
28,338,338,786	29,801,842,960	30,000,938,564	25,057,925,841	473,148,280
19,581,941,203	20,685,024,739	21,802,568,155	22,426,043,072	18,793,444,381
21,253,754,089	22,351,382,220	22,500,703,923	18,793,444,381	354,861,210
20,685,024,739	21,802,568,155	22,426,043,072	20,647,074,152	9,574,152,795
20,685,024,739	21,802,568,155	22,426,043,072	18,793,444,381	354,861,210
29,441,422,322	30,919,386,376	30,624,413,481	21,425,327,151	-

Flujo de Caja

Deflactor Dic 2010

Deflactor Jun 2010

Ingresos Operacionales

Ingresos

Vigencias Futuras

Total Ingresos Operacionales

Costos Operacionales

Operación Obras adicionales

Operación y Mantenimiento

Interventoría

Mantenimiento Rutinario Obras Adicionales

Total Costos Operacionales

EBITDA

CAPEX (Inversiones)

Mantenimiento Periódico

Equipos y POLCA

Impuestos por Pagar

GMF

FCL del periodo

Flujo de Caja del Periodo

FLC del Periodo (Corrientes)

FCL del periodo (Millones de Pesos Corrientes)

FCL del periodo (Pesos Constantes de Jun-2010)

FCL del periodo (Millones de Pesos Constantes)

Calculo de Rentabilidades

TIR Nominal

TIR Real

Valor Presente Neto Ingresos

Ingresos (Constantes)

Tasa de Descuento

TIR PROYECTADA

\$ 139,000,000,000,000.00

\$ 15,290,000,000,000.00

2010	2011	2012	2013	2014
1.00	1.03	1.06	1.09	1.13
1.01	1.04	1.07	1.10	1.13
-	-	-	-	-
-	-	19,096,200,000	19,669,086,000	20,259,158,580
-	-	19,096,200,000	19,669,086,000	20,259,158,580
90,000,000	370,800,000	381,924,000	393,381,720	405,183,172
-	-	-	-	-
47,404,445	197,558,288	205,778,201	214,234,181	222,966,685
-	-	4,911,277,415	5,058,615,737	5,210,374,210
137,404,445	568,358,288	5,498,979,616	5,666,231,639	5,838,524,066
-	-	-	-	-
137,404,445	568,358,288	13,597,220,384	14,002,854,361	14,420,634,514
14,968,172,418	99,315,564,477	29,543,691,382	-	-
-	-	-	-	-
418,917,200	-	-	-	-
-	568,616,503	568,616,503	413,539,275	413,539,275
62,097,976	399,535,691	140,170,684	22,664,927	23,354,096
-	-	-	-	-
15,586,592,039	100,852,074,960	16,655,258,186	13,566,650,160	13,983,741,142
-	-	-	-	-
15,586,592,039	100,852,074,960	16,655,258,186	13,566,650,160	13,983,741,142
-	-	-	-	-
15,587	100,852	16,655	13,567	13,984
-	-	-	-	-
15,506,478,202	97,411,362,484	15,618,485,711	12,351,592,541	12,360,512,603
-	-	-	-	-
15,506	97,411	15,618	12,352	12,361
15.04%				
11.69%				
		18,000,000,000	18,000,000,000	18,000,000,000

11.00% WACC INSERTADO INICIALMENTE

WACCC

2015	2016	2017	2018	2019
1.16	1.19	1.23	1.27	1.30
1.17	1.20	1.24	1.27	1.31
-	-	-	-	-
20,866,933,337	21,492,941,338	22,137,729,578	22,801,861,465	23,485,917,309
20,866,933,337	21,492,941,338	22,137,729,578	22,801,861,465	23,485,917,309
417,338,667	429,858,827	442,754,592	456,037,229	469,718,346
-	-	-	-	-
231,949,608	241,229,589	250,762,687	260,928,173	271,441,477
5,366,685,436	5,527,685,999	5,693,516,579	5,864,322,076	6,040,251,739
6,015,973,711	6,198,774,415	6,387,033,858	6,581,287,478	6,781,411,562
14,850,959,626	15,294,166,922	15,750,695,720	16,220,573,987	16,704,505,747
-	-	-	-	-
2,602,832,134	17,270,093,861	5,137,385,322	-	-
-	-	503,010,215	-	-
413,539,275	413,539,275	413,539,275	413,539,275	413,539,275
34,475,223	93,875,473	48,109,718	26,325,150	27,125,646
11,800,112,994 -	2,483,341,687	9,648,651,190	15,780,709,562	16,263,840,825
11,800,112,994 -	2,483,341,687	9,648,651,190	15,780,709,562	16,263,840,825
11,800 -	2,483	9,649	15,781	16,264
10,126,562,490 -	2,069,069,769	7,804,912,491	12,393,407,618	12,400,811,256
10,127 -	2,069	7,805	12,393	12,401
18,000,000,000	18,000,000,000	18,000,000,000	18,000,000,000	18,000,000,000

2020	2021	2022	2023	2024
1.34	1.38	1.43	1.47	1.51
1.35	1.39	1.43	1.48	1.52
-	78,218,758,924	121,973,906,935	126,829,935,711	132,333,876,189
24,190,494,828	24,916,209,673	25,663,695,963	26,433,606,842	27,226,615,047
24,190,494,828	103,134,968,597	147,637,602,898	153,263,542,553	159,560,491,236

483,809,897	498,324,193	513,273,919	528,672,137	544,532,301
-	23,465,627,677	36,592,172,080	38,048,980,713	39,700,162,857
282,211,472	293,320,346	304,934,767	317,074,839	330,834,690
6,221,459,291	6,408,103,069	6,600,346,162	6,798,356,546	7,002,307,243
6,987,480,660	30,665,375,286	44,010,726,929	45,693,084,236	47,577,837,091

17,203,014,169	72,469,593,311	103,626,875,969	107,570,458,317	111,982,654,145
-	-	-	-	-
3,017,395,812	20,020,772,074	45,331,089,808	-	-
-	-	-	-	618,639,118
799,598,532	1,834,993,620	26,787,752,491	40,410,904,981	31,186,730,750
40,019,506	202,744,589	357,367,267	182,772,337	192,785,905
13,346,000,318	50,411,083,027	31,150,666,404	66,976,781,000	79,984,498,372

13,346,000,318	50,411,083,027	31,150,666,404	66,976,781,000	79,984,498,372
13,346	50,411	31,151	66,977	79,984
9,879,634,736	36,230,853,147	21,736,151,381	45,373,507,663	52,607,381,326
9,880	36,231	21,736	45,374	52,607

18,000,000,000	74,506,895,676	103,550,044,233	104,365,014,673	105,488,281,861
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2025	2026	2027	2028	2029
1.56	1.60	1.65	1.70	1.75
1.57	1.61	1.66	1.71	1.76
138,009,415,446	143,862,493,565	150,027,618,797	156,380,000,356	162,932,828,461
-	-	-	-	-
138,009,415,446	143,862,493,565	150,027,618,797	156,380,000,356	162,932,828,461
560,868,270	577,694,318	595,025,148	612,875,902	631,262,179
41,402,824,634	43,158,748,069	45,008,285,639	46,914,000,107	48,879,848,538
345,023,539	359,656,234	375,069,047	390,950,001	407,332,071
7,212,376,460	7,428,747,754	7,651,610,186	7,881,158,492	8,117,593,247
49,521,092,902	51,524,846,375	53,629,990,020	55,798,984,502	58,036,036,035
88,488,322,544	92,337,647,189	96,397,628,777	100,581,015,854	104,896,792,426
-	-	-	-	-
3,497,988,737	23,209,562,013	52,551,157,174	-	-
-	-	-	-	-
30,421,837,241	16,856,645,796	23,836,850,824	25,403,953,740	26,156,937,085
212,076,327	298,937,634	424,724,589	223,195,938	232,144,144
54,356,420,239	51,972,501,747	19,584,896,191	74,953,866,176	78,507,711,197
54,356,420,239	51,972,501,747	19,584,896,191	74,953,866,176	78,507,711,197
54,356	51,973	19,585	74,954	78,508
34,709,989,444	32,221,075,447	11,788,280,426	43,801,198,999	44,541,726,960
34,710	32,221	11,788	43,801	44,542
88,582,992,157	89,650,349,783	90,769,176,703	91,856,768,948	92,918,315,380

2030	2031	2032	2033	2034
1.81	1.86	1.92	1.97	2.03
1.82	1.87	1.93	1.98	2.04
169,888,866,595	177,047,772,775	184,464,015,505	192,086,483,012	66,648,445,320
-	-	-	-	-
169,888,866,595	177,047,772,775	184,464,015,505	192,086,483,012	66,648,445,320
650,200,044	669,706,046	689,797,227	710,491,144	243,935,293
50,966,659,978	53,114,331,833	55,339,204,651	57,625,944,904	19,994,533,596
424,722,166	442,619,432	461,160,039	480,216,208	166,621,113
8,361,121,044	8,611,954,676	8,870,313,316	9,136,422,715	3,136,838,466
60,402,703,234	62,838,611,986	65,360,475,233	67,953,074,970	23,541,928,468
109,486,163,361	114,209,160,789	119,103,540,272	124,133,408,041	43,106,516,852
-	-	-	-	-
4,055,127,655	26,906,243,517	60,921,194,086	-	-
-	760,848,083	-	-	-
27,688,844,062	29,441,422,322	30,919,386,376	30,624,413,481	21,425,327,151
257,831,324	362,022,814	505,126,677	271,812,300	94,167,714
77,484,360,321	56,738,624,053	26,757,833,132	93,237,182,261	21,587,021,988
-	-	-	-	-
77,484	56,739	26,758	93,237	21,587
42,680,702,841	30,343,039,710	13,892,934,946	46,999,688,170	10,564,801,596
42,681	30,343	13,893	47,000	10,565
94,063,346,340	95,171,902,057	96,270,386,375	97,328,635,927	32,786,618,728

Estado de Resultados

Ingresos Operacionales

Ingresos

Vigencias Futuras

Total Ingresos Operacionales

Costos Operacionales

Operación Obras adicionales

Operación y Mantenimiento

Interventoría

Mantenimiento Rutinario Obras Adicionales

Total Costos Operacionales

EBITDA **INGRESOS OPERACIONALES- ANTES DE**

Margen EBITDA

Costos no operacionales

Amortizaciones

Total Costos No Operacionales

Utilidad Operacional

Utilidad antes de impuestos

Impuestos

Utilidad Neta

2010	2011	2012	2013	2014
-	-	-	-	-
-	-	19,096,200,000	19,669,086,000	20,259,158,580
-	-	19,096,200,000	19,669,086,000	20,259,158,580
90,000,000	370,800,000	381,924,000	393,381,720	405,183,172
-	-	-	-	-
47,404,445	197,558,288	205,778,201	214,234,181	222,966,685
-	-	4,911,277,415	5,058,615,737	5,210,374,210
137,404,445	568,358,288	5,498,979,616	5,666,231,639	5,838,524,066
-	-	13,597,220,384	14,002,854,361	14,420,634,514
		71.20%	71.19%	71.18%
-	650,790,105	5,165,133,945	6,571,976,392	6,571,976,392
-	650,790,105	5,165,133,945	6,571,976,392	6,571,976,392
-	1,219,148,393	8,432,086,439	7,430,877,969	7,848,658,122
-	1,219,148,393	8,432,086,439	7,430,877,969	7,848,658,122
568,616,503	568,616,503	413,539,275	413,539,275	413,539,275
-	1,787,764,897	8,018,547,164	7,017,338,694	7,435,118,847

2015	2016	2017	2018	2019
-	-	-	-	-
20,866,933,337	21,492,941,338	22,137,729,578	22,801,861,465	23,485,917,309
20,866,933,337	21,492,941,338	22,137,729,578	22,801,861,465	23,485,917,309
417,338,667	429,858,827	442,754,592	456,037,229	469,718,346
-	-	-	-	-
231,949,608	241,229,589	250,762,687	260,928,173	271,441,477
5,366,685,436	5,527,685,999	5,693,516,579	5,864,322,076	6,040,251,739
6,015,973,711	6,198,774,415	6,387,033,858	6,581,287,478	6,781,411,562
14,850,959,626	15,294,166,922	15,750,695,720	16,220,573,987	16,704,505,747
71.17%	71.16%	71.15%	71.14%	71.13%
6,571,976,392	7,092,542,818	10,546,561,591	11,574,038,655	11,574,038,655
6,571,976,392	7,092,542,818	10,546,561,591	11,574,038,655	11,574,038,655
8,278,983,235	8,201,624,104	5,204,134,129	4,646,535,332	5,130,467,092
8,278,983,235	8,201,624,104	5,204,134,129	4,646,535,332	5,130,467,092
413,539,275	413,539,275	413,539,275	413,539,275	799,598,532
7,865,443,959	7,788,084,829	4,790,594,854	4,232,996,057	4,330,868,560

2020	2021	2022	2023	2024
-	78,218,758,924	121,973,906,935	126,829,935,711	132,333,876,189
24,190,494,828	24,916,209,673	25,663,695,963	26,433,606,842	27,226,615,047
24,190,494,828	103,134,968,597	147,637,602,898	153,263,542,553	159,560,491,236
483,809,897	498,324,193	513,273,919	528,672,137	544,532,301
-	23,465,627,677	36,592,172,080	38,048,980,713	39,700,162,857
282,211,472	293,320,346	304,934,767	317,074,839	330,834,690
6,221,459,291	6,408,103,069	6,600,346,162	6,798,356,546	7,002,307,243
6,987,480,660	30,665,375,286	44,010,726,929	45,693,084,236	47,577,837,091
17,203,014,169	72,469,593,311	103,626,875,969	107,570,458,317	111,982,654,145
71.11%	70.27%	70.19%	70.19%	70.18%
11,574,038,655	11,656,951,391	12,207,087,033	20,245,827,930	20,245,827,930
11,574,038,655	11,656,951,391	12,207,087,033	20,245,827,930	20,245,827,930
5,628,975,513	60,812,641,920	91,419,788,936	87,324,630,387	91,736,826,215
5,628,975,513	60,812,641,920	91,419,788,936	87,324,630,387	91,736,826,215
1,834,993,620	26,787,752,491	40,410,904,981	31,186,730,750	30,421,837,241
3,793,981,893	34,024,889,429	51,008,883,955	56,137,899,636	61,314,988,973

2025	2026	2027	2028	2029
138,009,415,446	143,862,493,565	150,027,618,797	156,380,000,356	162,932,828,461
-	-	-	-	-
138,009,415,446	143,862,493,565	150,027,618,797	156,380,000,356	162,932,828,461
560,868,270	577,694,318	595,025,148	612,875,902	631,262,179
41,402,824,634	43,158,748,069	45,008,285,639	46,914,000,107	48,879,848,538
345,023,539	359,656,234	375,069,047	390,950,001	407,332,071
7,212,376,460	7,428,747,754	7,651,610,186	7,881,158,492	8,117,593,247
49,521,092,902	51,524,846,375	53,629,990,020	55,798,984,502	58,036,036,035
88,488,322,544	92,337,647,189	96,397,628,777	100,581,015,854	104,896,792,426
64.12%	64.18%	64.25%	64.32%	64.38%
20,245,827,930	20,341,946,515	20,979,704,503	22,423,717,976	22,423,717,976
20,245,827,930	20,341,946,515	20,979,704,503	22,423,717,976	22,423,717,976
68,242,494,613	71,995,700,674	75,417,924,274	78,157,297,878	82,473,074,449
68,242,494,613	71,995,700,674	75,417,924,274	78,157,297,878	82,473,074,449
16,856,645,796	23,836,850,824	25,403,953,740	26,156,937,085	27,688,844,062
51,385,848,817	48,158,849,850	50,013,970,534	52,000,360,793	54,784,230,388

2030	2031	2032	2033	2034
169,888,866,595	177,047,772,775	184,464,015,505	192,086,483,012	66,648,445,320
-	-	-	-	-
169,888,866,595	177,047,772,775	184,464,015,505	192,086,483,012	66,648,445,320
650,200,044	669,706,046	689,797,227	710,491,144	243,935,293
50,966,659,978	53,114,331,833	55,339,204,651	57,625,944,904	19,994,533,596
424,722,166	442,619,432	461,160,039	480,216,208	166,621,113
8,361,121,044	8,611,954,676	8,870,313,316	9,136,422,715	3,136,838,466
60,402,703,234	62,838,611,986	65,360,475,233	67,953,074,970	23,541,928,468
109,486,163,361	114,209,160,789	119,103,540,272	124,133,408,041	43,106,516,852
64.45%	64.51%	64.57%	64.62%	64.68%
22,423,717,976	22,737,902,143	27,064,737,579	47,015,103,187	40,443,126,796
22,423,717,976	22,737,902,143	27,064,737,579	47,015,103,187	40,443,126,796
87,062,445,385	91,471,258,647	92,038,802,692	77,118,304,854	2,663,390,057
87,062,445,385	91,471,258,647	92,038,802,692	77,118,304,854	2,663,390,057
29,441,422,322	30,919,386,376	30,624,413,481	21,425,327,151	-
57,621,023,062	60,551,872,270	61,414,389,211	55,692,977,703	2,663,390,057

Amortizaciones

IPC

Deflactor 2010

Fin Amortizaciones

Ciclos Mantenimientos

Periodo Amortización Mmnto periódico 2010 - 2030

Periodo Amortización Mmnto periódico 2011 - 2031

Periodo Amortización Mmnto periódico 2012 - 2032

Periodo Amortización Mmnto periódico 2012 - 2032

Periodo Amortización Mmnto periódico inicial 2032

Inversiones (Corrientes)

Inversiones

Mantenimiento Periódico 2010 Adic

Mantenimiento Periódico 2011 Adic

Mantenimiento Periódico 2012 Adic

Mantenimiento Periódico 2013 Adic

Mantenimiento Periódico 2014 Adic

Mantenimiento Periódico 2015 Adic

Mantenimiento Periódico 2016 Adic

Mantenimiento Periódico 2017 Adic

Mantenimiento Periódico 2018 Adic

Mantenimiento Periódico inicial

Total Inversiones

Amortizaciones (Corrientes)

Amortización Inv. 2010

Amortización Inv. 2011

Amortización Inv. 2012

Amortización Inv. 2013

Amortización Inv. 2014

Amortización Inv. 2015

Amortización Inv. 2016

Amortización Inv. 2017

Amortización Inv. 2018

Total Amort. Inversiones

Amortización Mant. 2010 en 2015

Amortización Mant. 2010 en 2020

Amortización Mant. 2010 en 2025

Amortización Mant. 2010 en 2030

Total Amort. Mmntos 2010

Amortización Mant. 2011 en 2016

Amortización Mant. 2011 en 2021

Amortización Mant. 2011 en 2026

Amortización Mant. 2011 en 2031

Total Amort. Mmntos 2011

Amortización Mant. 2012 en 2017

Amortización Mant. 2012 en 2022

Amortización Mant. 2012 en 2027

Amortización Mant. 2012 en 2032

Total Amort. Mmntos 2012

Mantenimiento Periódico inicial en 2022

Mantenimiento Periódico inicial en 2027

Mantenimiento Periódico inicial en 2032

Total Amort. Mmntos iniciales

Total Amortización

	2010	2011	2012
	3%	3%	3%
	1.00	1.03	1.06

2034

5
4
3
2
1
2

	2010	2011	2012
	14,968,172,418	99,315,564,477	29,543,691,382
13,173,344,338	-	-	-
87,406,671,464	-	-	-
26,001,118,154	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
137,939,708,235	-	-	-
	14,968,172,418	99,315,564,477	29,543,691,382

14,968,172,418	-	650,790,105	650,790,105
99,315,564,477	-	-	4,514,343,840
29,543,691,382	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
	-	650,790,105	5,165,133,945

	-	-	-
	-	-	-
	-	-	-
	-	-	-
13,173,344,338	-	-	-

	-	-	-
	-	-	-
	-	-	-
	-	-	-
87,406,671,464	-	-	-

	-	-	-
	-	-	-
	-	-	-
	-	-	-
26,001,118,154	-	-	-

	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	650,790,105	5,165,133,945

2020	2021	2022	2023	2024	2025	2026	2027
3%	3%	3%	3%	3%	3%	3%	3%
1.34	1.38	1.43	1.47	1.51	1.56	1.60	1.65

2020	2021	2022	2023	2024	2025	2026	2027
-	-	-	-	-	-	-	-
3,017,395,812	-	-	-	-	3,497,988,737	-	-
-	20,020,772,074	-	-	-	-	23,209,562,013	-
-	-	5,955,637,613	-	-	-	-	6,904,216,281
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	39,375,452,194	-	-	-	-	45,646,940,893
3,017,395,812	20,020,772,074	45,331,089,808	-	-	3,497,988,737	23,209,562,013	52,551,157,174

650,790,105	650,790,105	650,790,105	650,790,105	650,790,105	650,790,105	650,790,105	650,790,105
4,514,343,840	4,514,343,840	4,514,343,840	4,514,343,840	4,514,343,840	4,514,343,840	4,514,343,840	4,514,343,840
1,406,842,447	1,406,842,447	1,406,842,447	1,406,842,447	1,406,842,447	1,406,842,447	1,406,842,447	1,406,842,447
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
6,571,976,392	6,571,976,392	6,571,976,392	6,571,976,392	6,571,976,392	6,571,976,392	6,571,976,392	6,571,976,392

520,566,427	-	-	-	-	-	-	-
-	603,479,162	603,479,162	603,479,162	603,479,162	603,479,162	-	-
-	-	-	-	-	-	699,597,747	699,597,747
-	-	-	-	-	-	-	-
520,566,427	603,479,162	603,479,162	603,479,162	603,479,162	603,479,162	699,597,747	699,597,747

3,454,018,772	3,454,018,772	-	-	-	-	-	-
-	-	4,004,154,415	4,004,154,415	4,004,154,415	4,004,154,415	4,004,154,415	-
-	-	-	-	-	-	-	4,641,912,403
-	-	-	-	-	-	-	-
3,454,018,772	3,454,018,772	4,004,154,415	4,004,154,415	4,004,154,415	4,004,154,415	4,004,154,415	4,641,912,403

1,027,477,064	1,027,477,064	1,027,477,064	-	-	-	-	-
-	-	-	1,191,127,523	1,191,127,523	1,191,127,523	1,191,127,523	1,191,127,523
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
1,027,477,064	1,027,477,064	1,027,477,064	1,191,127,523	1,191,127,523	1,191,127,523	1,191,127,523	1,191,127,523

-	-	-	7,875,090,439	7,875,090,439	7,875,090,439	7,875,090,439	7,875,090,439
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	7,875,090,439	7,875,090,439	7,875,090,439	7,875,090,439	7,875,090,439

11,574,038,655	11,656,951,391	12,207,087,033	20,245,827,930	20,245,827,930	20,245,827,930	20,341,946,515	20,979,704,503
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2028	2029	2030	2031	2032	2033	2034
3%	3%	3%	3%	3%	3%	3%
1.70	1.75	1.81	1.86	1.92	1.97	2.03

2028	2029	2030	2031	2032	2033	2034
-	-	-	-	-	-	-
-	-	4,055,127,655	-	-	-	-
-	-	-	26,906,243,517	-	-	-
-	-	-	-	8,003,878,938	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	52,917,315,148	-	-
-	-	4,055,127,655	26,906,243,517	60,921,194,086	-	-

650,790,105	650,790,105	650,790,105	650,790,105	650,790,105	650,790,105	-
4,514,343,840	4,514,343,840	4,514,343,840	4,514,343,840	4,514,343,840	4,514,343,840	-
1,406,842,447	1,406,842,447	1,406,842,447	1,406,842,447	1,406,842,447	1,406,842,447	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
6,571,976,392	6,571,976,392	6,571,976,392	6,571,976,392	6,571,976,392	6,571,976,392	-

-	-	-	-	-	-	-
-	-	-	-	-	-	-
699,597,747	699,597,747	699,597,747	-	-	-	-
-	-	-	1,013,781,914	1,013,781,914	1,013,781,914	1,013,781,914
699,597,747	699,597,747	699,597,747	1,013,781,914	1,013,781,914	1,013,781,914	1,013,781,914

-	-	-	-	-	-	-
-	-	-	-	-	-	-
4,641,912,403	4,641,912,403	4,641,912,403	4,641,912,403	-	-	-
-	-	-	-	8,968,747,839	8,968,747,839	8,968,747,839
4,641,912,403	4,641,912,403	4,641,912,403	4,641,912,403	8,968,747,839	8,968,747,839	8,968,747,839

-	-	-	-	-	-	-
-	-	-	-	-	-	-
1,380,843,256	1,380,843,256	1,380,843,256	1,380,843,256	1,380,843,256	-	-
-	-	-	-	-	4,001,939,469	4,001,939,469
1,380,843,256	1,380,843,256	1,380,843,256	1,380,843,256	1,380,843,256	4,001,939,469	4,001,939,469

-	-	-	-	-	-	-
9,129,388,179	9,129,388,179	9,129,388,179	9,129,388,179	9,129,388,179	-	-
-	-	-	-	-	26,458,657,574	26,458,657,574
9,129,388,179	9,129,388,179	9,129,388,179	9,129,388,179	9,129,388,179	26,458,657,574	26,458,657,574

22,423,717,976	22,423,717,976	22,423,717,976	22,737,902,143	27,064,737,579	47,015,103,187	40,443,126,796
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