



Transantiago

Current and future challenges



Gobierno
de Chile

Santiago de Chile, · 23th July 2012

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Ministerio de Transportes y Telecomunicaciones



“ Hace 11 meses
cuando asumí, el
Presidente Sebastián
Piñera me encargó la
misión de devolverle
la dignidad
a los usuarios del
Transantiago”.

Pedro Pablo Errázuriz, Minister.
December 2011.



Since then...

- Parliament supported plan to improve public transport regulation.
- Ministry and Vice ministry closely involved.
- Comprehensive problem-solving approach adopted.
- Multidisciplinary team defined to reach the goals.
- Strategy involving all relevant stakeholder.





- Improve and stabilized the quality of service for users.
Align the expectation, the perception and the real quality.
- Reduce de cost and obtain an efficient industry.
- Stable companies in the long term focused providing a public service.



We are working for **our users**...



...to make their trips more comfortable



...improve their safety

...to give everybody the same opportunities



We are working for **our city**...



...building new infrastructure



We are working for **our city**...



...making it cleaner

Air Pollution 2005 – 2011		
	Reduction Goal	Real Reduction
PM 10	24%	65,1%
NOx	6%	28,2%
CO2		29,3%



...and safer

	2006	2010
Accident Rate per Bus	0,80	0,48





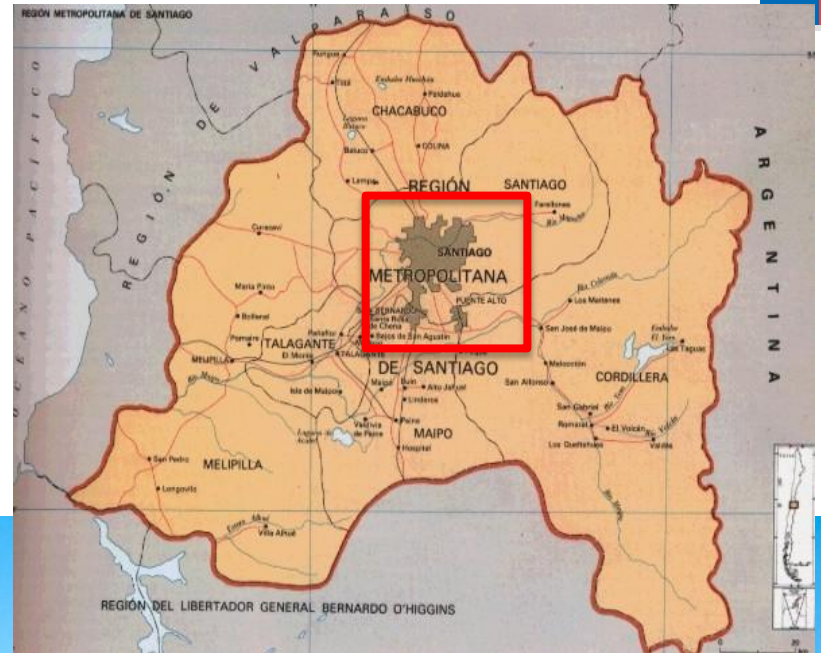
- **Santiago – General view**
- Transantiago – Work in progress
- The coming challenges of Santiago



Santiago and Transantiago

General view

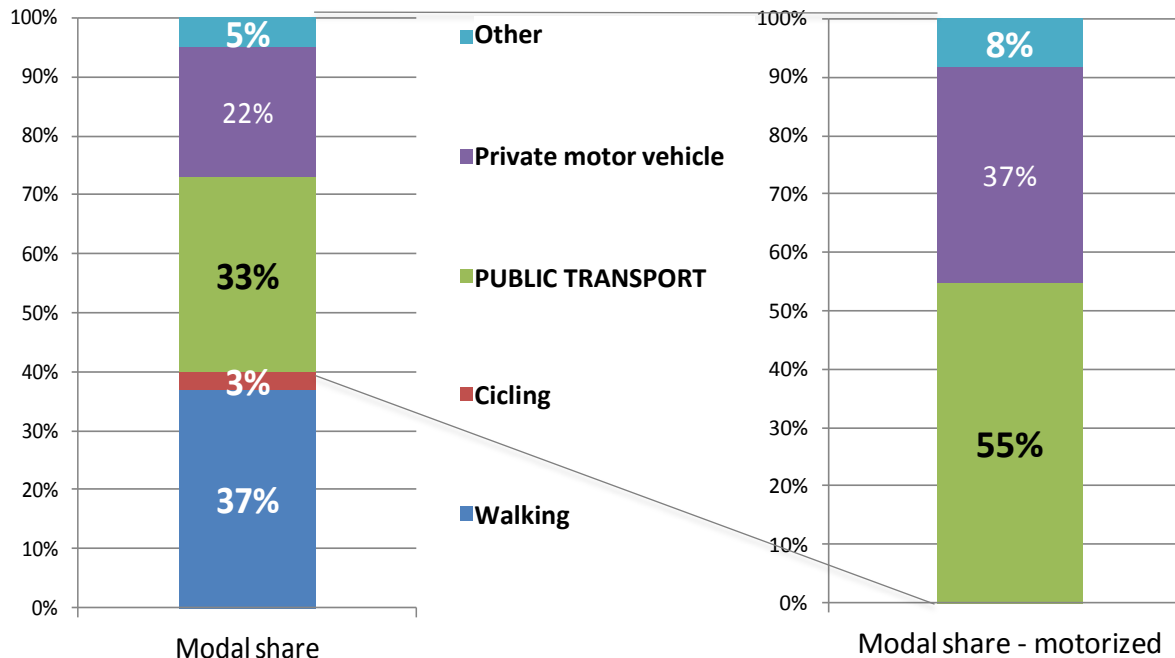
- Population
 - Metropolitan population:
~7 millions
 - Transantiago (Santiago city) :
~6 millions
(i.e. 34 counties from Santiago city, plus San Bernardo and Puente alto counties)
- Area:
 - Metropolitan:
~15.400 km²
 - Transantiago serves:
~2.270 km²



Santiago and Transantiago

General view

- Motor vehicle metropolitan area: ~1.1 millions
- Petrol prices
 - Diesel: 1,3 USD/ltr (4,9 USD/gal)
 - Unleaded: 1,65 USD/ltr (6,2 USD/gal)(CLP\$ 485 per USD @ July 2012)



Source: 2006 Origin-Destination Survey



Transantiago

Demand

**3,6 millions
of daily trips**

(average business day)

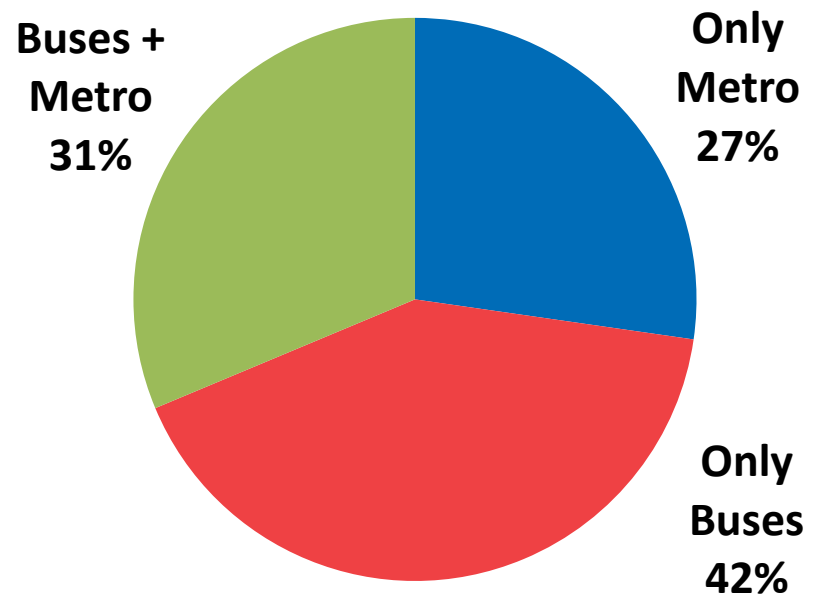
**92 millions
of monthly trips**

(average)

**1.098 millions
of annual trips**

2011 data

Trips by Transport Mode

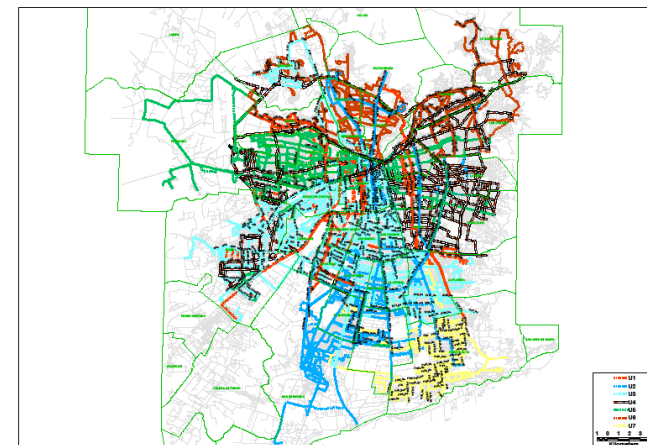


1.56 stages per trip (average)

Transantiago

Supply

- **Metro de Santiago**
 - 5 lines
 - 103 network kilometers
 - 108 metro stations
- **Bus services**
 - ~6.000 buses (morning peak; business day)
 - 365 services / 11.395 kilometers
 - Passenger-kilometer index: 2,65
 - Average speed:
 - 19,7 km/hr (morning peak, business day)
 - 21,9 km/hr (system average)
 - 83.484 business day expeditions (11.603 in morning peak)
 - 11,100 bus stops
 - 129 off-vehicle payment areas
 - 35 Transfer stations
 - 6 modal interchange station



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An integrated public transport system



Transantiago

An integrated public transport system



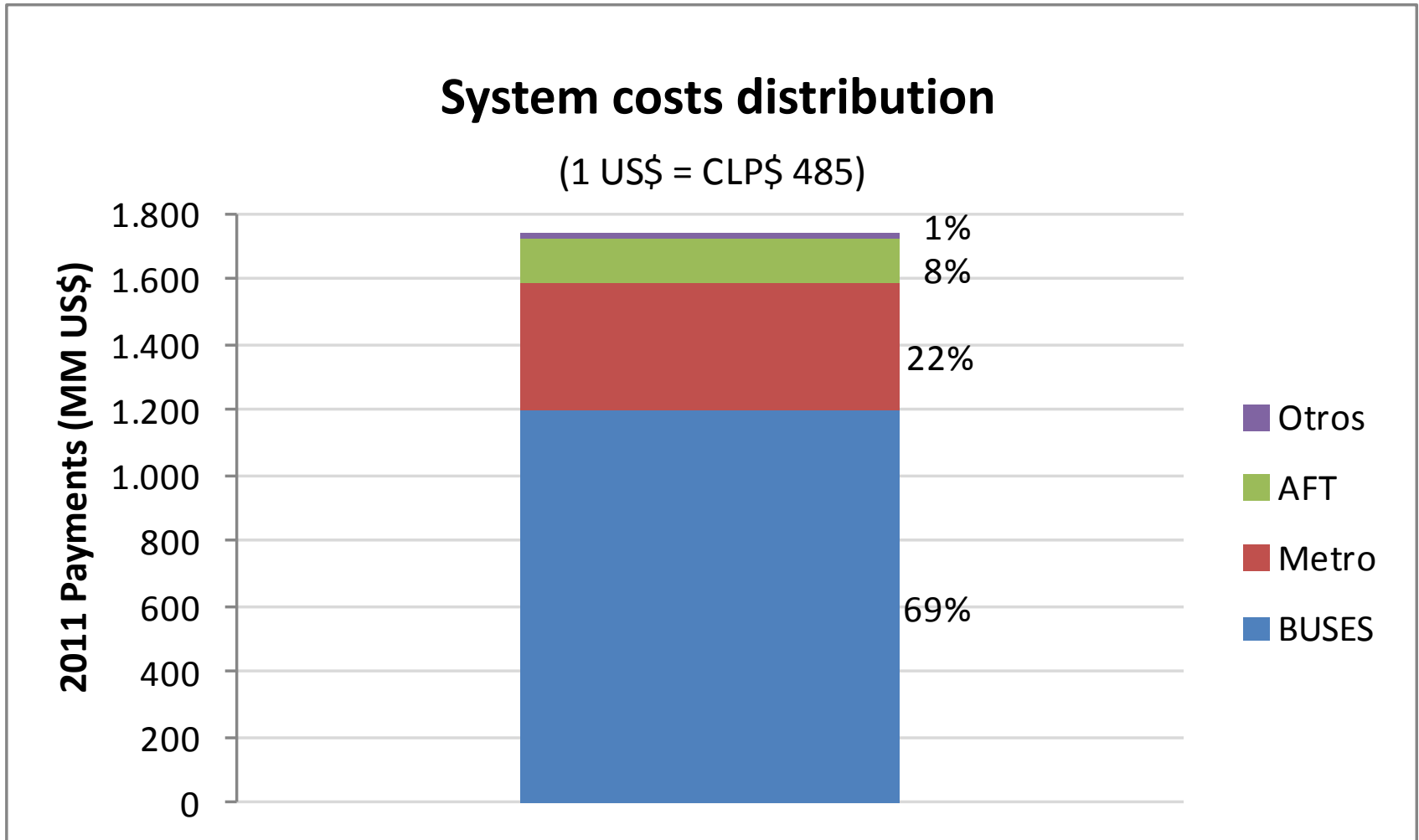
Integrated Fare (July 2012):

- Flat fare for buses: \$ 590 (US\$ 1,2)
- Differential fare for metro
 - \$ 670 (US\$ 1,4) – peak hours
 - \$ 610 (US\$ 1,3) – off-peak hours
- Students pay discounted fare (one third rule)
 - \$ 190 (US\$ 0,4)
- 1 Fare allows 3 stages within 120 minutes.

Tarifas vigentes		
Tarifa Base en Bus \$590		
Horario	Combinaciones	Tarifa con Metro
Hora Punta 07:00 - 08:59 hrs. 18:00 - 19:59 hrs.	\$670 + \$0 + \$0 \$590 + \$80 + \$0 \$590 + \$0 + \$0	\$670 \$590
Hora Valle 06:30 - 06:59 hrs. 09:00 - 17:59 hrs. 20:00 - 20:44 hrs.	\$610 + \$0 + \$0 \$590 + \$20 + \$0 \$590 + \$0 + \$0	\$610 \$590
Hora Baja 06:00 - 06:29 hrs. 20:45 - 23:00 hrs.	\$560 + \$30 + \$0 \$590 + \$0 + \$0 \$560	\$590 \$560

Transantiago

Distribution of System Costs



Santiago and Transantiago

General view

- The complexity of fare level with current distribution of income

Monthly income and the potential spending in public transport

Income deciles (Each decile has 10 per cent of the population)	Average monthly income by house in Santiago Metropolitan Area (USD)* (USD/month)	Average number of people by house (N° personas)	Affordability index** (spending per capita of sixty trips per month (%))
I	323	3.56	85%
II	620	4.25	53%
III	822	4.10	38%
IV	938	3.97	32%
V	1,205	3.72	24%
VI	1,476	3.76	20%
VII	1,856	3.64	15%
VIII	2,315	3.49	12%
IX	3,596	3.21	7%
X	9,107	2.85	2%
Average	2,226	3.57	12%

* Casen 2009. Prices at may'2011. (CLP\$ 485 per USD @ April 2012)

**Carruthers, Dick and Saurkar (2005) Affordability of Public Transport in Developing Countries. Current average spending for 60 trips is \$37,200 or 77 USD.

AGENDA



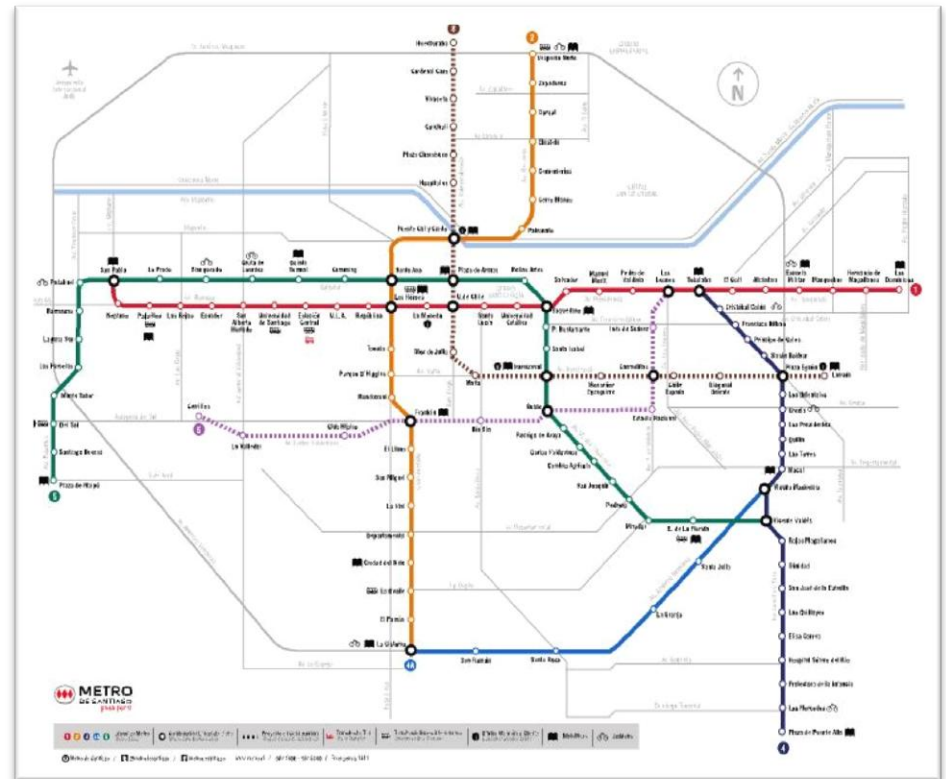
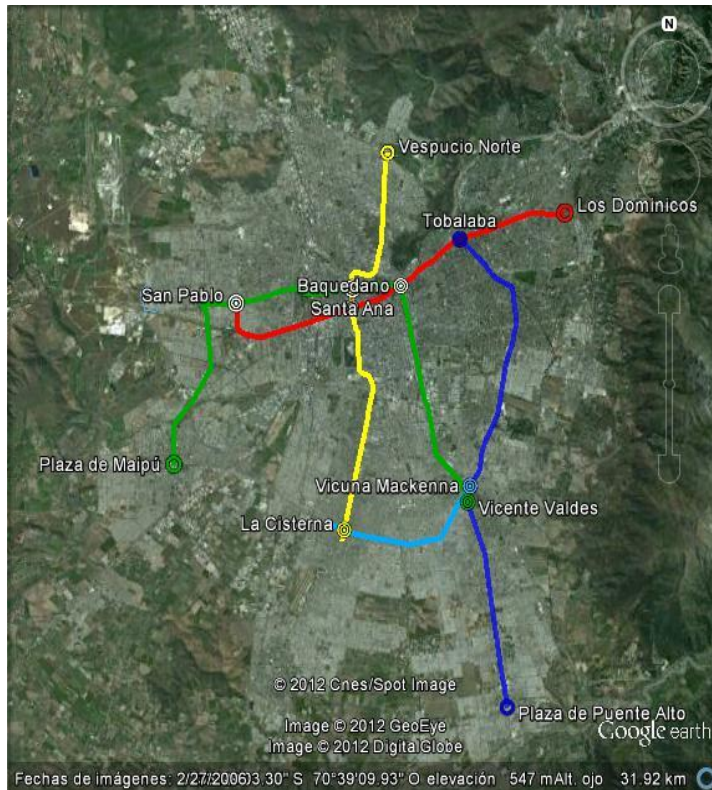
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Transantiago

Original design (2007-2011)

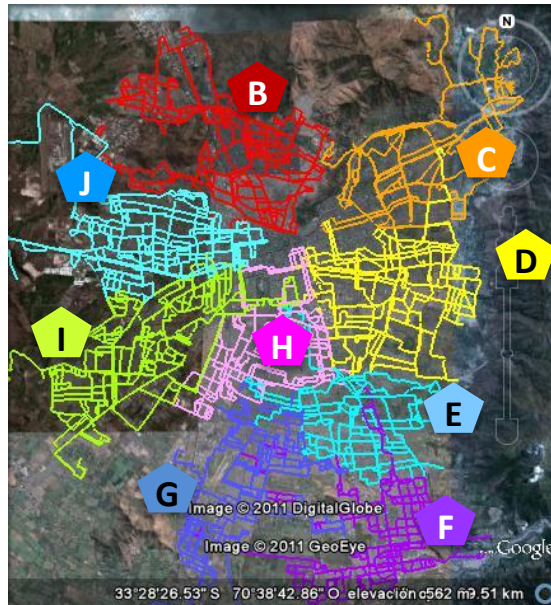
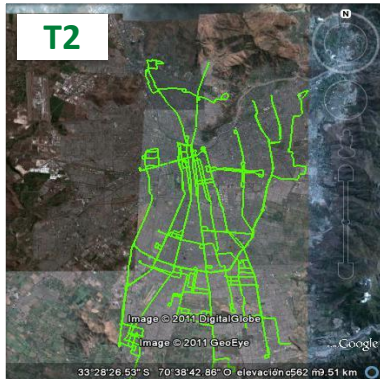
- Trunks: Metro network and 5 units of bus services
- Feeders: 9 geographical areas (agregation of 36 counties)

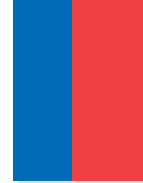


Transantiago

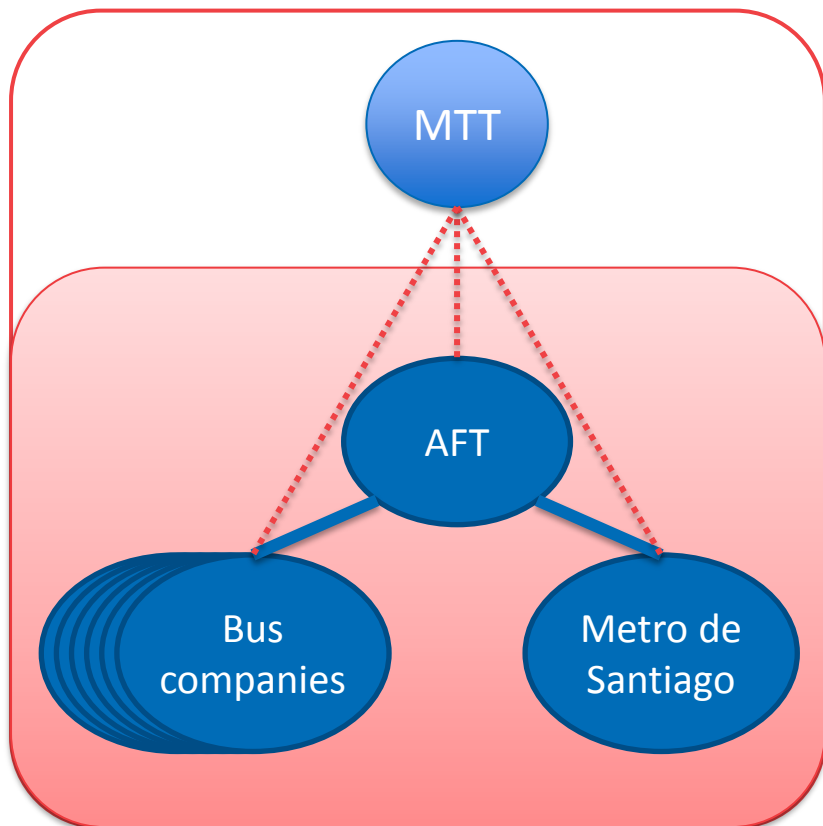
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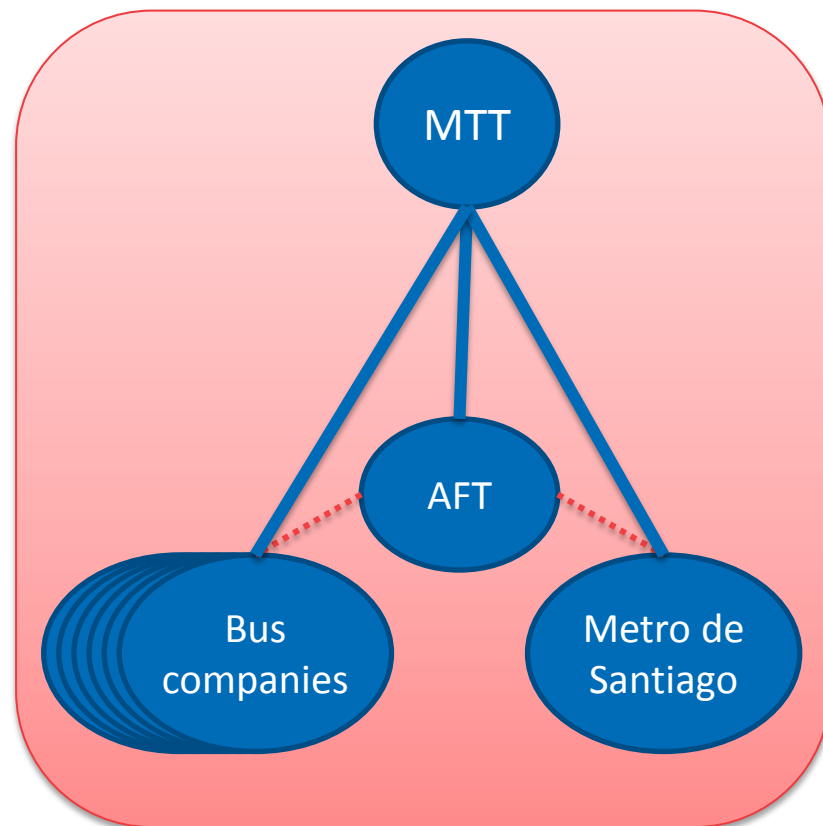




Original



Target

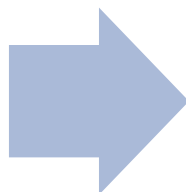


Exclusive concession



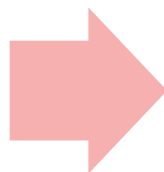
Preferential concession

Based on *trunk-feeder* (rigid definition of interchange)



Based on specific services as result of demand characteristic and offer required over time

Focused in operational plan as service quality



Focused in **user experience** as quality of service measure

Income of operators coming from rigid plan and performance of operational plan



Income comes from ridership but also from marginal operational cost of fleet

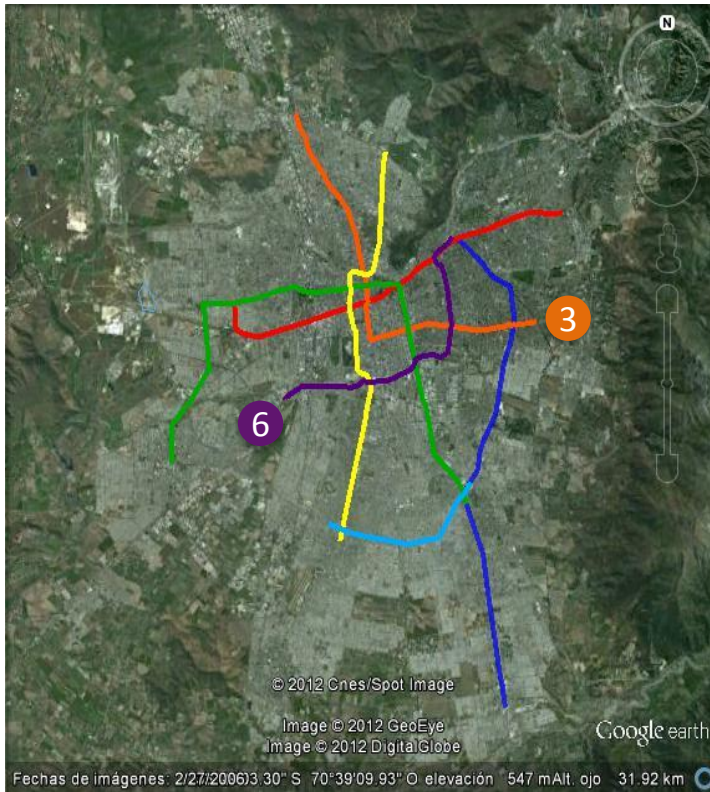
A new *Regulatory Framework* - bus companies



Transantiago redesign

Current scenario for Metro (2012-2018)

- The construction of two new lines will take 7 years to be completed:
 - Line 6 in operation at the end of 2016.
 - Line 3 will start during 2017 and fully operational at the end of 2018.



Transantiago

Result after negotiation with bus operators

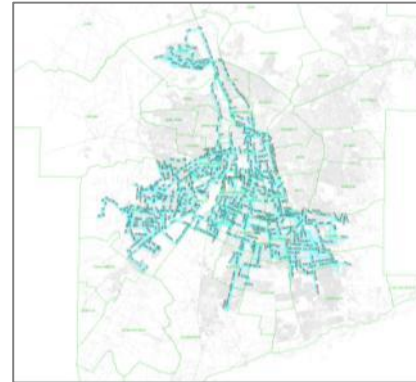
- 7 different bus operators units



UN1: ex T1
Company: Alsacia
Exp.: Oct'2018



UN2: ex T2 + G
Company: SuBus
Exp.: Aug'2020



UN3: ex T3 + E + H + I
Company: Buses Vule
Exp.: Nov'2021



UN4: ex T4 + D
Company: Express
Exp.: Oct'2018



UN5: ex T5 + J
Company: B. Metropolitana
Exp.: Oct'2018



UN6: B + C
Company: RedBus
Exp.: May'2015



UN7: F
Company: STP
Exp.: May'2015

AGENDA



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The upcoming challenges for Transantiago



- Short term goals (2012)
 - Improve quality of service for users.
 - Identify the “quick wins” (infrastructure, user information).
 - Align expectations (perception vs. reality).
 - Address a long term and well structured subsidy by recognizing income levels.
- Medium and long term challenges
 - Establish a public transport long term planning
 - Handle the full integration of Metrotren commuter rail (2013)
 - Handle the implementation of the new two Metro lines (2016 to 2017)



Quality challenges

Improve quality of service and recover user's confidence

- Achieve better performance levels in bus operation (frequency and regularity)
- Improve the quality of vehicles and their comfort
- Improve the quality of service at bus stops and interchanges areas



Infrastructure challenges

Identify the right projects

- **Infrastructure Master Plan:** Budget of US\$ 284 million for 2012 (2012-2013):
 - 50 km. of red bus lanes.
 - 3.000 solar powered bus stops
 - Renovation of 7.000 bus stops
 - Renovation of 129 off vehicle payment areas
 - Construction of 67 km of corridors





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