

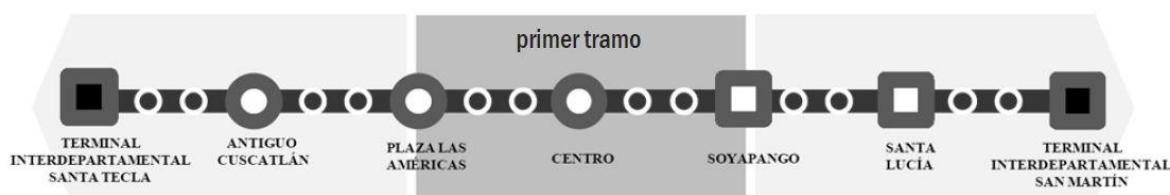
## Annex B The SITRAMSS BRT in San Salvador

The Master Plan for the AMSS Public Transport System<sup>1</sup> is the result of a long-term process by VMT with financial support from the Inter-American Development Bank (IDB) and the Salvadoran Fund for Pre-investment Studies (FOSEP) that started in the 1990s. Based on an analysis of the existing transport system, it was concluded that a hierarchization of transport would be the most adequate approach, built upon the construction of a mass transport solution in the form of a Bus Rapid Transit (BRT).<sup>2</sup> In response a primary road network was laid out consisting of 7 main corridors.

According to the ITDP<sup>3</sup> (2010) the BRT is “a system based on high-quality buses providing urban mobility which is fast, comfortable and with a favorable cost-benefit ratio, by means of a dedicated, exclusive infrastructure, fast and frequent operations and excellence in marketing and customer service”. The BRT is an operational model that requires feeders towards and from the main corridors. The American Public Transport Association (APTA) defines the following basic features for a BRT system: (i) central lane for bus transport; (ii) exclusive circulation for buses; (iii) optimization of road intersections; (iv) ticket validation outside the buses; and (v) levelized platform for fast bus access.

The BRT is most effective for passenger rates between 10,000 and 30,000 per hour and shows investment (CAPEX) levels of less than 5% of a subterranean metro system. BRTs have been adopted by 67 cities in Latin America and transport over 20 million people per day over almost 1,800 km of dedicated lanes.

Based on a comparative evaluation of the seven main arteries in the Master Plan, a first corridor for SITRAMSS was selected being the east-west connection between Santa Tecla and San Martín. This stretch was divided into two phases (T I; and T II/T III) as in the next figure (T I is the depicted grey area).



In 2013 a start was made with the first phase to demonstrate the BRT and generate direct impact. The criteria for selection of T I are the following:

- 1) It is the stretch with highest user demand along the corridor, as concluded from the previous studies;
- 2) It serves the areas of Soyapango and central San Salvador, which is one of the most densely populated areas in the AMSS, and it links important origins and destinations of user journeys;
- 3) The majority of existing transport services in the city connect with T I in the central area allowing easy transfers;
- 4) Implementation of SITRAMSS in T I articulates with the programme for improvement and revitalization of the City Center as pursued by the central Government and the Municipality;
- 5) A detailed technical study of this part of the corridor and the necessary interventions was already available;
- 6) An area had been identified for constructing the Soyapango terminal; and:
- 7) The interventions along the corridor in T I were considered as least interruptive in terms of expropriation of land and civil works in the road infrastructure, allowing for a more expedite implementation process.

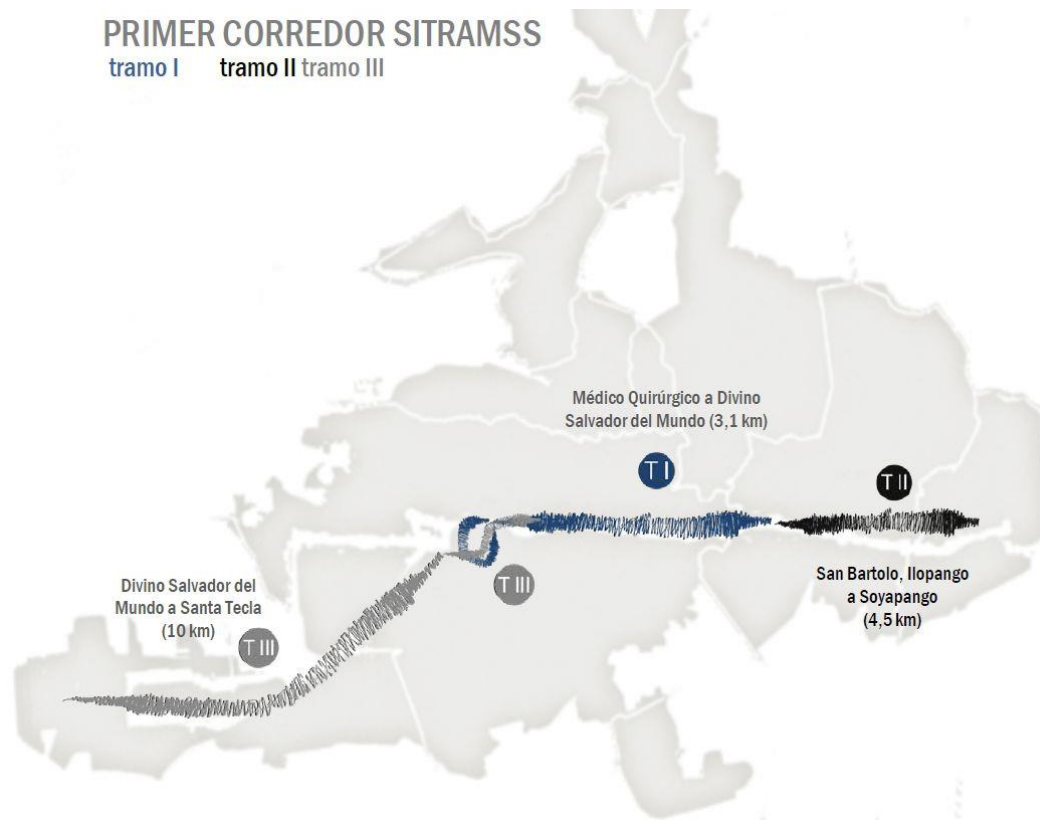
Based on these criteria, T I was identified for immediate implementation as the stretch running from the *Plaza las Américas (Monumento a El Salvador del Mundo)* to the Soyapango terminal. The infrastructure encompasses an exclusive bus lane, bus stations, bus terminal with docks, and maintenance work shops. The 7 bus stops measure 24 meter, 18m for boarding the bus plus 6m for the entry/exit area hosting the ticketing machines and

<sup>1</sup> Red Maestra del Sistema de Transporte Público del AMSS.

<sup>2</sup> Banco Interamericano de Desarrollo - SITRAMSS, Mejorando el transporte público del Área Metropolitana de San Salvador. Miroslava Nevo Isabel Granada Paola Ortiz (2014), p.26 ff.

<sup>3</sup> See: <https://www.itdp.org/library/standards-and-guides/the-bus-rapid-transit-standard/>

entrance gates (tourniquets). The Soyapango terminal involves a 15,000 m<sup>2</sup> are along Avenida Rosario Sur next to the *Centro Comercial Plaza Soyapango*. Construction of T I was started in June 2013 financed through a loan from the IDB “Programa de Transporte del Área Metropolitana de San Salvador-Tramo II (ES-L1050/2752/OC-ES)”; the SITRAMSS started operations in January 2015.



The operation of the system is based on the gradual replacement of existing conventional bus routes for a structured service following the hierarchization: main, auxiliary, feeder, and secondary<sup>4</sup>. Tariff integration is one of the pillars allowing the co-existence and complementarity of the different services. Payment will be through a rechargeable electronic card (SUBES).

The following table provides key data for the various stages of the first Corridor.

SITRAMSS – IMPLEMENTATION STAGES OF FIRST CORRIDOR		
	T1 (implemented)	T II, T III (to be implemented)
Extension	6.5 km	17.5 km
Terminal	Soyapango	San Bartolo, Santa Tecla
Bus stops	7	22
Investment	US\$ 45.5M	US\$ 85M
Demand	75,000 pp/day	523,000 pp/day
Tariff	US\$ 0.33	US\$ 0.33

The stages T II and T III include 22 bus stops, two terminals, two maintenance and repair areas and a large modal transport node in the vicinity of the Divino Salvador del Mundo. The new infrastructure will be complemented with three auxiliary routes integrated into the SITRAMSS tariff system and feeding the main corridor. Based on an updated transport plan by VMT in 2014, the completed first corridor with feeders will encompass a projected total of 523,000 trips per day, equivalent to 32% of the total currently generated in public transport in the AMSS.

<sup>4</sup> In Spanish: *troncal, auxiliar, alimentador y remanente*.