Project Overview

This road corridor plays a crucial role in national development, as it is part of the E35 State Road Network, which is a very fluid road. This is based on the high number of users that travel along this road corridor, coming from several of the provinces of Ecuador. It is also a road that connects the provinces of Loja, Zamora Chinchipe and El Oro, with a permanent and constantly growing flow of traffic, especially heavy transport that moves agricultural products and materials for mining activities. The length of this road is 36.50 kilometers and is aligned with the "Plan Estratégico de Movilidad PEM 2013-2037" (Strategic Mobility Plan 2013-2037).

The wearing course is currently in fair condition, which makes vehicular traffic slow and dangerous. This problem may be exacerbated by the fact that the current asphalt surface of the road corridor has an average thickness of 20 cm and cracks have been observed. The current geometric characteristics of the road pose challenges not only in terms of capacity and level of service, but also in terms of safety. This road has only two lanes (one in each direction), with a winding layout that generates high traffic congestion and delays for users.

Project Type

Brownfield

Fundamental Criteria

Priority project duly aligned with the objective, policy and goal of the National Development Plan and sectoral-level strategic plan.

Delegating Entity: Ministry of Transportation and Public Works.

Delegation and Compensation Model

- •Public-Private Partnership (PPP).
- •User-pays.

Beneficiaries

Located in the area of affluence:

- Direct Beneficiaries: 285,268 inhabitants.
- •Indirect Beneficiaries: 485,421 inhabitants.
- •Induced Beneficiaries: 13,836 inhabitants.

Environmental Benefits

- Reduction of Emissions.
- •Reduction in the use of non-renewable resources.
- •Minimization of Impacts on Sensitive Ecosystems.

Components

Widening of the road to 4 lanes and construction of a tunnel.

Alternative 2

- Total widening of the road to 4 lanes.

START: Abscissa: 0+000, East (longitude): 699,308.789, North (latitude):

END: Abscissa: 36+500, East (longitude): 681.384,187, North (latitude): 9.558.177,277.

Current project status

- · Phase: Structuring.
- · Registration in Source: 04/06/2024.

Infrastructure Type

Socioeconomic Information

Positive Impacts of the Project:

- * Improved road safety.
- * Reduced vehicle maintenance costs.
- * Improved transportation efficiency. * Promoting economic development.
- * Access to essential services.
- * Local infrastructure development.
- * Increased property values. * Improved access to emergency services.
- * Reduced congestion.
- * Reduced vehicular wear and tear.

Potential jobs generated

6.759 aprox.

Potential Demand *Annual Average Daily Traffic (A

Year	AADT PROJECTED FOR 30 YEARS
2013	5.886
2023	11.331
2033	18.078
2042	27.951

Comparative analysis of alternatives

Detail	Alternative 1	Alternative 2
Advantages	Reduced travel time by reducing its length by 7 km and lower maintenance costs. Road safety by having 2 lanes in each direction that allows passing in a correct manner.	Lower cost and construction time due to better complexity, less state contribution and environmental impact, road safety due to having two lanes in each direction.
Disadvantages	Increased state contribution and environmental impact.	Increased travel time and maintenance costs
Preliminary Decision Justification	Increased resources from the State. It is proposed in the case of prioritizing the reduction of travel times.	It is proposed as a result of the pre-feasibility studies according to the Geometric Design Standard for Roads 2003. Geometric Design of Highways 2003. This alternative based on the AADT, the CAPEX cost optimizes the project costs and the OPEX in order to determine a socially acceptable toll rate.

Suggestion: The Delegated Entity concludes that Alternative No. 2 is the alternative that best meets the project objectives and selection criteria.

Financial information

Alternative 1		Alternative 2	
CAPEX (Reference)	\$ 252'382.300,92 millons.	CAPEX (Reference)	\$ 169′156.261,04 millons.
OPEX (Reference)	\$ 85'577.184,29 millons.	OPEX (Reference)	\$ 162'186.743,02 millons.
Project Value	\$ 337'959.485,21 millons.	Project Value	\$ 331'343.004,06 millons.

[•] NOTE: It is important to point out that the investment amounts shown in the different alternatives are referential, since they come from the initial screening report. These amounts will be updated as the phases of the PPP cycle progress, i.e., prefeasibility and feasibility, respectively.

Implementation time in years (reference)

Alternative 1	Alternative 2	
CAPEX: 6 years	CAPEX: 4 years	
OPEX: 24 years	OPEX: 26 years	

Location

Province: Loja **Cantons:**

Loja and Catamayo





