



PROJECT: “DESIGN, FINANCING, CONSTRUCTION, OPERATION AND MAINTENANCE OF THE PIFO - ‘Y’ DE BAEZA ROAD CORRIDOR”

PIFO - “Y” DE BAEZA

Project Overview

This road corridor plays a crucial role in national development, as it is part of the E20 axis, which constitutes a route with high traffic flow in the State Road Network. Additionally, it is a roadway that connects the provinces of Pichincha and Napo, with a permanent and constantly growing traffic flow, especially of heavy transport that moves essential goods. The approximate length of the Pifo - ‘Y’ de Baeza road corridor is 76.4 kilometers.

Along the road, deteriorations can be observed, such as longitudinal cracking, potholes, constant landslides, deformations, and cracking of the pavement. The mentioned deteriorations may have occurred due to the movement of masses from the slopes and the infiltration of water resulting from rainfall. Intense rainfall has been evidenced along the road corridor; this climatic condition influences water infiltration into the soil, and erosion weakens the upper layers of soil and the structure of the road, causing deterioration. This manifests in constant landslides that primarily affect the adjacent slopes and the loss of pavement structure.

Likewise, at the provincial boundary between Pichincha and Napo, snowfall has been observed, affecting the safety of road users, conditions that are worsened by the inadequate presence of proper vertical and horizontal signage. This has resulted in increased travel times.

Project Type

Brownfield.

Fundamental Criteria

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

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: 2'686,194 inhabitants.
- \* Indirect Beneficiaries: 3'221,148 inhabitants.
- \* Induced Beneficiaries: 7,561 inhabitants.

Environmental Benefits

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

Components

Alternatives 1.  
- Rehabilitation of the 4-lane Pifo-Papallacta section and widening to flexible pavement, from 2 to 4 lanes, Papallacta-Baeza section.

Alternatives 2.  
- Rehabilitation of the 4-lane Pifo-Papallacta section and widening to rigid pavement from 2 to 4 lanes, Papallacta-Baeza section.

\*(km 0+000 at the beginning of E20 and ends at km 76+400).

START: Abscissa: 0+000, East (longitude): 797,130.10, North (latitude): 9,973,423.60.  
END: Abscissa: 76+400, East (longitude): 176,682.90, North (latitude): 9,948,892.80.

Current project status

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

Infrastructure Type

Road.

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.

Project Information

Potential jobs generated

3.780 aprox.

Potential Demand - Studies 2021

Based on the available information from the MTOP from a study conducted in 2021:

Year	2021	2023	2030	2035	2040	2045	2051
Section: Pifo - Papallacta	12.148	12.875	15.781	18.267	21.159	24.505	29.227

\*Growth rate: 2,98%.

Comparative analysis of alternatives

Detail	Alternative 1	Alternative 2
Advantages	Lower investment costs, construction time, travel time, higher capacity and road safety.	Lower operating costs, environmental impact, reduced travel time, increased capacity and road safety.
Disadvantages	Higher operating costs.	Higher investment cost and construction time.
Preliminary Decision Justification	Alternative 1 proposes to widen the road if studies show that traffic meets the 2003 Roadway Geometric Design Standard, with more than 8,000 vehicles. This would ensure road safety and optimal travel times. The proposed CAPEX alternative optimizes project costs, which will allow optimizing OPEX costs in order to determine a socially acceptable toll rate.	In this alternative, the participation of state contributions is higher than that foreseen in alternative 1.

- Suggestion: The Delegated Entity concludes that Alternative No. 1 is the alternative that best meets the project objectives and selection criteria.

Financial information

Alternativa 1		Alternativa 2	
CAPEX (Reference)	\$ 73'032.713 millions.	CAPEX (Reference)	\$ 89'191.212 millions.
OPEX (Reference)	\$ 115'985.210,40 millions.	OPEX (Reference)	\$ 98'352.212,40 millions.
Project Value	\$ 188'017.923 millions.	Project Value	\$ 187'543.424,40 millions.

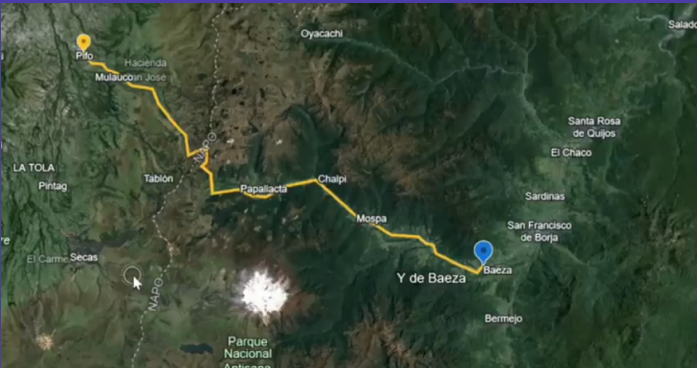
- NOTE: It is important to point out that the investment amounts shown in the different alternatives are referential, since they come from the initial screening report. These amounts will be updated as the phases of the PPP cycle progress, i.e., prefeasibility and feasibility, respectively.

Implementation time in years (reference)

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

Location

Provinces:
Pichincha and Napo.
Cantons:
Quito and Quijos.



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