



ITF-OECD Round Table on
*“Improving the Practice of Cost-
Benefit Analysis in Transport”*

SHCP

**THE PRACTICE OF COST BENEFIT
ANALYSIS IN THE TRANSPORT
SECTOR**

MEXICO PERSPECTIVE

Vladimir Ramirez Soberanis
Unidad de Inversiones
SHCP

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I. Institutional Framework



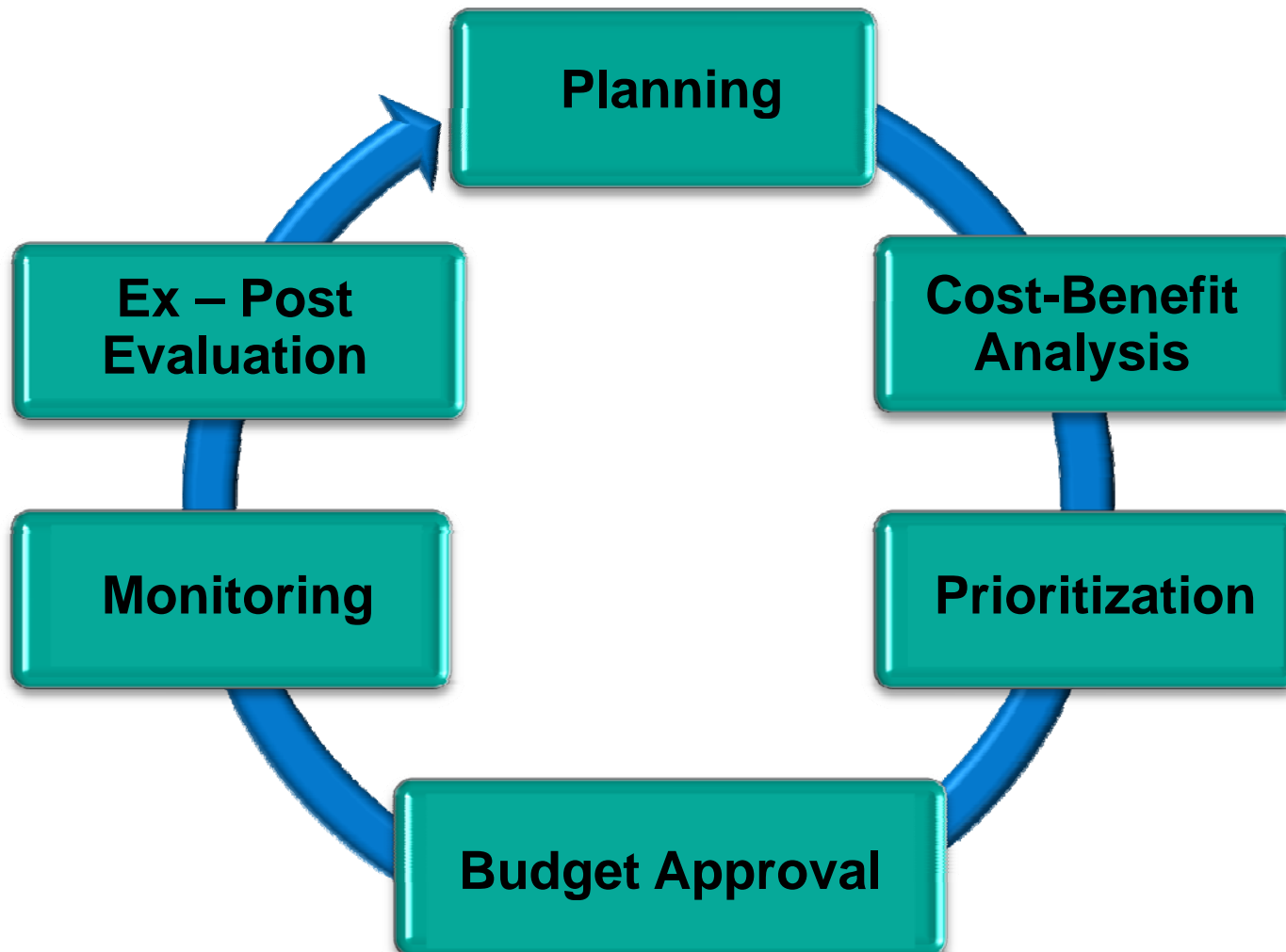
- The purpose of the Institutional framework is to strengthen the process of planning, selection and prioritization of investment projects.
- Prerequisites for federal investments:
 - i. Federal entities must present a planning document with priority investment needs
 - ii. Present cost – benefit analysis
 - iii. Obtain the project approval in the Investment Portfolio
 - iv. The Inter-ministerial Commission for Financing and Expenditure (CIGFD) will analyze and determine the projects prioritization for their inclusion in the draft budget of expenditure

II. Institutional Framework

Stages of the Public Investment Process



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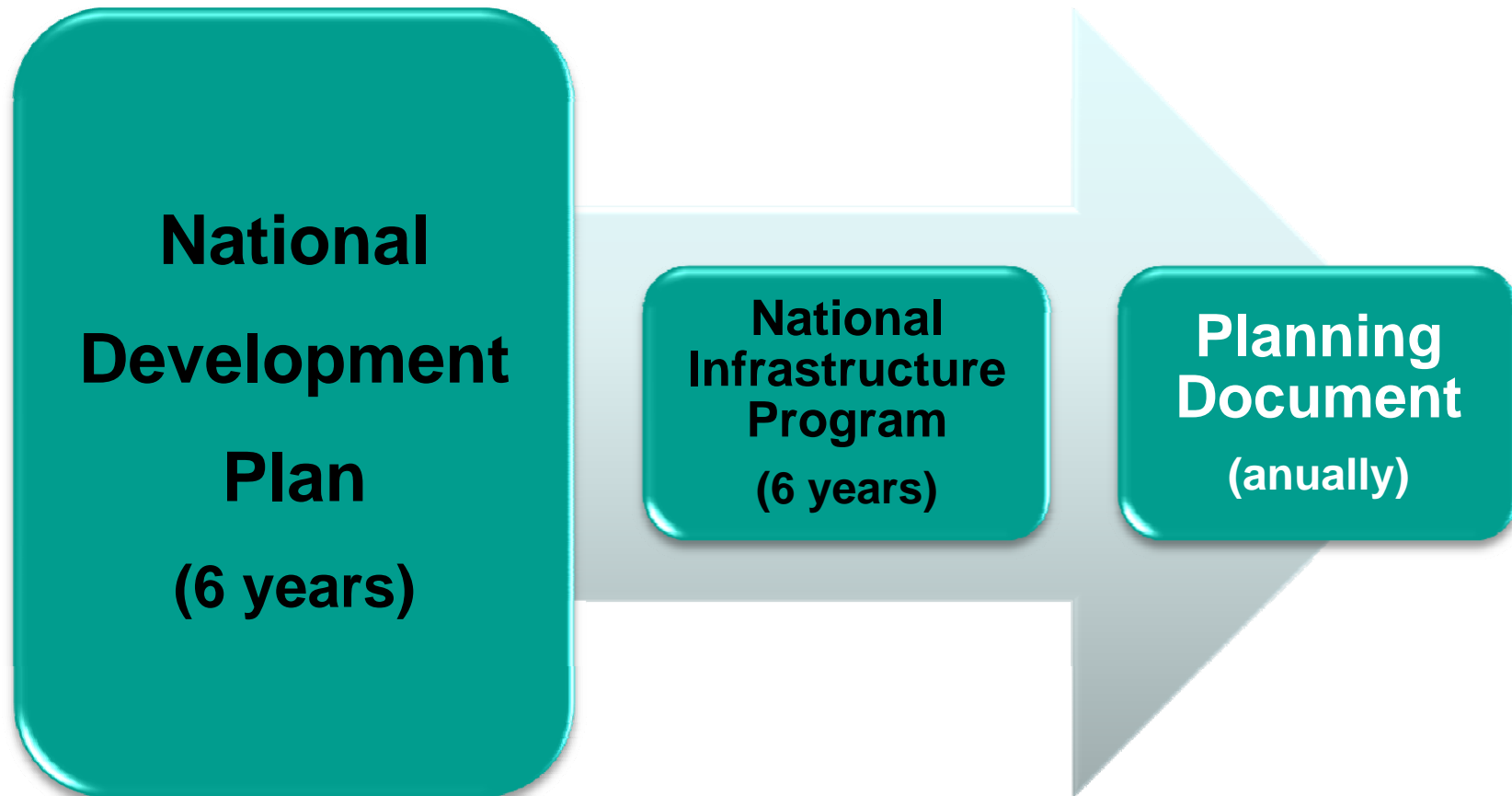


1. Planning

Planning Tools



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2. Cost - Benefit Analysis



- Clear guidelines and parameters for the evaluation of costs and benefits. In order to promote the same process for all projects there is a general methodology that helps in the evaluation and selection of projects with high social return.
- An independent expert opinion. For projects which investment amount is greater than 500 million pesos (approximately 50 million dollars).
- Training Center for the Preparation and Evaluation of Projects (CEPEP). It is the think tank of the UI.
- Investment Portfolio System. It is a bank of projects that demonstrates, through a cost benefit analysis, high social return.
- Transparency. The Investment Portfolio System is available in the SHCP web page:

(http://www.apartados.hacienda.gob.mx/sistema_cartera_inversion/index.html)

Priorization - Programming and Budgeting - Monitoring and Ex-Post Evaluation



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3. Priorization

- The Inter-ministerial Commission for Financing and Expenditure (CIGFD) will analyze and determine the projects prioritization for their inclusion in the draft budget of expenditure.

4. Programming and Budgeting

- Federal Expenditure Budget and Investment Portfolio System are linked at this stage.

5. Monitoring and Ex- Post Evaluation

- Seeks to monitor the development of the project, checking that ex – ante estimated benefits are actually attained.

III. The role of Cost – Benefit Analysis in decision-making process

- Is the most important instrument used by the government in decision-making process.
- CBA allows homogenizing criteria in the evaluation of projects and promote transparency and certainty.
- By law, all federal investment projects have the obligation to:
 - i) Present a Cost – Benefit Analysis
 - ii) Have the UI approval (registration code)
 - iii) Be included in the investment portfolio
- In order to execute a project is necessary to demonstrate through a CBA that this project has high social return.



IV. Key elements of Cost – Benefit Analysis

- The depth of the analysis depends on the investment amount.



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Type of CBA Millions of Dollars (MD)			
Type Level	Technical notes (Idea and Project Definition level)	CBA (Pre-feasibility level)	CBA (Feasibility level)
Infrastructure Project	< 5 MD	< 50 MD	> 50 MD
Maintenance Project	< 15 MD	< 50 MD	> 50 MD

Process of a CBA



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- Identify a need or problem



- Review if it is possible to improve the current situation



- Propose alternative solutions



- Evaluate alternatives and improved current situation

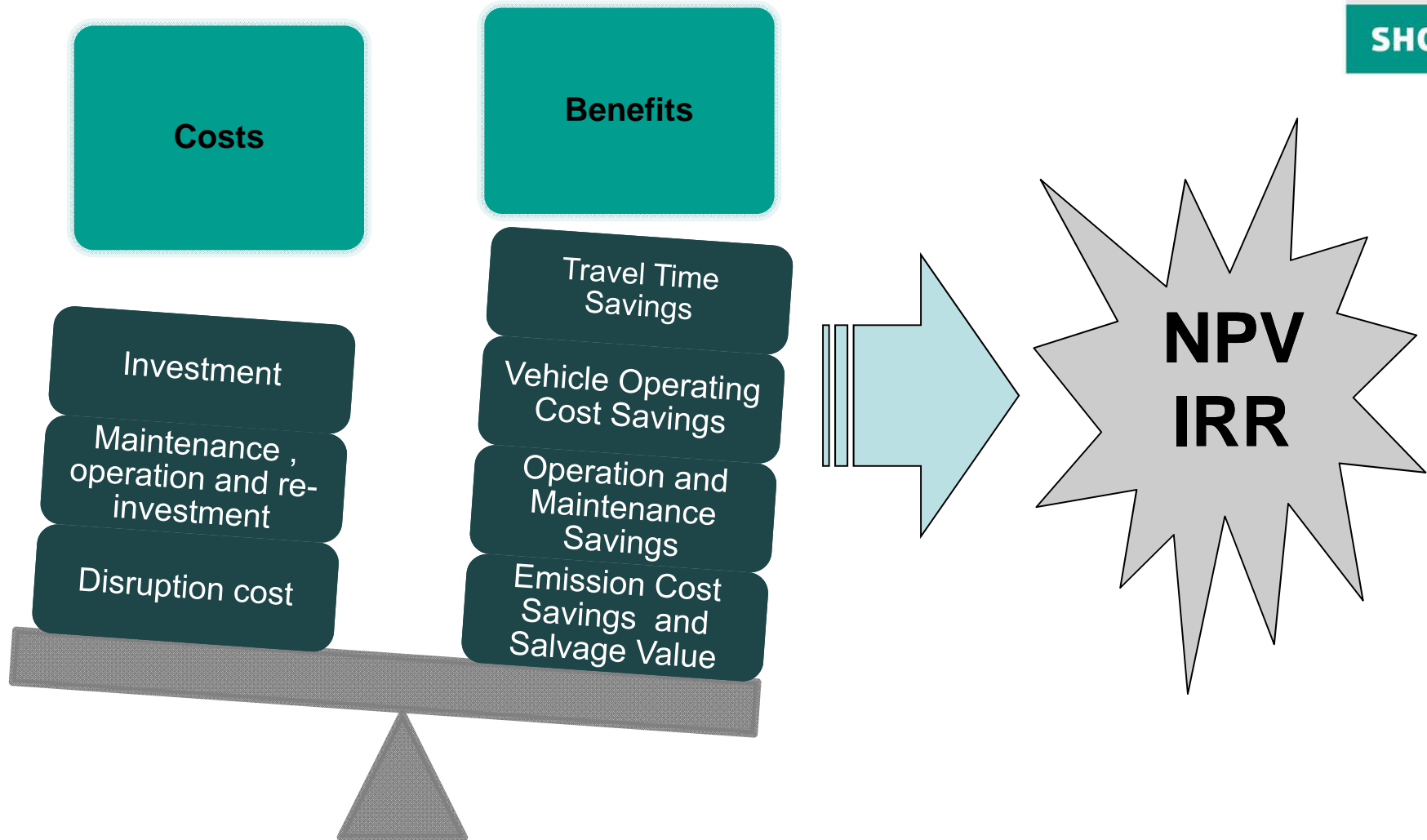


- Apply a decision criterion to choose the best option

Transport Evaluation



- Costs, Benefits and Indicators



Transport Evaluation



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- Structure of a CBA

- 1 • Executive Summary
- 2 • The “No Project scenario” and alternatives analysis
- 3 • Project Description
- 4 • Project Scenario
- 5 • Project Evaluation
- 6 • Sensitivity and Risk Analysis
- 7 • Recommendations.

Specific Methodology

We have specific methodologies to facilitate and promote transparency and uniform criteria to evaluate the CBA, which are:

- Highways
- Rural Roads
- Railway projects
- Massive Transport Projects



Methodology for Massive Transport Systems



Some elements analyzed in this type of evaluation are:

- **Supply (Characteristics of the Transport System)**
 - a) Number and total capacity of all transport modes
 - b) Existing routes that provide the service (distance, number of lanes, etc.)
 - c) Travel time by route, and traffic light system's description
 - d) Number of stops, their location and the distance between them
 - e) Frequency of transport by congestion Schedule (high, medium and low)

- **Demand**
 - a) Origin and destination of passengers
 - b) Classification of passengers by travel's motivation
 - c) Amount of user's time
 - d) Estimated average number of passengers up and down daily and the distance
 - e) Traveled by the time of congestion (high, medium and low)
 - f) Average occupancy rate of each transport mode by congestion schedule.

...

Methodology for Massive Transport Systems



Some elements analyzed in this type of evaluation are:

- **Supply and Demand Interaction (Identify the Problem)**
 - a) Higher transport costs
 - b) High operation and maintenance cost
 - c) Inefficient transport system's operation

- **Benefit identification**
 - a) Benefits for a shorter travel time (users and no users)
 - b) Benefits for the reduction of pollutant emissions to the environment (intangible)
 - c) Reduced operating and maintenance costs
 - d) Earnings per release of resources
 - e) Salvage value at the end of project evaluation horizon.

V. Potential development of project assessment procedures



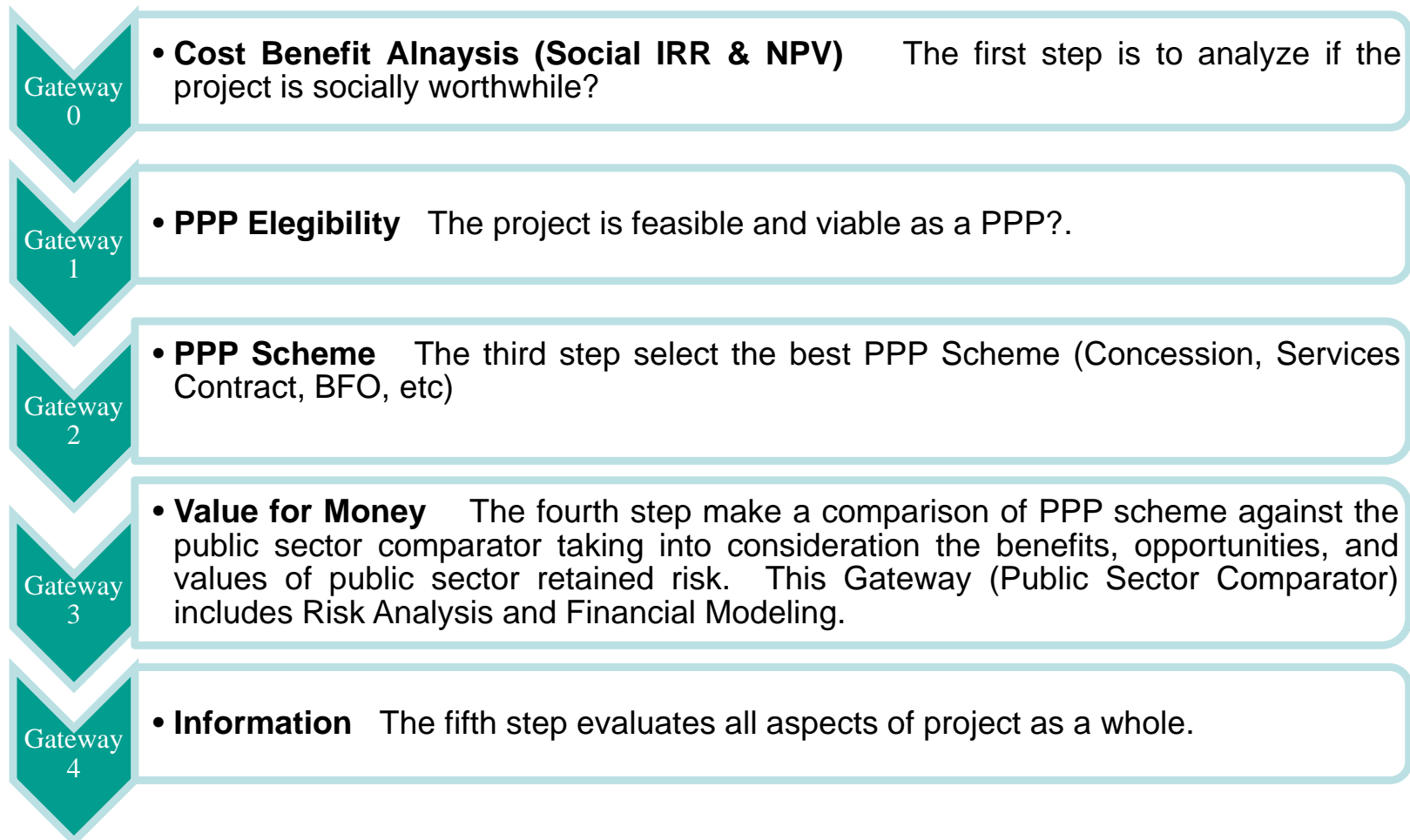
In order to improve the quality of public investment, the UI:

- Will play a more active role (conception and definition)
- Will focus more deeply into risk analysis
- Will determine the best financing scheme (pure federal expenditure or PPP)
- Is working on 3 new approaches to evaluate a PPP project:
 - a) Gateway process review
 - b) Eligibility index for PPP's
 - c) A new methodology for the whole investment cycle

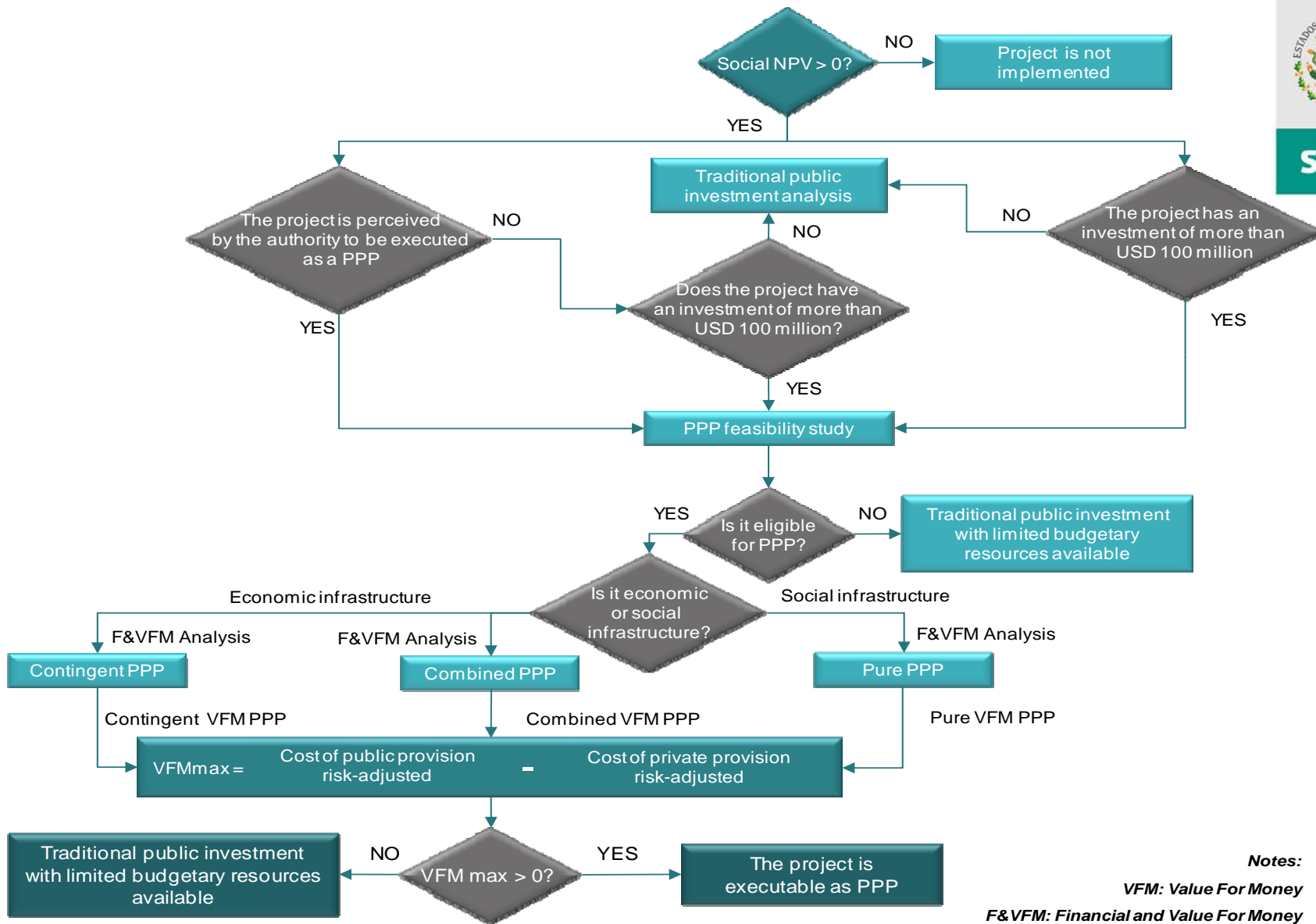
V. Potential development of project assessment procedures



Gateway Process Review



PPP's Eligibility index



Notes:
VFM: Value For Money
F&VFM: Financial and Value For Money



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Conclusion



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