

**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)**  
**NATIONAL ECONOMIC DEVELOPMENT AUTHORITY (NEDA)**  
**DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH)**

**PREPARATORY SURVEY  
FOR  
PUBLIC-PRIVATE PARTNERSHIP (PPP)  
INFRASTRUCTURE DEVELOPMENT PROJECTS  
IN  
THE REPUBLIC OF THE PHILIPPINES**

**FINAL REPORT  
TRAINING MATERIALS**

**DECEMBER 2010**

**CTI ENGINEERING INTERNATIONAL CO., LTD.  
MITSUBISHI RESEARCH INSTITUTE, INC.**

## **LIST OF TRAINING MATERIALS**

### **Day 1: October 19**

Outline of Pilot Training  
Initial Capacity Assessment (Distribution of and Answer to Questionnaire)  
PPP in General

### **Day 2: October 20**

PPP in the Philippines  
Legal Framework  
Institutional Framework

### **Day 3: October 21**

Project Identification  
Business Case/Feasibility Study

### **Day 4: October 22**

Traffic Demand Forecast  
Risks and Risk Allocation

### **Day 5: October 26**

Financial Analysis  
Financial Analysis

### **Day 6: October 27**

Project Procurement  
Project Implementation

### **Day 7: October 28**

Operation and Maintenance  
Project Monitoring and Post Evaluation of Project Impact

### **Day 8: October 29**

Assessment of Pilot Training

**PREPARATORY SURVEY  
FOR  
PUBLIC - PRIVATE PARTNERSHIP (PPP)  
INFRASTRUCTURE DEVELOPMENT PROJECTS  
IN  
THE REPUBLIC OF THE PHILIPPINES**

**PILOT TRAINING ON PPP**

**-.< Training Program >.-**

**Day 1: October 19 (Tues.)**

12:00 – 1:00	Registration	
1:00 – 1:10	Opening Remarks -----	Asec. Ma. Catalina E. Cabral
1:10 – 1:20	Outline of Pilot Training -----	Mr. Mitsuo Kiuchi
1:20 – 1:40	Introduction of Presentors and Participants -----	Engr. Rebecca T. Garsuta
1:40 – 3:30	Initial Capacity Assessment (Distribution of and Answer to Questionnaire) -----	Dr. Yoichi Sakurada
3:30 – 3:45	Coffee Break	
3:45 – 6:15	PPP in General -----	Mr. Mitsuo Kiuchi

**Day 2: October 20 (Wed.)**

12:00 – 1:00	Registration	
1:00 – 1:30	PPP in the Philippines -----	Mr. Mitsuo Kiuchi
1:30 – 3:30	Legal Framework -----	Atty. Saviniano M. Perez, Jr.
3:30 – 3:45	Coffee Break	
3:45 – 5:00	Institutional Framework -----	Mr. Mitsuo Kiuchi
5:00 – 6:15	Open Forum	

**Day 3: October 21 (Thu.)**

12:00 – 1:00	Registration	
1:00 – 3:30	Project Identification -----	Mr. Mitsuo Kiuchi
3:30 – 3:45	Coffee Break	
3:45 – 5:30	Business Case/Feasibility Study -----	Dr. Yoichi Sakurada
5:30 – 6:15	Open Forum	

**Day 4: October 22 (Fri.)**

12:00 – 1:00	Registration	
1:00 – 3:30	Traffic Demand Forecast -----	Dr. Yoichi Sakurada
3:30 – 3:45	Coffee Break	
3:45 – 4:45	Risks and Risk Allocation -----	Dr. Yoichi Sakurada
4:45 – 6:15	Open Forum	

**Day 5: October 26 (Tues.)**

12:00 – 1:00	Registration	
1:00 – 3:30	Financial Analysis -----	Mr. Mikio Okano
3:30 – 3:45	Coffee Break	
3:45 – 5:00	Financial Analysis -----	Mr. Mikio Okano
5:00 – 6:15	Open Forum	

**Day 6: October 27 (Wed.)**

12:00 – 1:00	Registration	
1:00 – 3:30	Project Procurement -----	Engr. Teodoro T. Encarnacion
3:30 – 3:45	Coffee Break	
3:45 – 5:30	Project Implementation -----	Mr. Nemesio Castillo Mr. Guillermo Caranto Mr. Luisito Delfino
5:30 – 6:15	Open Forum	

**Day 7: October 28 (Thu.)**

12:00 – 1:00	Registration	
1:00 – 3:30	Operation and Maintenance -----	Mr. Raul Ignacio Mr. Glenn Campos Ms. Jennifer Jane Go Mr. Ronel Langcaun
3:30 – 3:45	Coffee Break	
3:45 – 4:45	Project Monitoring and Post- Evaluation of Project Impact -----	Mr. Mitsuo Kiuchi
4:45 – 6:15	Open Forum	

**Day 8: October 29 (Fri.)**

12:00 – 1:00	Registration	
1:00 – 6:00	Assessment of Pilot Training -----	Mr. Mitsuo Kiuchi
6:00 – 6:15	Closing Remarks -----	Dir. Bienvenida A. Firmalino

# **Day 1: October 19**

- Outline of Pilot Training
- Initial Capacity Assessment (Distribution of and Answer to Questionnaire)
- PPP in General

## QUESTIONNAIRE ON INITIAL CAPACITY ASSESSMENT

Name: \_\_\_\_\_

Position: \_\_\_\_\_

Your Specialized Fields/Profession: \_\_\_\_\_

Office & Agency Name: \_\_\_\_\_

1. About Basic Principles of PPP			
a. Do you know what PPP is?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, but I know only by name.	<input type="checkbox"/> No, I don't know.
b. Are you familiar with the term: PPP modality (BOT, BOO, BLT)?	<input type="checkbox"/> Yes, I'm very much familiar.	<input type="checkbox"/> Yes, but I know only by name.	<input type="checkbox"/> No, I'm not familiar.
c. Have you ever been involved with actual PPP project implementation in the past?	<input type="checkbox"/> Yes, I have deeply been involved with it.	<input type="checkbox"/> Yes, but not so deeply involved.	<input type="checkbox"/> No, I have never been involved.
d. How do you think the applicability of PPP projects in the Philippines?	<input type="checkbox"/> Easy to be applied.	<input type="checkbox"/> Very hard to be applied.	<input type="checkbox"/> No idea.
2. Laws and Regulations			
a. Do you know "BOT Law"?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, but I know only by name.	<input type="checkbox"/> No, I don't know.
b. Are you familiar with some other laws and regulations relevant to PPP in the Philippines?	<input type="checkbox"/> Yes, I'm familiar with all of relevant laws and regulations..	<input type="checkbox"/> Yes, but I know only a few.	<input type="checkbox"/> No, I'm not familiar.
3. Institutional Framework			
a. Do you know what agencies are major players of PPP Projects?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, I know some of agencies.	<input type="checkbox"/> No, I don't know.
b. Do you know roles and functions of major players of PPP Projects?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, I know some agencies' roles and functions.	<input type="checkbox"/> No, I do not know.
4. Project Identification			
a. Do you know what factors to be considered in identifying projects?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, I know some factors.	<input type="checkbox"/> No, I do not know.
b. Have you practiced project identification?	<input type="checkbox"/> Yes, many times.	<input type="checkbox"/> Yes, but not so many times (1 or 2 times only)	<input type="checkbox"/> No. No experience.
c. Have you been involved in Master Plan preparation?	<input type="checkbox"/> Yes, many times.	<input type="checkbox"/> Yes, but only 1 or 2 times.	<input type="checkbox"/> No. No experience.
d. Do you have experiences in prioritizing projects?	<input type="checkbox"/> Yes, many times.	<input type="checkbox"/> Yes, but only 1-2 times.	<input type="checkbox"/> No. No experience.
5. Business Case/Feasibility Study			
a. Have you been involved in FS Studies?	<input type="checkbox"/> Yes, many times.	<input type="checkbox"/> Yes, but only 1-2 times.	<input type="checkbox"/> No. No experience.
b. Have you been involved in BC/FS studies of PPP Projects?	<input type="checkbox"/> Yes, many times.	<input type="checkbox"/> Yes, but only 1-2 times.	<input type="checkbox"/> No. No experience.
c. Do you know the differences or contents of FS between conventional public sector project and PPP project?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, but concept only.	<input type="checkbox"/> No, I do not know.
6. Tollway Planning & Design			
a. Are you familiar with design standards of tollway?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, but not so in details.	<input type="checkbox"/> No, I do not know.
b. Do you have experiences in tollway planning and design?	<input type="checkbox"/> Yes, I planned/designed many tollways.	<input type="checkbox"/> Yes, but only 1 or 2 tollways.	<input type="checkbox"/> No. I have no experience.
c. Do you have experiences in interchange planning and design?	<input type="checkbox"/> Yes, I planned/designed many types of interchange.	<input type="checkbox"/> Yes, but only 1-2 types of interchange.	<input type="checkbox"/> No, I have no experience.
7. Traffic Demand Forecast			
a. Do you know how to prepare present OD Matrix?	<input type="checkbox"/> Yes, I can prepare present OD matrix.	<input type="checkbox"/> Yes, but only concept. I have no experience in preparation of OD matrix.	<input type="checkbox"/> No, I do not know.
b. Do you know how to prepare Node-Link map for traffic assignment?	<input type="checkbox"/> Yes, I have many experience.	<input type="checkbox"/> Yes, but only concept. No Experience.	<input type="checkbox"/> No, I do not know.
c. Do you know how to prepare/build traffic demand forecast models?	<input type="checkbox"/> Yes, I have many experience.	<input type="checkbox"/> Yes, but only concept. No Experience.	<input type="checkbox"/> No, I do not know.
d. Do you have experiences in traffic assignment?	<input type="checkbox"/> Yes, I have many experience.	<input type="checkbox"/> Yes, but only concept. No Experience.	<input type="checkbox"/> No, I do not know.
e. Do you know how to do traffic assignment for network with tollway?	<input type="checkbox"/> Yes, I have many experience.	<input type="checkbox"/> Yes, but only concept. No Experience.	<input type="checkbox"/> No, I do not know.
f. Are you familiar with JICA-STRADA software?	<input type="checkbox"/> Yes, I used it many times.	<input type="checkbox"/> Yes, but only outline. No experience of using the software.	<input type="checkbox"/> No, I do not know.

8. EIA and Resettlement Plan			
a. Are you familiar with the Philippine EIA system?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, but only outline.	<input type="checkbox"/> No, I do not know.
b. Have you undertaken EIA studies?	<input type="checkbox"/> Yes, many times.	<input type="checkbox"/> Yes, but 1 or 2 times only.	<input type="checkbox"/> No. No experience.
c. Have you prepared Resettlement Action Plan?	<input type="checkbox"/> Yes, many times.	<input type="checkbox"/> Yes, but 1 or 2 times only.	<input type="checkbox"/> No. No experience.
9. ROW Acquisition			
a. Do you know ROW acquisition procedure?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, but only outline.	<input type="checkbox"/> No, I do not know.
b. Are you familiar with the DPWH IROW Procedural Manual?	<input type="checkbox"/> Yes, very much familiar.	<input type="checkbox"/> Yes, but only outline.	<input type="checkbox"/> No. I am not.
10. PPP Modalities			
a. Do you know various PPP modalities?	<input type="checkbox"/> Yes. I know very well.	<input type="checkbox"/> Yes, but only 1 or 2, like BOT and BLT.	<input type="checkbox"/> No. I don't.
b. Do you know characteristics of various PPP modalities?	<input type="checkbox"/> Yes. I know very well.	<input type="checkbox"/> Yes, but outline only.	<input type="checkbox"/> No, I don't.
c. Do you know the applicability of various PPP modalities?	<input type="checkbox"/> Yes. I know very well.	<input type="checkbox"/> Yes, but outline only.	<input type="checkbox"/> No, I don't know.
d. Do you know what types of PPP modality were undertaken in the Philippines?	<input type="checkbox"/> Yes. I know.	<input type="checkbox"/> Yes. I know some projects.	<input type="checkbox"/> No. I don't know.
11. Economic Evaluation			
a. Do you know the concept of economic evaluation?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, I know, but only outline.	<input type="checkbox"/> No. I don't know.
b. Do you know the indicators of economic evaluation?	<input type="checkbox"/> Yes, I know all.	<input type="checkbox"/> Yes, I know 1 or 2.	<input type="checkbox"/> No, I don't know.
c. Have you undertaken economic evaluation of some projects?	<input type="checkbox"/> Yes, I have done economic evaluation of many projects.	<input type="checkbox"/> Yes, but only 1-2 projects.	<input type="checkbox"/> No, I have no experience.
12. Financial Evaluation			
a. Do you know what is:			
Project IRR	<input type="checkbox"/> Yes		<input type="checkbox"/> No.
Equity IRR	<input type="checkbox"/> Yes.		<input type="checkbox"/> No.
IRR for Special Purpose Company	<input type="checkbox"/> Yes.		<input type="checkbox"/> No.
Debt Service Coverage Ratio	<input type="checkbox"/> Yes.		<input type="checkbox"/> No.
b. Do you have experiences of preparing financial cash flow?	<input type="checkbox"/> Yes, many times.	<input type="checkbox"/> Yes, but 1 - 2 times only.	<input type="checkbox"/> No. No experience.
c. Have you undertaken financial evaluation of PPP projects?	<input type="checkbox"/> Yes, I did for many projects.	<input type="checkbox"/> Yes, but 1 or 2 projects only.	<input type="checkbox"/> No. No experience.
d. Have you tested financial evaluation of many types of PPP modality?	<input type="checkbox"/> Yes, I did for many types of PPP modality.	<input type="checkbox"/> Yes, but only for 1 or 2 PPP modality.	<input type="checkbox"/> No. No experience.
13. Risk, Risk Management, Risk Allocation			
a. Do you know major risks of PPP projects?	<input type="checkbox"/> Yes. I know major risks.	<input type="checkbox"/> Yes, but only a few risks.	<input type="checkbox"/> No. I don't know.
b. Do you know ways to manage major risks?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, but for some risks only.	<input type="checkbox"/> No. I don't know.
c. Do you have any ideas on how to allocate risks to the public sector and the private sector?	<input type="checkbox"/> Yes, I have clear ideas.	<input type="checkbox"/> Yes, but not so clear.	<input type="checkbox"/> No, I don't have.
14. Project Procurement			
a. Do you know tender procedure of PPP projects?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, but not so in detail.	<input type="checkbox"/> No, I do not know.
b. Do you know differences of tender documents between conventional public infrastructure projects and PPP projects?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, but not so in detail.	<input type="checkbox"/> No. I don't know.
c. Have you joined tendering activities of PPP projects?	<input type="checkbox"/> Yes.		<input type="checkbox"/> No.
15. Project Implementation			
a. Do you have any experiences in involving in project implementation?	<input type="checkbox"/> Yes.		<input type="checkbox"/> No.
b. Do you know what aspects are different between conventional type of projects and PPP projects in project implementation?	<input type="checkbox"/> Yes.		<input type="checkbox"/> No.
16. Operation and Maintenance			
a. Do you know what are the major items of operation?	<input type="checkbox"/> Yes.		<input type="checkbox"/> No.
b. Do you know what are the problems of the private sector during O & M period?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, but I know a little.	<input type="checkbox"/> No.
17. Project Monitoring			
a. Do you know what should be monitored?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, but I know a little.	<input type="checkbox"/> No. I don't know.
18. Post Evaluation of Inputs			
a. Do you know what items should be evaluated?	<input type="checkbox"/> Yes, I know very well.	<input type="checkbox"/> Yes, but I know a little.	<input type="checkbox"/> No. I do not know.

**PREPARATORY SURVEY**  
for  
**Public Private Partnership (PPP)**  
**Infrastructure Development Projects**  
**in the Republic of the Philippines**

**PILOT TRAINING**

**PPP in General**

**October 19, 2010**

**MR. MITSUO KIUCHI**

**Team Leader**

**JICA Study Team**



National Economic Development Authority  
(NEDA)



Japan International Cooperation  
Agency (JICA)



Department of Public Works and Highways  
(DPWH)

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**OUTLINE OF PRESENTATION**

1. Why PPP?
2. What is PPP? [Basic Types of PPP Modality]
3. Applicable Conditions of Basic Types of PPP Modality
4. PPP Project Cycle
5. Risks of PPP Projects
6. What are the keys for success of PPP Projects

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## 1. Why PPP?

### 1.1 Definition of PPP

The term “**Public-Private Partnership (PPP)**” describes a range of possible relationship among public and private entities in the context of infrastructure and other services

Source: The Public-Private Partnership Handbook (2008, ADB)

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## 1. Why PPP?

### 1.2 Objectives of PPP

#### 1) **Mobilization of Private Capital**

- ❖ To deliver required public service to people as early as possible by mobilizing private capital, and to reduce the public sector's financial burden.
- ❖ The need of the private sector in entering into a PPP is to seek compensation for its services through fees for service fees for service rendered, resulting in an appropriate return on capital.

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## 1. Why PPP?

### 1.2 Objectives of PPP

#### 2) Tool for Greater Efficiency

- ❖ The public sector has rather few incentives for efficiency structures into its organization and process and is rather poorly positioned to efficiently build and operate infrastructure.
- ❖ The private sector, however, enters into an investment with the clear goals of maximizing profits by increased efficiency in investment and operations with full utilization of the private sector's know-how and skills.

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## 1. Why PPP?

### 1.2 Objectives of PPP

#### 3) Faster Implementation

- ❖ The allocation of design and construction responsibility to the private sector, combined with payments linked to the availability of a service, provides significant incentives for the private sector to deliver capital projects within shorter construction timeframes.

#### 4) Reduced whole life costs

- ❖ PPP projects which require operational and maintenance service provision provide the private sector with strong incentives to minimize costs over the whole life of a project, something that is inherently difficult to achieve within the constraints of traditional public sector budgeting.

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## 1. Why PPP?

### 1.3 PPP Concept in other Terminology

**PPP Concept** is also called in other terminology.

**PPI** : Private Participation in Infrastructure

**PSP** : Private Sector Participation

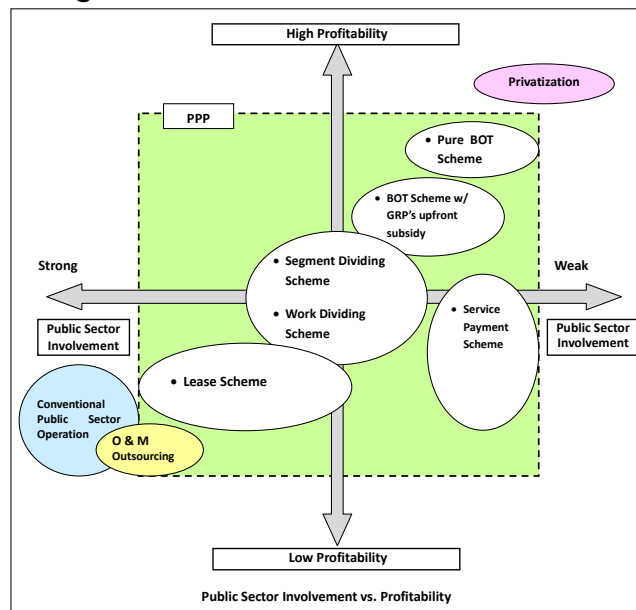
**PFP** : Privately Financed Project

**PFI** : Private Finance Initiative

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## 1. Why PPP?

### 1.4 Image of PPP Structure



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## 2. What is PPP?

### 2.1 Basic Types of PPP Modality

	Responsibility		Examples in the Philippines
	GRP	Private Sector	
<b>Type-1:</b> Pure BOT Type	<ul style="list-style-type: none"> <li>• ROW Acquisition</li> </ul>	<ul style="list-style-type: none"> <li>• Design, construction and O &amp; M</li> <li>• Financing of above.</li> <li>• Investments will be recovered by toll revenue</li> <li>• <b>Revenue Risk (Note-1)</b></li> </ul>	<ul style="list-style-type: none"> <li>• Rehabilitation/Widening of:                             <ul style="list-style-type: none"> <li>- NLEX</li> <li>- SLEX</li> <li>- Manila-Cavite Expressway</li> </ul> </li> <li>• Construction of :                             <ul style="list-style-type: none"> <li>- Skyway I &amp; II</li> <li>- Manila-Cavite Expressway Extension</li> </ul> </li> </ul>
<b>Type-2:</b> BOT Type with GRP Subsidy/ Financial Support	<ul style="list-style-type: none"> <li>• ROW Acquisition</li> <li>• GRP provides up-front subsidy (max. is 50% of project cost), or government financial support (GFS)</li> </ul>	<ul style="list-style-type: none"> <li>• Design, Construction and O &amp; M.</li> <li>• Financing of above with GRP subsidy or GFS.</li> <li>• Investment will be recovered by toll revenue.</li> <li>• <b>Revenue Risk (Note-1)</b></li> </ul>	<ul style="list-style-type: none"> <li>• TPLEX</li> </ul>

**Note-1:** Revenue risk can be shared with GRP.

Source: JICA Study Team

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## 2. What is PPP?

### 2.1 Basic Types of PPP Modality

	Responsibility		Examples in the Philippines
	GRP	Private Sector	
<b>Type-3:</b> Segment Dividing Type (Project is divided into GRP Segment and Private Segment)	<ul style="list-style-type: none"> <li>• ROW Acquisition of both segments</li> <li>• Design and construction of GRP segment.</li> <li>• GRP segment will be leased to the private sector at the lease fee of 0-100% of GRP Expenditure.</li> </ul>	<ul style="list-style-type: none"> <li>• Design and Construction of the Private Segment.</li> <li>• O &amp; M of both segments.</li> <li>• Financing of above.</li> <li>• Investments will be recovered by toll revenue of both segments.</li> <li>• Private sector pays lease fee to GRP.</li> <li>• <b>Revenue Risk (Note-1)</b></li> </ul>	<ul style="list-style-type: none"> <li>• STAR</li> </ul>

**Note-1:** Revenue risk can be shared with GRP.

Source: JICA Study Team

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## 2. What is PPP?

### 2.1 Basic Types of PPP Modality

	Responsibility		Examples in the Philippines
	GRP	Private Sector	
<b>Type-4:</b> Service Payment Type	<ul style="list-style-type: none"> <li>• ROW Acquisition</li> <li>• During O &amp; M period, GRP will pay to the private sector service fee for the private sector to recover its investments.</li> <li>• Toll revenue usually turned over to GRP. If toll revenue is not enough to pay service fee, GRP adds subsidy.</li> <li>• <b>Revenue Risk</b></li> </ul>	<ul style="list-style-type: none"> <li>• Design, Construction and O &amp; M.</li> <li>• Financing of above.</li> <li>• Receive service fee annually to recover investments.</li> </ul>	<ul style="list-style-type: none"> <li>• MRT-3 (O &amp; M by GRP)</li> </ul>
<b>Type-5:</b> Lease Type	<ul style="list-style-type: none"> <li>• ROW Acquisition</li> <li>• Design and Construction</li> </ul>	<ul style="list-style-type: none"> <li>• O &amp; M</li> <li>• The private sector leases the facility from GRP.</li> <li>• Lease fee ranges from 0-100% of GRP expenditure.</li> <li>• <b>Revenue Risk (Note – 1)</b></li> </ul>	<ul style="list-style-type: none"> <li>• Original NLEX and SLEX</li> <li>• SCTEX</li> </ul>

**Note-1:** Revenue risk can be shared with GRP.

**Source:** JICA Study Team

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## 2. What is PPP?

### 2.2 Variation of Basic Types of PPP Modality

PPP Modality	Variation of Basic Types of PPP Modality
<b>Type-1:</b> Pure BOT Type	<ul style="list-style-type: none"> <li>• Build-Operate-and-Transfer (BOT)</li> <li>• Build-and-Transfer (BT) → Type-4 in this study</li> <li>• Build-Own-and-Operate (BOO)</li> <li>• Build-Lease-and Transfer (BLT) → Type-4 in this study</li> <li>• Build-Transfer-and Operate (BTO) → Type-4 in this study</li> <li>• Contract-Add-and-Operate (CAO)</li> <li>• Develop-Operate-and-Transfer (DOT)</li> <li>• Rehabilitate-Operate-and-Transfer (ROT)</li> <li>• Rehabilitate-Own-and-Operate (ROO)</li> </ul> <p><b>Note:</b> Build, Develop, Rehabilitate → by the Private Operate → by the Private Contract – Add → to the Private Lease → lease to the Public</p> <p><b>Source:</b> RA 7718</p>
<b>Type-2:</b> BOT Type with GRP Subsidy/Financial Support	<ul style="list-style-type: none"> <li>• In case of Two Step Loan (TSL), if foreign exchange risk is shouldered by GRP, it will be subsidy.</li> <li>• Revenue Guarantee Scheme by GRP is classified as Type-4. If revenue is not enough to pay service fee, GRP has to use subsidy.</li> </ul>

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## 2. What is PPP?

### 2.2 Variation of Basic Types of PPP Modality

PPP Modality	Variation of Basic Types of PPP Modality
<b>Type-3:</b> Segment Dividing Type	<ul style="list-style-type: none"> <li>Similar one is <b>Work Dividing Type</b>.</li> </ul> <p><b>Example</b></p> <p><b>Case-1: Elevated Expressway</b></p> <ul style="list-style-type: none"> <li>Construction of foundation and substructure by GRP</li> <li>Construction of superstructure &amp; others by Private Sector.</li> </ul> <p><b>Case-2: Railway Project</b></p> <ul style="list-style-type: none"> <li>All civil work by GRP.</li> <li>All others (rolling stocks, depot, etc.) by Private Sector.</li> </ul>

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## 2. What is PPP?

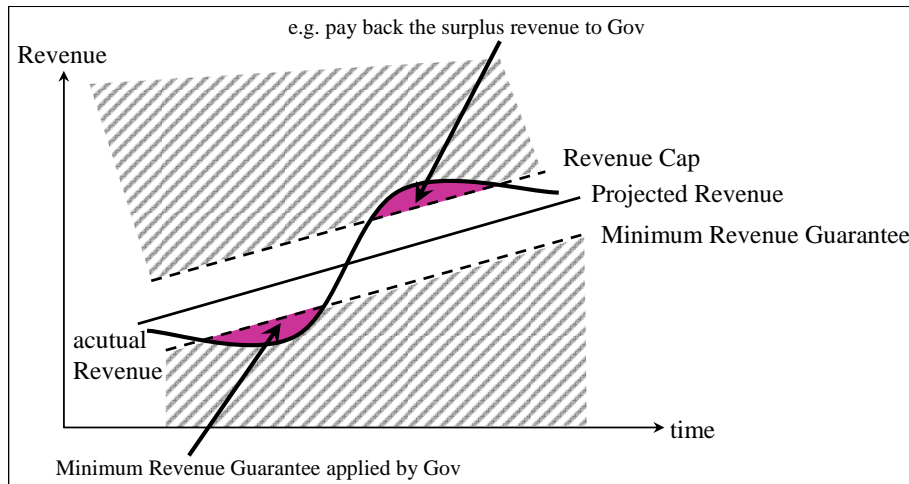
### 2.2 Variation of Basic Types of PPP Modality

PPP Modality	Variation of Basic Types of PPP Modality															
<b>Type-4:</b> Service Payment Type	<ul style="list-style-type: none"> <li>Various majors such as Revenue Risk Guarantee (RRG) and Viability Gap Financing (VGF) can be also applied to Type-1, Type-2, and Type-3. These are classified under Type-4 in this study.</li> </ul> <table border="1"> <thead> <tr> <th>Type</th> <th>Outlines</th> <th>Examples</th> </tr> </thead> <tbody> <tr> <td>Fixed revenue guarantee</td> <td>The government guarantees the agreed fixed revenue as availability fee, provided that agreed service level is attained.</td> <td>A13 Road in England</td> </tr> <tr> <td>Banding</td> <td>Toll fee to be adjusted depending on actual traffics.</td> <td>DBFO Road in the UK (early phase)</td> </tr> <tr> <td>Cap and floor</td> <td>The public collects the amount above the agreed upper limit or compensates the amount below the agreed lower limit of toll revenue.</td> <td>Sydney Harbour Tunnel in Australia</td> </tr> <tr> <td>Variable term of contract period</td> <td>Closing the contract when the investor acquires the agreed benefit.</td> <td>Sky bridge in the UK</td> </tr> </tbody> </table> <p><b>Note:</b> DBFO = Design, Build, Finance and Operate</p>	Type	Outlines	Examples	Fixed revenue guarantee	The government guarantees the agreed fixed revenue as availability fee, provided that agreed service level is attained.	A13 Road in England	Banding	Toll fee to be adjusted depending on actual traffics.	DBFO Road in the UK (early phase)	Cap and floor	The public collects the amount above the agreed upper limit or compensates the amount below the agreed lower limit of toll revenue.	Sydney Harbour Tunnel in Australia	Variable term of contract period	Closing the contract when the investor acquires the agreed benefit.	Sky bridge in the UK
Type	Outlines	Examples														
Fixed revenue guarantee	The government guarantees the agreed fixed revenue as availability fee, provided that agreed service level is attained.	A13 Road in England														
Banding	Toll fee to be adjusted depending on actual traffics.	DBFO Road in the UK (early phase)														
Cap and floor	The public collects the amount above the agreed upper limit or compensates the amount below the agreed lower limit of toll revenue.	Sydney Harbour Tunnel in Australia														
Variable term of contract period	Closing the contract when the investor acquires the agreed benefit.	Sky bridge in the UK														
<b>Type-5:</b> Lease Type	<ul style="list-style-type: none"> <li>Extreme case of this type is outsourcing of O &amp; M work to the private sector.</li> </ul>															

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## 2. What is PPP?

### 2.3 Concept of Minimum Revenue Guarantee



Source: Created based on Macquarie materials

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## 3. Applicable Conditions of Basic Types of PPP Modality

### 3.1 Needs of PPP Approach

- a) There are various tollway development projects ranging from highly profitable one to very low profitable one, if a project is planned to be implemented solely by the private sector. However, even very low profitable projects can be converted to a profitable project with the reasonable government financial supports. Therefore, various types of PPP modalities should be studied and the most appropriate type should be selected, even for the very low profitable projects.
- b) In the Philippines, highly profitable tollway projects have already been implemented by BOT Scheme and those highly profitable projects are becoming less and less in number, thus the Public-Private Partnership is becoming more important than before.

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### 3. Applicable Conditions of Basic Types of PPP Modality

#### 3.2 Terminology

**Project FIRR:** Investment return when all costs are financed by the private sector (no government financial support is considered).

**IRR for SPC (Special Purpose Company):** Investment return from the viewpoint of SPC (only costs financed by SPC are considered. Cost financed by the Government is excluded).

**WACC:** Weighted Average Capital Cost. When Loan and Equity share is 70:30, and loan interest rate is 10% per annum and expected dividend to equity investment is 15%, WACC is 11.5%. (This Study adopted WACC as 11.5%).

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### 3. Applicable Conditions of Basic Types of PPP Modality

#### 3.2 Terminology

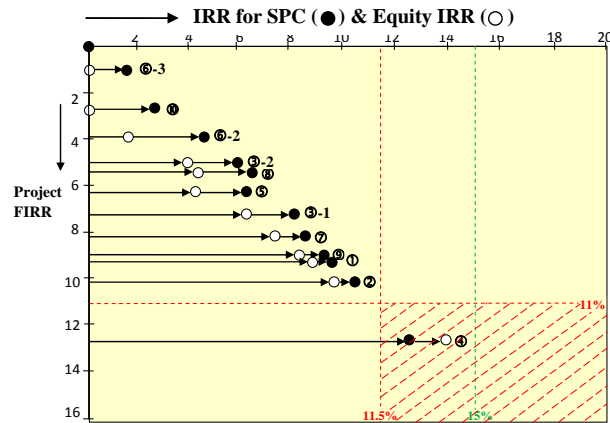
**NPER (Net Public Expenditure Reduction):** This is an indicator to check if net public expenditure (expenditure minus income (toll revenue) under conventional type of implementation or everything is done by the Government) is higher than that under a PPP modality (or the Government's net expenditure under the conventional type of implementation can be saved by a PPP modality).

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### 3.3 How PPP Modalities Improve Private Sector's Investment Return?

#### Type-1: Pure BOT



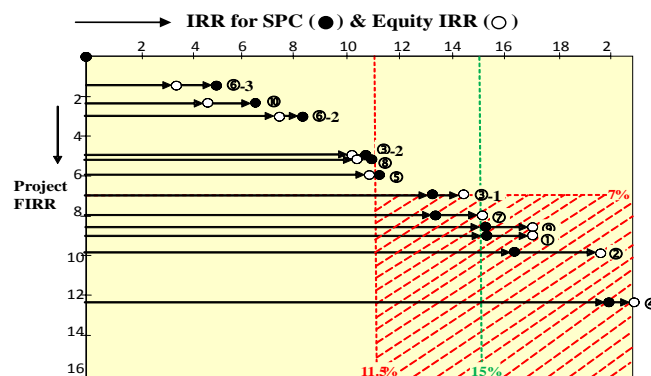
Source: JICA Study Team

- This type is applicable when the Project FIRR is close to or over WACC.
- When the Project IRR is less than WACC, the project needs the Government's financial support.

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### 3.3 How PPP Modalities Improve Private Sector's Investment Return?

#### Type-2: BOT with GRP subsidy



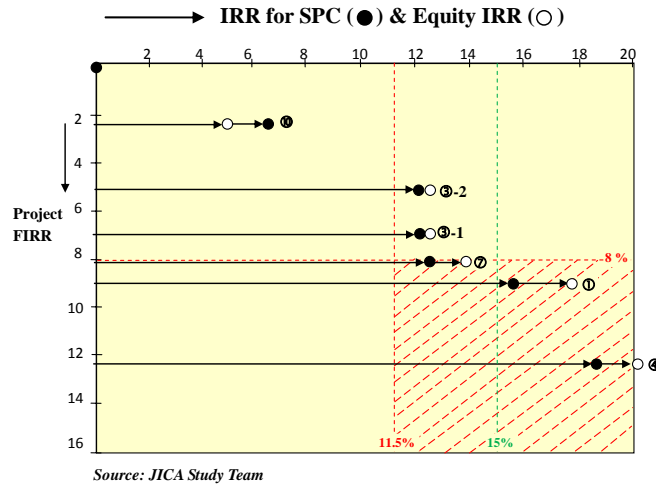
Source: JICA Study Team

- When the subsidy equivalent to 50% of construction cost is provided, a project with Project FIRR of about 7% or over becomes financially viable.
- For a project with Project FIRR is about 10% or more, the subsidy should be reduced.

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### 3.3 How PPP Modalities Improve Private Sector's Investment Return?

#### Type-3: Segment Dividing (GRP Segment Lease Fee = 100%)

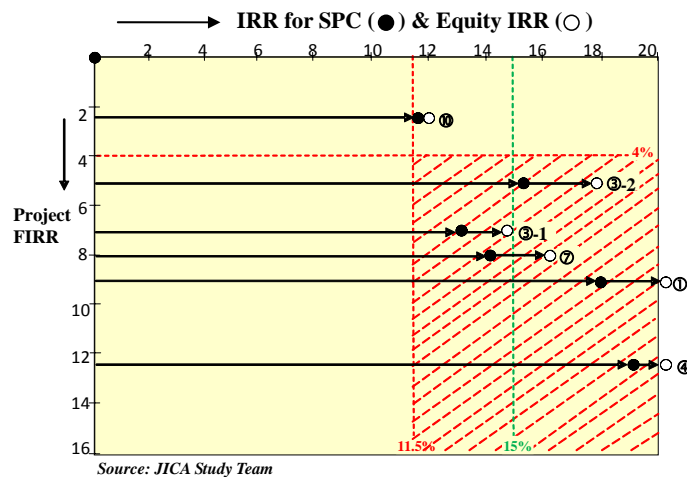


- When a segment division is 50 (public): 50 (private), a project with Project FIRR of about 8% or more becomes financially feasible, even though lease fee of the GRP segment is set at 100%.

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### 3.3 How PPP Modalities Improve Private Sector's Investment Return?

#### Type-3: Segment Dividing (GRP Segment Lease Fee = 0%)

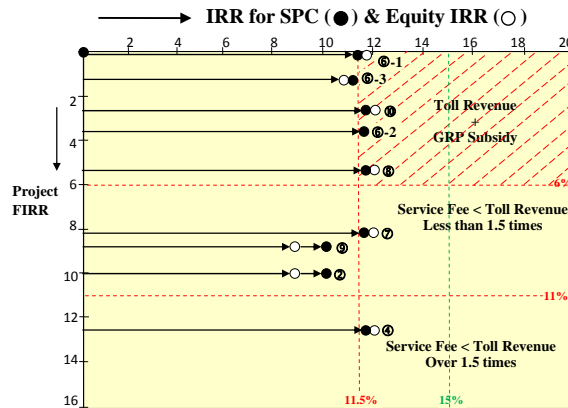


- When a segment division is 50(public): 50 (Private) and lease fee of GRP segment is set at 0%, a project with the Project FIRR of about 4% becomes financially feasible.

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### 3.3 How PPP Modalities Improve Private Sector's Investment Return?

#### Type-4: Service Payment (No government subsidy)



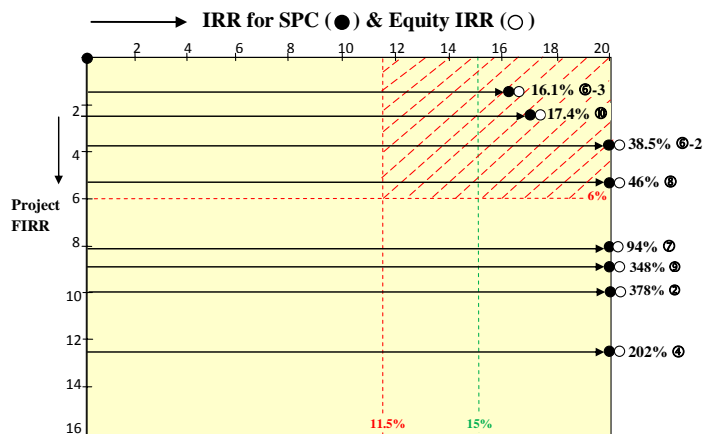
Source: JICA Study Team

- This type can be applicable to a project with low Project FIRR.
- Toll revenue will not be sufficient to pay service fee and subsidy will be required for a project with Project FIRR of 0% to about 6%.
- Toll revenue will be much higher than service fee which means the Government will have profit, when the Project FIRR of a project is over about 11%.

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### 3.3 How PPP Modalities Improve Private Sector's Investment Return?

#### Type-5: Lease Type



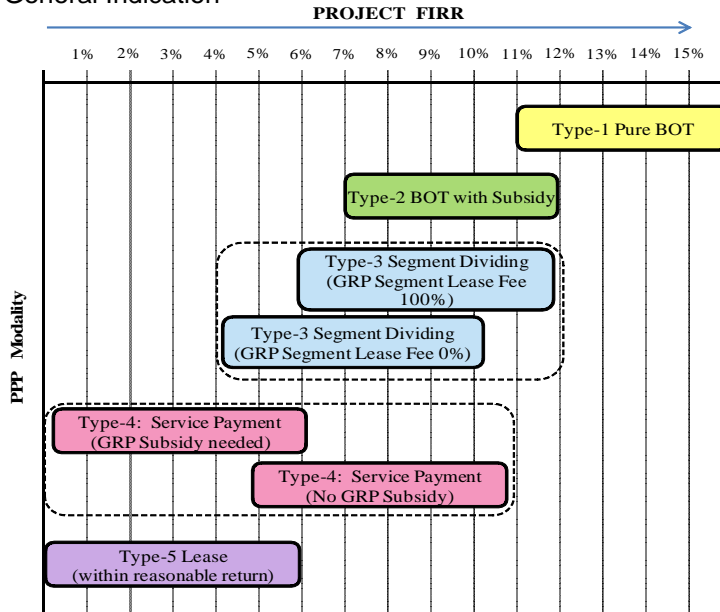
Source: JICA Study Team

- This type can be applicable to a project with low Project FIRR.
- When this type is applied to a project with Project FIRR is over about 6%, investment return of the private sector becomes very high, therefore, toll rate needs to be lowered or other type with higher participation of private sector should be studied.

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### 3.4 Applicable Condition of Each Type of PPP Modality

#### 1) General Indication



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### 3.4 Applicable Condition of Each Type of PPP Modality

#### 2) Applicable Conditions

PPP Type	Applicable Conditions
<b>Type-1:</b> Pure BOT Scheme	<ul style="list-style-type: none"> <li>• Applicable to project of which Project FIRR is over 11% or close to WACC.</li> </ul>
<b>Type-2:</b> BOT Scheme with Up-front Subsidy	<ul style="list-style-type: none"> <li>• Applicable to a project of which Project FIRR is between about 7% and 12%.</li> <li>• Various amount of up-front subsidy should be studied to check if NPER is positive. (Max. subsidy is limited to 50% of the project cost in accordance with BOT Law.)</li> </ul>

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### 3.4 Applicable Condition of Each Type of PPP Modality

#### 2) Applicable Conditions

PPP Type		Applicable Conditions
Type-3: Segment Dividing Type	GRP Segment to be leased to SPC	<ul style="list-style-type: none"> <li>• Applicable to a project of which Project FIRR is between 6% and 12%.</li> <li>• Various divisions of segment as well as lease fee of GRP segment should be studied.</li> <li>• Needs to check if NPER is positive or not.</li> <li>• Not applicable to a short project in length (say less than 5 km.)</li> <li>• A project should be divided that a segment earlier completed than the other can function by itself.</li> </ul>
	GRP Segment is leased to SPC free of charge	<ul style="list-style-type: none"> <li>• Applicable to a project of which Project FIRR is between 4% and 10%.</li> <li>• If IRR for SPC and Equity IRR become quite high (say about 22% or more), GRP segment should be leased to SPC.</li> <li>• Not applicable to a short project in length (say less than 5 km.)</li> <li>• A project should be divided that a segment earlier completed than the other can function by itself.</li> </ul>

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### 3.4 Applicable Condition of Each Type of PPP Modality

#### 2) Applicable Conditions

PPP Type		Applicable Conditions
Type-4: Service Payment Type	With GRP Subsidy	<ul style="list-style-type: none"> <li>• Applicable to a project of which Project FIRR is between 0% and 6%.</li> <li>• Needs to be check if GRP subsidy is within a reasonable range.</li> </ul>
	Without GRP Subsidy	<ul style="list-style-type: none"> <li>• Applicable to a project of which Project FIRR is between 5% and 9%.</li> <li>• IRR for SPC and Equity IRR should be within a reasonable range (say about 22%).</li> <li>• When this type is applied to a project with Project FIRR of about 11% or more, toll revenue becomes much higher than the service fee, which means the Government gets high profit, thus such projects should be planned to adopt Type-1 or Type-2.</li> </ul>
	Common to above	<ul style="list-style-type: none"> <li>• The Government must allocate budget for payment of service fee for the full duration of operation period (commonly 30 consecutive years), thus, sustainable and firm commitment of the Government for this type is required.</li> </ul>
Type-5: Lease Type		<ul style="list-style-type: none"> <li>• Applicable to a project of which Project FIRR is between 0% to 6%.</li> <li>• When this type is applied to a project of which Project FIRR is over about 6%, the private sector's financial return becomes unreasonably high, thus, other types with higher participation of the private sector should be studied, or toll rates should be set low.</li> </ul>

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### 3.5 Example of Study on PPP Modality Selection

Project Name: NAIA Expressway Phase II

	PPP Modality					
	Pure BOT	BOT with Subsidy (40% of Construction Cost)	Segment Dividing		Service Payment	Lease
			GRP Segment's Lease Fee 100%	GRP Segment's Lease Fee 0%		
Project FIRR	9.97	9.97	9.97	9.97	9.97	
IRR for SPC	10.54	15.00	-	-	10.05	374.41 (271.52) (Note-1)
Equity IRR	10.04	16.80	-	-	8.86	374.41 (271.52) (Note-1)
NPER (Million PHP)	2,397	-10	-	-	1,977	-2,563 (3,291) (Note-1) (Note-2)
Remarks		<ul style="list-style-type: none"> <li>Recommended</li> <li>Amount of subsidy needs to be reduced to 35%.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable due to short distance.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable due to short distance.</li> </ul>	<ul style="list-style-type: none"> <li>The service fee needs to be increased.</li> </ul>	<ul style="list-style-type: none"> <li>(Note-1): Toll Rate needs to be reduced.</li> <li>(Note-2): GRP utilizes ODA soft loan, of which repayment will be made from lease fee.</li> </ul>

Note: Figure in ( ) shows when GRP utilizes a soft loan from multi, bi-lateral sources.

    : IRR for SPC is less than 11.5%  
    : Equity IRR less than 15%  
    : NPER is negative.

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### 3.5 Example of Study on PPP Modality Selection

Project Name: CALA Expressway

	PPP Modality							
	Pure BOT	BOT with Subsidy (30% of Construction Cost)	Segment Dividing (40 : 60)		(20 : 80)		Service Payment	Lease
			GRP Segment's Lease Fee 100%	GRP Segment's Lease Fee 0%	GRP Segment's Lease Fee 100%	GRP Segment's Lease Fee 0%		
Project FIRR	12.51	12.51	12.51	12.51	12.51	12.51	12.51	
IRR for SPC	13.59	16.78	18.14 (17.83)	19.12	14.89	11.67	202.20 (177.18) (Note-1)	
Equity IRR	14.63	20.15	22.52 (21.88)	24.58	16.66	11.66	202.20 (177.18) (Note-1)	
NPER (Million PHP)	1,220	-1,266	-1,882 (1,843)	-2,545 (1,085)	58 (Note-1)	2,009	-6,407 (2,751) (Note-1) (Note-2)	
Remarks		<ul style="list-style-type: none"> <li>Needs to decrease subsidy to less than 30%.</li> </ul>	<ul style="list-style-type: none"> <li>Recommended, on the condition that GRP utilizes a soft loan.</li> </ul>		<ul style="list-style-type: none"> <li>(Note-1): Lease fee to be paid back to GRP in 10 years</li> </ul>	<ul style="list-style-type: none"> <li>The service fee needs to be increased.</li> </ul>	<ul style="list-style-type: none"> <li>(Note-1): Same as NAIA</li> <li>(Note-2): Same as NAIA</li> </ul>	

Note: Figure in ( ) shows when GRP utilizes a soft loan from multi, bi-lateral sources.

    : IRR for SPC is less than 11.5%  
    : Equity IRR less than 15%  
    : NPER is negative.

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#### 4. PPP Project Cycle

Stage-1 : Basic Plan/Master Plan/Project Identification Stage

Stage-2 : Business Case/Feasibility Study Stage

Stage-3 : Project Approval Stage

Stage-4 : ROW Acquisition/Resettlement Stage (Note-1)

**Note – 1 :** Under conventional government projects, ROW acquisition is undertaken after the detailed design completed. For PPP projects, it is recommended to start ROW acquisition soon after the project is approved, and preferably completed before the bidding. To achieve this, accuracy of engineering study during the feasibility study must be improved.

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#### 4. PPP Project Cycle

Stage-5: Tender Stage

Stage-6: Contracting Stage

Stage-7: Toll Operation Agreement Stage

Stage-8: Fund Procurement/Preparation Stage

Stage-9: Detailed Design Stage

Stage-10: Construction Stage

Stage-11: Operation and Maintenance Stage

Stage-12: End of Contract and Facility Transfer Stage

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## 5. Risks of PPP Projects

### 1) Characteristics of Tollway PPP Projects

- Huge up-front investment is required (initial 3-4 years).
- Investment return can only be expected after a long period (25 ~ 30 years).

Thus, a project life is quite long, therefore, many kinds of risks are expected.

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## 5. Risks of PPP Projects

### 2) Categories of the Background Risks

Risk Categories	Types of the Risks
Political, Legal, Institutional and Regulatory Risk	Change of law
	Resort to legal action by the third parties
	Conflict between the central government and local authorities
	Breach of the contract due to change of political situation
	Cancelation of approval
Social Risk	Change of social acceptance
Economic Risk	Occurrence of macro economic crisis
	Financial crisis
	Currency devaluation
	Energy supply crisis
Force Majeure	Acts of God risks e.g. earthquake, flood, fire etc.
	Trade embargo
	Armed conflict/War
	Occurrence of riot

Source: JICA Study Team

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## 5. Risks of PPP Projects

### 3) Categories of the Project Cost Risks

Risk Categories	Types of the Risks
Project Preparation Risk	Delay or failure of the project preparation
Land Acquisition Risk	Delay or failure of land acquisition
	Increase of land acquisition cost
	Obstruction of the moving inhabitants
Environmental Risk	Contamination of natural resources
Design Risk	Excessive design
	Design error
	Technology risks
Construction and Repair Risk	Cost overrun
	Delay of completion of the construction
	Poor quality of the construction
	Conflicts among sub-contractors
Financial Risk	Increase of the material price
	Increase of interest rates
	Increase of O&M cost

Source: JICA Study Team

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## 5. Risks of PPP Projects

### 4) Categories of the Commercial Risks

Risk Categories	Types of the Risks
Traffic Demand Risk	Lower demand level than expected
Toll Risk	Lower level of the toll acceptance than expected
	Unpaid toll by road users
	Un-approval of toll adjustment
Road Network Risk	Decreasing traffic volume due to change of road network

Source: JICA Study Team

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## 6. What are Keys for Success of PPP Projects

- Proper legal basis is established for PPP Projects.
- Firm commitments of the Government and politicians must be secured. Projects continue over 30 years, thus sustainable support of the Government, politicians and the people are important.
- Clear roles and functions of key players are established and proper coordination among players is made.
- Capacity of key players is properly developed.

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## 6. What are Keys for Success of PPP Projects

- Projects must be so developed that projects will attract the private sector. Projects attractive to the Private Sector can be developed with proper Government's financial support
- Risks are identified and properly shared between the Government and the Private Sector.
- Environment of project financing to the Private Sector is properly developed.
- Fair competition and transparency must be secured.

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**Maraming Salamat Po!**

# **Day 2: October 20**

- PPP in the Philippines
- Legal Framework
- Institutional Framework


**PREPARATORY SURVEY  
for  
Public Private Partnership (PPP) Infrastructure  
Development Projects  
in the Republic of the Philippines**

**PILOT TRAINING  
PPP in the Philippines  
October 20, 2010**

**MR. MITSUO KIUCHI**  
Team Leader  
JICA Study Team



National Economic Development Authority  
(NEDA)

 Japan International Cooperation  
Agency (JICA)

Department of Public Works and Highways  
(DPWH)

1

**OUTLINE OF PRESENTATION**

1. Brief History of PPP Projects: Tollways
2. Brief History of PPP Projects: Urban Railway
3. Completed and On-going PPP Projects:  
Tollways
4. Existing, On-going and Proposed Projects:  
Railways
5. Proposed Tollway Projects
6. Needs of Transport Sector PPP Projects

2

## 1. Brief History of PPP Projects : Tollways

### 1) Three (3) Approaches

- **Franchise Approach :**  
Late 1970s to Mid 2000s
- **Joint Venture Approach :**  
Early 1990s to Present
- **BOT Law Approach :**  
Early 1990s to Present

3

## 1. Brief History of PPP Projects : Tollways

### 2) Franchise Approach

- PD No. 1112 in 1977: "Toll Operation Degree" issued and TRB created.
- PD No. 1113 in 1977: CDCP (now PNCC) was granted the franchise of NLEx and SLEx. (NLEx and SLEx were constructed by DPWH)
- PD No. 1894 in 1983: PNCC was further granted the authority to construct, maintain and operate **any and all such extensions, linkages or stretches from any part of NLEx and/or Metro Manila Expressway.** The franchise for Metro Manila Expressway and all extensions/linkages shall have **a term of thirty (30) years commencing from the date of completion of the project.**
- PNCC lost its franchise in 2005.

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## 1. Brief History of PPP Projects : Tollways

### 3) Joint Venture Approach

- With the increase of traffic and deteriorated conditions of franchised expressways, needs of rehabilitation, improvement and widening of the facilities increased sharply.
- Since the original franchise holders did not have enough financial capacity, the private investors submitted unsolicited proposal to the original franchise holders for financing of required rehabilitation/widening/improvement of the facilities under the joint venture approach.
- The private investors in joint venture with the original franchise holder implemented the necessary works and the Joint Venture Company contracted the supplemental toll operation agreement (STOA) with TRB.

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## 1. Brief History of PPP Projects : Tollways

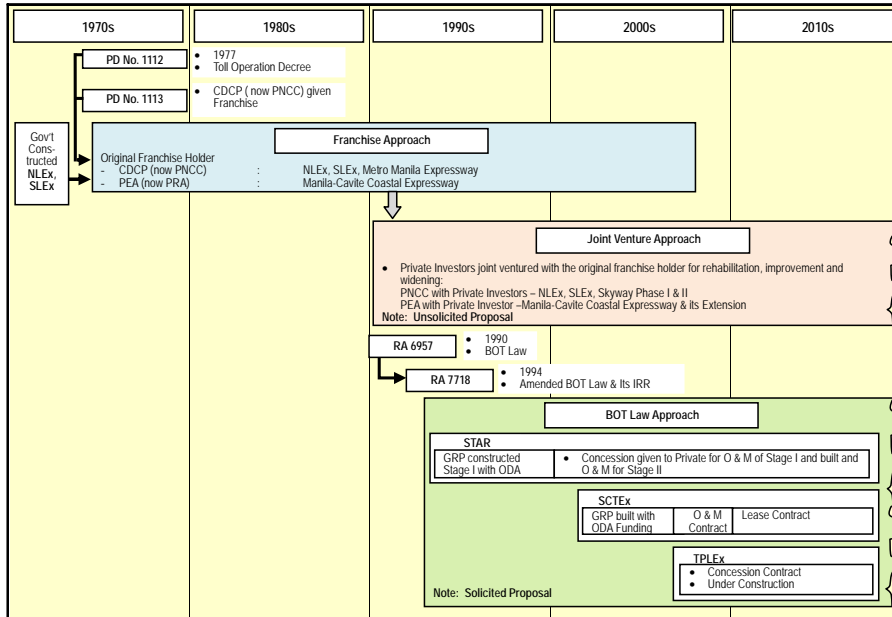
### 4) BOT Law Approach

- In 1990, Republic Act (RA) No. 6957, otherwise known as the BOT Law, authorized the financing, construction, operation and maintenance of infrastructure projects by the private sector.
- In 1994, RA No. 6957 was amended by RA No. 7718, which, among other things, allows more BOT variants, recognizes the need for private investors to realize rates of return reflecting market conditions, allows government support for BOT projects and allows unsolicited proposals.
- The Revised Implementing Rules and Regulations (Revised IRR) for the BOT Law, as amended, have been prescribed to cover all private sector infrastructure or development projects.

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# 1. Brief History of PPP Projects : Tollways

## HISTORICAL FLOW OF PRIVATE SECTOR PARTICIPATION IN EXPRESSWAY SERVICES



Source: JICA Study Team

# 2. Brief History of PPP Projects : Urban Railway

First and only PPP project is **MRT Line-3 Project**

## OUTLINE OF MRT-3 PPP ARRANGEMENT

▪ Gov't. Agency Partner	DOTC
▪ O & M	DOTC (MRT-3 Project Management Office)
▪ Concessionaire	Metro Rail Transit Corporation (MRTC)
▪ Concession Period	25 years
▪ PPP Type	Build-Lease-Transfer (BLT)
▪ Cost	US\$ 675 million
▪ Construction Schedule	1997-2001
▪ Date of Operation	1999
▪ Length	16.9 km



## 2. Brief History of PPP Projects : Urban Railway

Passenger fare rate has been set low to about level of bus passenger fare, thus the Government is providing huge subsidy annually.

### GOVERNMENT'S SUBSIDY TO MRT-3 (2007-2010)

Year	Gov't. Subsidy (PhP Billion)	O&M (PhP Million)
2007	2.189	578.7
2008	2.446	618.0
2009	1.187	645.0
2010	5.116	645.0

Source: GAA, DBM (2010)

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## 3. Completed and On-going PPP Projects

### 1) Road Sector

Existing  
Expressway  
and  
On-going  
Projects



Source: JICA Study Team

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### 3. Completed and On-going PPP Projects

#### EXISTING and ON-GOING EXPRESSWAY PROJECTS

Project	Length (km)
▪ South Luzon Expressway (SLEx)	37.23
▪ Southern Tagalog Arterial Road (STAR)	42.00
▪ Metro Manila Skyway	22.78
▪ Manila-Cavite Coastal Expressway	6.80
▪ North Luzon Expressway (NLEx)	91.12
▪ Subic-Clark-Tarlac Expressway (SCTEx)	93.80
On-going	
▪ R-1 Extension	11.24
▪ SLEx (Bation-Sto. Tomas)	7.50
▪ NLEx (Seg 8, 9, and 10)	22.26
▪ TPLEx	88.00
▪ Daang Hari-SLEx Link	4.00
Total	426.73

Source: JICA Study Team

### 4. Existing, On-going and Proposed Railway Projects

#### 2) Rail Sector

**Existing  
Railway Lines  
and  
On-going and  
Proposed  
Railway  
Projects**



Source: JICA Study Team

## 4. Existing, On-going and Proposed Railway Projects

### ON-GOING AND PROPOSED RAILWAY PROJECTS

	Project Name	Cost	Implementing Agency
On-going	1. Line 1 North Ext.	7.60 B	DOTC / LRTA
	2. Northrail	65.08 B	BCDA / Northrail
	3. Northrail-Southern Link	130.65 M (US\$) or 5.8 B Php	PNR
	Total	78.48 B Php	
Proposed	4. LRT Line 1 South Ext.	49.03 B	DOTC / LRTA
	5. LRT Line 2 East Ext.	11.30 B	DOTC / LRTA
	6. MRT 7	61.75 B	DOTC / ULC
	7. MRT 3 & LRT Capacity Exp.	70.00 B	DOTC and MRTC
	8. LRT Line 1 Airport Ext.	3.6 to 5.0 B	DOTC / LRTA
	9. Southrail	52.4 B	DOTC / PNR
	10. MRT 8	(Conceptual Stage)	
Total	249.48 B Php		

Source: Various documents of DOTC, 2010

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## 5. Proposed Tollway Projects

### 2020 PROJECTS

- C. Luzon Ex (Phase 1)
- C6 (N. Section)
- C6 (S-E Section)
- La Mesa Parkway
- NLEX (Segment 8-2)
- C5/FTI/Skyway Connector Road
- Global City Link
- CALA Expressway
- Calamba-Los Banos
- SLEX Extension
- NLEX-SLEX Link
- NAIA Ex (Phase 2)

### HSH Network 2020

420 + 206 ➔ 626 km



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## 5. Proposed Tollway Projects

### 2030 PROJECTS

- C. Luzon Ex (Phase 2)
- NLEX-East
- C6 (E. Section)
- Pasig-Marikina Ex
- R7 Expressway
- Manila Bay Ex
- C6 Extension

**HSH Network 2030**  
626 + 236 → 862 km



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## 5. Proposed Tollway Projects

### BEYOND 2030 PROJECTS

- NLEX (Phase 3)
- Manila-Bataan Coastal Road
- E-W Connection Expressway

**HSH Network (Beyond 2030)**  
862 + 133 → 995 km



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## 6. Needs of Transport Sector PPP Projects

Transport Sector alone has huge demand for PPP Projects.

<b>TRANSPORT SECTOR INFRASTRUCTURE DEVELOPMENT NEEDS</b>		
<b>Sub-sector</b>	<b>No. of Projects</b>	<b>Estimated Cost (Billion Php)</b>
Tollway Development	13	258.9
Urban Rail Development	7	249.5
Port development	3	5.5
Airport Development	3	6.4
<b>Total</b>	<b>25</b>	<b>520.3</b>

*Source: Compiled by the Study Team based on the information from DPWH and DOTC*

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**Maraming Salamat Po!**

18

**PREPARATORY SURVEY  
for  
Public Private Partnership (PPP) Infrastructure Development  
Projects  
in the Republic of the Philippines**

**PILOT TRAINING  
Legal Framework  
October 20, 2010**

**Atty. Saviniano M. Perez**



National Economic Development Authority  
(NEDA)



Japan International Cooperation  
Agency (JICA)



Department of Public Works and Highways  
(DPWH)

**PILOT TRAINING IN  
PUBLIC-PRIVATE PARTNERSHIP  
(PPP)  
PRESENTATION OUTLINE  
LEGAL FRAMEWORK OF PPP IN  
INFRASTRUCTURE PROJECTS**

## **A. HISTORICAL DEVELOPMENT OF PPP LEGAL FRAMEWORK**

1. Example of an Earlier Concession/Grant –  
Development of the Railroad in Luzon
2. Legal Framework – CA#146  
The Public Service Law
  - a) Definition of Public Service
  - b) Powers of the Public Service Commission

### **A....Legal Framework**

3. Republic Act No. 2000  
Limited Access Highway Act
  - a) Definition of Limited Access Facility
  - b) Authority to Establish Limited Access  
Facilities
  - c) Design of Limited Access Road
  - d) Local Service Road
  - e) Financing

**A....Legal Framework**

**4. Presidential Decree No.1112  
Toll Operation Decree  
Authorizing the Establishment of Toll  
Facilities on Public Improvements**

**a) Powers and Duties of the Board**

**A....Legal Framework**

**5. Presidential Decree No.1113  
The CDCP Franchise  
Granting the CDCP A Franchise To  
Operate, Construct and Maintain Toll  
Facilities  
In the North and South Luzon Toll  
Expressway**



### **A....Legal Framework**

- 6. Republic Act No.6957, As amended by  
R.A. No.7718  
The BOT Law  
An Act Authorizing the Financing,  
Construction, Operation and  
Maintenance of Infrastructure Projects by the  
Private Sector**

- a. Declaration of Policy**
- b. Contractual Arrangements**
- c. Definitions**
- d. Private initiative in Infrastructure**
- e. Unsolicited Proposals**
- f. Award of Contract**
- g. Direct Negotiation of Contracts**
- h. Repayment Scheme**
- i. Maintenance and Repair**
- j. Contract Termination**

## A...Legal Framework

### **B. COMMENTARIES**

1. Public-Private Partnership  
Some Issues/Concerns to Consider
2. Elements of a Successful BOT Project
3. Factors for Success
  - a. From Government
  - b. From Private Sponsors
  - c. Contractual Arrangements
4. Commentaries on the JVA Scheme

### **Example of An Earlier Concession/Grant Development of the Railroad in Luzon**

- On June 25, 1875 – by virtue of the Royal Decree of King Alfonso XII of Spain, the Inspector of PUBLIC WORKS of the Philippine Island, submitted a general plan for the establishment of a railroad line in the island of Luzon.
- On June 1, 1887 – a concession for the construction of a railway line from Manila to Dagupan was awarded to the Ferrocarril de Manila-Dagupan, the original name of the Manila Railway Company Ltd. Of London.
- On November 24, 1892 – Railway line from Manila to Dagupan was opened for operation. Length-195 km.

### Example of an Earlier Concession/Grant

- On February 4, 1916 – the Philippine Legislature passed Act No. 2547 acquiring the Manila Railroad Company
- Railway had been extended up to Legaspi, Albay and San Fernando, La Union
- Branch Lines from Paniqui, Tarlac to Dagupan, Pangasinan; Tarlac, Tarlac to San Jose, Nueva Ecija; from Bigaa, Bulacan to Cabanatuan City; from San Fernando, Pampanga to Carmen, Pangasinan; from College to Sta. Cruz, Laguna; and from Sta. Mesa to Hulo in Mandaluyong.
- Total length before WWII–1,140 rout-km.

### Example of an Earlier Concession/Grant

- After the Second Worldwar, the \_\_\_\_\_ Army had temporarily gained control of the Company and restored 40% of the pre-War lines–or only 452 route-kms.
- On February 1, 1946 – control of the railway system was turned over to the Philippine Government. Reconstruction of damaged railway facilities was undertaken.

### **Example of an Earlier Concession/Grant**

- On June 20, 1964 – R.A. No. 4156 created the present day Philippine National Railway (PNR)
- Presently, PNR is rehabilitating and improving its operation and services using private sector partners
- In March 1990, the Main Line South has been rehabilitated. Diesel Electric Locomotives have been acquired
- On February 23, 1995, the Improvement and Modernization of Commuter Line South had been started – a total stretch of 40 kms.

### **HISTORICAL DEVELOPMENT OF PRIVATE SECTOR INVOLVEMENT IN THE PROVISION OF INFRASTRUCTURE FACILITIES AND UTILITIES**

#### **LEGAL FRAMEWORK:**

1. CA#146 – Approved on November 7, 1936

#### **THE PUBLIC SERVICE LAW**

Section 13. Jurisdiction, provide among others:  
(a) The Commission shall have jurisdiction, supervision and control over all PUBLIC SERVICES and their franchises, equipment and other properties.... Provided, that public services OWNED AND OPERATED by GOVERNMENT ENTITIES or GOCC shall be regulated by the Commission in the same way as PRIVATEDLY-OWNED public services.....

(This recognized the role of the Private Sector in the provision of Public Services)

THE PUBLIC SERVICE LAW

Section 13. Jurisdiction

(b) The term "PUBLIC SERVICE" includes every person that now or hereafter may own, operate, manage, or control in the Philippines, for hire, or compensation, with general or limited clientele, whether permanent, occasional or accidental, and done for general business purposes, any common carrier, railroad, street railway, sub-way motor-vehicle, either for freight or passenger, or both with or without fixed route and whether may be its classification, freight or carrier service of any class, express service, steamboat craft, engaged in the transportation of passengers or freight or both, shipyard, marine railways, marine repair shop [warehouse] wharf or dock... irrigation system, gas, electric light, heat and power, water supply and power, petroleum, sewerage system, wire or wireless communication system, wire or wireless broadcasting stations and other similar public services....

THE PUBLIC SERVICE LAW

Section 16 – Powers

(a) To grant certificates only to citizens of the Philippines or to corporations, co-partnerships, associations or joint-stock companies constituted and organized under the laws of the Philippines;

Provided that 60% of the stock or paid-up capital of any such corporations, co-partnership, association or joint-stock company must belong entirely to citizens of the Philippines.

Provided, further, that no such certificates shall be issued for a period of more than fifty

THE PUBLIC SERVICE LAW

**Section 16 – Powers**

(b) To impose such conditions as to construction, equipment, maintenance, service or operation as the public interests and convenience may require and to issue certificates of public convenience and necessity when such required or provided by any law or franchise.

THE PUBLIC SERVICE LAW

**Section 16 – Powers**

(c) To fix and determine individual or joint rates, tolls, charges, classifications or schedules thereof .... Which shall be imposed observed and followed thereafter by any public service;

Provided, that the commission may, in its discretion, approve rates proposed by public services provisionally and without necessity of any hearing;

But it shall call a hearing thereon within 30 days thereafter, upon publication and notice to the concerns operating in the territory affected.

THE PUBLIC SERVICE LAW

**Section 16 – Powers**

- (d) To fix just and reasonable standards, classifications, regulations, practices, measurements, or services to be furnished, imposed, observed and followed thereafter by any public service.
- (e) To ascertain and fix adequate and serviceable standards for the measurement of quantity, quality, .... Or other conditions pertaining to the supply of the product or service rendered by any public service, and  
To prescribed reasonable regulations for the examination and test of such product or service and for the measurement thereof.

THE PUBLIC SERVICE LAW

**Section 16 – Powers**

- (g) To compel any public service to furnish safe, adequate, and proper service as regards the manner of furnishing the same as well as the maintenance of the necessary material and equipment.
- (h) To require any public service to establish, construct, maintain, and operate any reasonable extension of its existing facilities, where such extension is reasonable and practicable and will furnish sufficient business to justify the construction and maintenance of the same, and when the financial condition of the said public service reasonably warrants the original expenditures required in making and operating such extension.

THE PUBLIC SERVICE LAW

**Section 16 - Powers**

- (i) To direct any rail road, street railway, or traction company to establish and maintain at any junction or point of connection or intersection with any other line of said road or track, or with any other line of any other rail road, street railway or traction to promote, such just and reasonable connection as shall be necessary to promote the convenience of shippers of property, or of passengers;  
**And** in like manner direct any railroad... company to engage in carrying merchandise, .... To construct, maintain and operate, upon reasonable terms, a switch connection with any private sidetrack which may be constructed by any shipper to connect with any railroad ... company;  
**Where** such connection is reasonable and practicable and can be out in with safety and will furnish sufficient business to justify the construction and maintenance of

THE PUBLIC SERVICE LAW

**Section 16 - Powers**

- (j) To authorize, in its discretion, any railroad.. Company to lay its tracks across the track of any other railroad... company, or across any public highway.
- (k) To direct any railroad to install such safety devises or such other reasonable measures as may... be necessary for the protection of the public passing at passing grade crossing of public highways and railroads.



THE PUBLIC SERVICE LAW

**Section 16 – Powers**

**(l) Depreciation**

- ▶ **TO** fix and determine proper and adequate rates of depreciation of the property of any public service which will be observed in a proper and adequate depreciation account.... in accordance with such rules and regulations, and form of account as may be prescribed.
- ▶ **SAID** rates shall be sufficient to provide the amounts required over and above the expense of maintenance to keep such property in a STATE OF EFFICIENCY corresponding to the progress of the industry.
- ▶ **EACH** public service shall set aside the moneys so provided out of its earnings and carry the same in a DEPRECIATION FUND.
- ▶ **THIS** FUND shall not be expended otherwise than for depreciation, improvements, new construction, extensions or conditions to the property of such public service.

**REPUBLIC ACT NO.  
2000**

**Limited Access Highway Act  
(Approved June 22, 1957)**

## SEC. 2. DEFINITION OF LIMITED ACCESS FACILITY

- A **HIGHWAY** or **STREET** especially designed for through traffic, and over, from and to which owners or occupants of abutting land or other persons have no right of easement or only a limited right or easement of access, light, air or view by reason of the fact that their property abuts upon such limited access facility or for any other reason.
- Such **HIGHWAY** or **STREETS** may be parkways, from which trucks, buses and other commercial vehicles shall be excluded; or they may be free ways open to use by all customary forms of street and highway traffic.

## SEC. 3. AUTHORITY TO ESTABLISH LIMITED ACCESS FACILITIES

- ▶ The Department of Public Works and Highways and Communications is hereby authorized to plan, designate, establish, regulate, vacate, alter, improve, maintain, and provide limited access facilities for public use whenever it is of the opinion that traffic conditions, present or future, will justify such special facilities; Provided, that within provinces, cities and towns, the establishment of such limited access facilities, in so far as they affect provincial, city or municipal streets and plazas shall have the consent of provincial board, city or municipal

## SEC. 4. DESIGN OF LIMITED ACCESS ROAD

- ▶ The DPWC is authorized to so design any limited access facility and to so regulate, restrict, or prohibit access as to best serve the traffic for which such facility is intended;
- ▶ No person shall have any right of ingress or egress to, from or across limited access facilities to or from abutting lands, except at such designated points at which access may be permitted, upon such terms and conditions as may be specified from time to time.

## SEC. 5. ACQUISITION OF PROPERTY AND PROPERTY RIGHTS

- In connection with the acquisition of property or property rights for any limited access facility or portion thereof, or service road in connection therewith, the national, provincial, city or municipal government may, in its discretion, acquire an entire lot, block, or tract of land, if by so doing, the interests of the public will be best served, even though said entire lot, block or tract is not immediately needed for the right-of-way proper.

## **SEC. 6. PREFERENCE OF CONDEMNATION CASES**

- **Court proceedings necessary to acquire property or property rights for purpose of this Act, (for limited access facility), shall take precedence over all cases not involving the public interest in all courts, to the end that the cases of limited access facilities may be expedited.**

## **SEC. 7. GRADE CROSSING ELIMINATIONS**

- **The DPWC shall have authority to provide for the elimination of intersection at grade of limited access facilities, with existing national and provincial roads and city and town or barrio streets by grade separation or service road or by closing-off such roads and streets at the right-of-way boundary line of such limited access facility.**

## SEC. 8. LOCAL SERVICE ROAD

- ▶ In connection with the development of any limited access facility, the DPWC, the City, Municipal or Provincial Governments are authorized to plan, designate, establish, use, regulate, alter, improve, maintain and vacate local service roads or streets or to designate as local service roads and streets any existing road or street, and to exercise jurisdiction over service roads in the same manner as is authorized over limited access facilities under the terms of this act, if in their opinion, such local service roads and streets are necessary or desirable.

## SEC. 9. FINANCING

- The complete financing of the construction (of the limited access facilities) shall be provided by Congress in the annual Public Works Appropriation Act under such long term financing term financing plans as may be found proper and feasible so as to expedite the construction in order that it can be completed in an estimated period of not more than three years.
- The initial expenditures for investigating, surveying, planning and designating the limited access facilities... (to provided in the Public Works Appropriation Act)..
- To take care of the initial expenditures for the acquisition of ROW, construction of stream-crossing facilities and such contiguous sections of the limited access highways as can adequately be met from continuing appropriations.

# PD - 1112

Dated March 31, 1977  
TOLL OPERATIONS DECREED

**AUTHORIZING THE ESTABLISHMENT  
OF TOLL FACILITIES ON PUBLIC  
IMPROVEMENTS, CREATING A BOARD  
FOR REGULATION THEREOF.**

## Premises:

- ▶ To seek out alternative sources of financing to ensure the prosecution of certain desirable infrastructure projects that complement the over-all national development effort;
- ▶ The potential resources of the private sector could be tapped to the maximum benefit by the government;
- ▶ The collection of toll fees... that would allow a reasonable rate of return on investment, should be authorized;
- ▶ Provided that collection of toll fees and operation of toll facilities ... be loosely supervised and regulated in the private interest.

### **SEC. 3. Power and Duties of the Toll Regulatory Board**

- a) Subject to the approval of the President of the Philippines:
  - ▶ ■ to enter into contract in behalf of the Republic
  - ▶ ■ with persons, natural or juridical
  - ▶ for the construction, operation and maintenance of toll facilities
  - ▶ Said Contract shall be open to citizens of the Philippines and/or to corporation or associations
  - ▶ ■ qualified under the constitution, and
  - ▶ ■ authorized by law to engage in toll operations.

### **SEC. 3. Powers and Duties of the Board**

- b. Determine and decide the kind, type and nature of public improvement that will be constructed and/or operated as toll facilities.
- ▶ c. Condemn private property for public use subject to the provisions of existing law.

### **SEC. 3. Powers and Duties of the Board**

- d) Issue, modify and promulgate from time to time the rates of toll that will be charged the direct user of toll facilities and upon notice of hearing, to approve or disapprove petitions for the increase thereof.

### **SEC. 3. POWERS AND DUTIES OF THE BOARD**

- d) Decisions of the Board on petitions for the increase of toll rate shall be appealable to the Office of the President within 10 days from the promulgation thereof. Appeal shall not suspend the imposition of the new rates, provided, petitioner shall deposit in a trust fund such amounts as may be necessary to reimburse toll payers in case of a reversal of the decision.



### **SEC. 3. Powers and Duties of The Board**

- e) To grant authority to operate a toll facility and to issue thereof the necessary "Toll Operation Certificate" subject to such conditions as shall be imposed including inter alia the following:
  - ▶ (1) that the operator shall desist from collecting toll upon the expiration of the TOC.
  - ▶
  - ▶ (2) that the entire facility operated as a toll system shall be turned over to the government immediately upon the expiration of the TOC.

### **SEC. 3. Powers and Duties of the Board**

- (3) Transfer of the IOC
  - ▶ In the event of any valid transfer of the TOC, the transferee shall be subject to all the conditions, terms, restrictions and limitations of this Decree as fully and completely and to the same extent as if the TOC has been granted to the same person, firm, company, corporation or other commercial or legal entity.

### **SEC. 3. Powers and Duties of the Board**

(5) that no guarantee, certificate of indebtedness collateral, securities, or bonds shall be issued by any government agency or GOCC on any FINANCING PROGRAM OF THE TOLL OPERATOR in connection with his undertaking under the Toll Operations Certificate.

(TOC – entered into by TRB and the Toll Operator)

### **SEC. 3. Powers and Duties of the Board**

- (6) The TOC may be amended, modified, or revoked whenever the public interest so requires.
- (a) The Board shall promulgate rules and regulations governing the procedures for the grant of Toll Certificates.
  - ▶ The rights and privileges of a guarantee under a TOC shall be defined by the Board.
  - ▶ (b) To issue rules and regulations to carry out the purposes of this Decree.

## **SECTION 3. Powers and Duties of the Board**

(e),(2). That the entire facility operated as a toll system including all operation and maintenance equipment directly related thereto shall be turned over to the government immediately upon the expiration of the TOC.

## **PD-1113**

**DATED March 31, 1977 - THE CDCP FRANCHISE  
GRANTING THE CDCP A FRANCHISE TO OPERATE,  
CONSTRUCT & MAINTAIN TOLL FACILITIES IN THE NORTH  
& SOUTH LUZON TOLL EXPRESSWAY**

### **PREMISES:**

- ➡ The construction of the Manila North and Manila South Expressways has spawned immense benefits to the country's economic development, serving as a main artery in the transportation of trade and commerce, THAT THEIR CONTINUED MAINTENANCE AND FURTHER EXTENSION IS NECESSARY;
- ➡ The CDCP has proposed a scheme of operation WHICH WILL TAP PRIVATE RESOURCES AND ENTERPRISE in this undertaking and which will at the same time allow the government to redirect its own resources to other infrastructure projects.

**SEC. 1** – There is hereby granted to the CDCP... the right, privilege and authority to construct, operate and maintain toll facilities.....

The franchise herein granted shall include the right to collect toll fees at such rates as may be fixed and/or authorized by the TRB.

**SEC. 3** – The franchise is granted subject to such conditions as may be imposed by the Board in an appropriate contract (TOA) to be executed for this purpose; and with the understanding and upon the condition that it shall be subject to amendment, alteration or repeal when private interest so requires.

## **SEC. 8 – Transfer of Franchise**

In the event that this franchise is SOLD, TRANSFERRED OR ASSIGNED, the transferee shall be subject to all the CONDITIONS, TERMS, RESTRICTIONS AND LIMITATIONS of this Decree as fully and completely and to the same extents as if the franchise has been granted to the same person, firm, company, corporation or other commercial or legal entity.

**SEC. 9 – The Government shall turn over to the GRANTEE..... all assets and facilities including all equipment and opportunities directly related to the operations of the N and STE**  
.....

**Provided, However,**

That upon termination of the franchise period, said physical assets and facilities including improvements thereon, together with equipment and appurtenances directly related to their operations, shall be turned over to the Government without any cost or obligation on the part of the latter.

# BOT LAW

R.A. 6957 - JULY 1990

AN ACT AUTHORIZING THE FINANCING,  
CONSTRUCTION, OPERATION AND MAINTENANCE  
OF INFRASTRUCTURE PROJECTS BY THE PRIVATE  
SECTOR.

R.A. 7718 - APPROVED MAY 1994

AN ACT AMENDING CERTAIN SECTIONS OF  
R.A. 6957.

# BOT LAW

## DECLARATION OF POLICY (R.A. 7718)

It is the declared policy of the state to recognize the indispensable role of the private sector as the main engine for national growth and development and provide the most appropriate incentives to mobilize private sector resources for the purpose of financing the construction, operation and maintenance of infrastructure and development projects normally financed and undertaken by the government.

# BOT LAW

## DEFINITION OF TERMS:

- (a) Private Sector infrastructure or development projects –  
Projects normally financed and operated by the public  
sector

But which will now be wholly or partly implemented  
By the private sector,  
Including but not limited to highways, ports, etc.  
As may be authorized by the appropriate agency  
pursuant to this Act.

Such projects shall be undertaken through Contractual  
arrangements as defined hereunder  
And such other variations as may be approved  
by the President of the Philippines.

# BOT LAW

## Contractual Arrangements:

1. Build-Operate-and-Transfer
2. Build-and-Transfer
3. Build-Own-and-Operate
4. Build-Lease-and-Transfer
5. Build-Transfer-and-Operate
6. Contract-Add-and-Operate
7. Develop-Operate-and-Transfer
8. Rehabilitate-Operate-and-Transfer
9. Rehabilitate-Own-and-Operate

# BOT LAW

## CONTRACTUAL ARRANGEMENTS.....

### VARIATIONS

1. Joint Venture Arrangement
2. Design-and-Build
3. Concession

# BOT LAW

## For the CONSTRUCTION STAGE:

Project Proponent may obtain financing from foreign and/or domestic sources, and/or engage the services of a foreign and/or Filipino Contractor.

## For the OPERATION of a public utility requiring a FRANCHISE

Facility Operator must be a Filipino or If a corporation-registered with the SEC and owned up to at least 60% by Filipinos.



## BOT LAW

For the FINANCING of projects having difficulty in sourcing funds

To be financed partly from direct government appropriations and/or ODA not exceeding 50% of the project cost.

Balance to be provided by the project proponent.

## BOT LAW

### DEFINITION

Project Proponent – The private sector entity which:

shall have Contractual Responsibility for the project,

and shall have an adequate financial base to implement said project, consisting of:

Equity and

Firm COMMITMENT from reputable financial institutions to provide, upon award, sufficient credit line to cover the total estimated cost of the project.

# BOT LAW

## CONTRACTOR

May or May Not Be the project proponent

Shall undertake the actual construction, and/or

Shall supply equipment to the project

Accredited under Philippine Laws

# BOT LAW

## FACILITY OPERATOR

May or May Not Be the project proponent

Responsible for all aspects of O & M

Collects tolls, fees, rentals or charges

Registered with the SEC

## BOT LAW

### DIRECT GOVERNMENT GUARANTEE

- An Agreement
- Government, its Agencies or LGUs assume responsibility

For the REPAYMENT of debt directly incurred by the Project Proponent in implementing the project.

In case of loan default.

## BOT LAW

### REASONABLE RATE OF RETURN ON INVESTMENTS AND OPERATING AND MAINTENANCE COST

- That reflects the prevailing cost of capital In the domestic and international markets.
- In case of negotiated contracts:
  - Determined by the ICC of the NEDA prior to negotiation and/or call for proposal.
  - But, for Public Utilities which are monopolies Determined by existing laws, in no case shall exceed 12%.

# BOT LAW

## CONSTRUCTION

**Refers to:**    New Construction                      Expansion  
                         Rehabilitation                      Alteration  
                         Improvement                      Related Works

**Includes supply of equipment, materials, labor and services and related items.**

# BOT LAW

## PRIVATE INITIATIVE IN INFRASTRUCTURE

**All government infrastructure agencies, GOCCs and LGUs:**

**Are** hereby authorized to enter into contract  
**With** any duly pre-qualified project proponent  
**For** the financing, construction, operation and maintenance

**Of** any financially viable infrastructure/facility  
**Thru** any of the contractual arrangement authorized  
**Shall** include in their development program those PRIORITY PROJECTS that may be.....(undertaken) by the private sector under the provisions of this Act.

# BOT LAW

## UNSOLICITED PROPOSALS

May be accepted on a negotiated basis

Conditions to be met:

- (1) Projects involve a new concept or technology and/or Are not part of the list of priority projects;
- (2) No direct government guarantee, subsidy or equity is required;
- (3) Comparative or competitive proposals have been invited, and no other proposal is received for a period of 60 working days.

Original proponent shall have the right to match the price within 30 working days.

# BOT LAW

## AWARD OF CONTRACT

BOT Arrangement

- The lowest bid and most favorable terms;
- For the Project, based on the present value of its proposed tolls, fees, rentals and charges;
- Over a fixed term for the facility;
- Constructed, rehabilitated, operated and maintained according to the prescribed minimum design and performance standards, plans and specifications;
- Winner automatically granted the franchise to operate and maintain the facility, including the collection of tolls, fees, rentals and charges.

# BOT LAW

## AWARD OF CONTRACT

### BT or BLT Arrangement:

The lowest complying bidder based on the present value of its proposed amortization payments.

Filipino contractor who submits an equally advantageous bid – Exactly the same price and technical specifications as those of a foreign contractor shall be given preference.

# BOT LAW

## DIRECT NEGOTIATION OF CONTRACTS

- Resorted to when there is only one complying bidder left
- Circumstances:
  - a. Only one contractor applies for Pre-Qualification
    - Is pre-qualified and
    - Submits a complying bid
  - b. More than one applied
    - But only one pre-qualified and
    - Submits a complying bid
  - c. More than one pre-qualified
    - Only one submits a complying bid

# BOT LAW

## REPAYMENT SCHEME

Project Proponent shall be repaid

by authorizing it to charge and collect  
reasonable tolls, fees, and rentals  
Not exceeding those incorporated in the contract

in the form of a share in the revenue or  
Other non-monetary payments – such as the  
grant of a portion of reclaimed land

# BOT LAW

## REPAYMENT SCHEME

For NEGOTIATED CONTRACT and  
For projects granted a natural monopoly, or  
where the public has no access to alternative  
facilities.

The Appropriate government regulatory bodies,  
Shall approve toll, fees, rentals and charges  
based on a reasonable rate of return.

## BOT LAW

### Toll, Fees, Rentals and Charges

- Imposition and collection for a fixed term as
- Proposed in the bid and
- Incorporated in the contract
- Term not to exceed 50 years
- Subject to adjustment
- Based on a pre-determined formula
- Using official price indices
- Included in the instruction to bidders
- And in the contract
- Reasonable to the end users

## BOT LAW

### MAINTENANCE AND REPAIR

• Undertaken by project proponent during  
The Lifetime of the Franchise.

• In accordance with standards prescribed  
In the Bidding Documents and the  
Contract.



# BOT LAW

## CONTRACT TERMINATION

Revoked, Cancelled or Terminated by Government  
Through no fault of the Project Proponent, or

By Mutual Agreement

The Government shall compensate the said Project  
Proponent

For the actual expenses incurred

Plus a reasonable rate of return thereon

**Provided:** Interest of Government is duly insured.

# BOT LAW

## CONTRACT TERMINATION

Project Proponent may terminate the contract,  
In the event Government defaults on certain  
major obligations in the contract  
Such failure is not remediable or  
If remediable remain unremedied for an  
unreasonable length of time.

Reasonable Compensation to project proponent for  
Equivalent or proportionate contract cost  
as defined in the contract.

**BREAK!!!!!!**

**BREAK!!!!!!**

For 15 minutes

## **Public-Private-Partnership**

### **SOME ISSUES/CONCERNS TO CONSIDER**

1. Government to provide appropriate  
Supervision and regulation of PPP  
arrangements.
2. Agencies, GOCCs and LGUs  
To separate regulatory function vis-à-vis  
contracting function
3. To ensure enforceability and stability of  
contract involving PPP
4. Promoting and encouraging PPP arrangements

## Public–Private–Partnership

### SOME ISSUES/CONCERNS TO CONSIDER

5. Carefully prepared projects, plans and programs for PPP implementation.
6. Allocating risks to the party best able to manage them.
7. Clear cut policy on the grant of government financial support or subsidy.
8. Rethinking the concept of unsolicited proposal.

## FACTORS FOR SUCCESS – FROM GOVERNMENT

1. Project Financially sound, feasible, affordable.
2. Manageable country risk
3. Government Support
4. High priority in list
5. Legal Framework
6. Efficient Administrative Process
7. Fair and Transparent bidding
8. Reasonable Time and Cost to conclude transactions

## FACTORS FOR SUCCESS – FROM PRIVATE SPONSORS

1. Experienced and reliable
2. Capacity to absorb financial risks
3. Constructors have experience and sufficient resources

## FACTORS FOR SUCCESS – CONTRACTUAL ARRANGEMENTS

1. Rational allocation and management of project risks.
2. Adequate security for financial lenders.
3. Currency, foreign exchange and inflation issues solved.
4. Development and integration of the legal document and their terms and conditions must reflect the basic economics of the project.
5. Need for efficient cooperation between Public and Private entities on a win-win basis.

## ELEMENTS OF A SUCCESSFUL BOT PROJECT

### A. HOST GOVERNMENT

1. Provision from government
  - a. Legal and regulatory framework  
to guide the BOT project process
  - b. Procurement process, transparent,  
Well-defined
  - c. Focal and specific BOT body  
to coordinate authorization  
process

## ELEMENTS OF A SUCCESSFUL BOT PROJECT

### B. PROJECT COMPANY

1. A special purpose, limited liability company
2. Capitalized with equity contribution from  
sponsors
3. Borrows funds to finance  
the project
4. Enters into contractual arrangement  
necessary to implement the project
5. Includes local sponsors that can  
help resolve local issues

## ELEMENTS OF A SUCCESSFUL BOT PROJECT

### C. CONCESSION AGREEMENT

1. Defines rights and obligations of the Government and of the Project Company
2. Identified and Allocates project risks and its management
3. Other agreements for construction, and O & M, among others

## ELEMENTS OF A SUCCESSFUL BOT PROJECT

### D. PROJECT FINANCE

1. Mix of debt, equity and other financial instruments.
2. On a limited-recourse basis against project company and its assets including contractual rights, performance bonds, insurances, and commitments obtained for the project.
3. Primarily based on contractual rights to a revenue stream, (For toll road - market-based revenues).
4. Clear and detailed description of the concession scope and limits.
5. Security package to protect lenders.

## ELEMENTS OF A SUCCESSFUL BOT PROJECT

### E. EQUITY FROM SPONSORS

1. Usually set between 20 – 30% of total project cost.
2. Projected rate of return often set forth in the request for proposal.

## ELEMENTS OF A SUCCESSFUL BOT PROJECT

### F. GOVERNMENT GUARANTEES

1. Guarantee on facility/utility performance.
2. Guarantee as may be required by foreign export credit guarantee agencies
3. Guarantee on financing readjustments relating to essential pre-requisites or force majeure provisions

NOTE: WHAT IS IMPORTANT ARE UNDERTAKINGS THAT PROVIDE ENHANCEMENT/SUPPORT FOR THE FINANCING OF THE PROJECT.

# Guidelines and Procedures For Entering Into JOINT VENTURE Between GOVERNMENT & PRIVATE ENTITIES

## LEGAL BASIS

EXECUTIVE ORDER NO. 423, Dated 30 April, 2005

## PRINCIPLES:

1. JV is for profit for government and private sector partner.
2. No barriers for the withdrawal of government investment.
3. Government to avoid conflict of interest as regulator and as investor/implementor.
4. Allow private sector to take over the project after

## Joint Venture Agreements

### Purpose:

1. To encourage pooling of resources and expertise between government and private sector entities through JV as a viable, efficient and practical alternative in pursuing development goals of the government.
2. To ensure the all JV Agreements are entered into through a transparent process.

### Coverage:

Apply to all GOCCs, GCEs, GICPs, GFIs, SVCs which are Expressly Authorized by law or their respective charters to enter in to JV Agreements.



## Joint Venture Agreements

### DEFINITIONS:

Joint Venture (JV). A contractual agreement whereby:

- a Private Sector Entity or a group of private sector entities on one hand, and
- a Government Entity or a group of government entities on the other hand,
- Contribute money/capital, services, assets (including equipment, land or intellectual property), or a combination of any or all of the foregoing.

## Joint Venture Agreements

### DEFINITION (CONT'D.....)

- Parties to a JV share risks to jointly undertake an investment activity.
- In order to accomplish a specific, limited or special goal or purpose.
- With the end in view of facilitating private sector initiative in a particular industry or sector, and
- Eventually transferring ownership of the investment activity to the private sector under competitive market conditions.

## Joint Venture Agreements

### DEFINITION (CONT'D.....)

- It involves a community or pooling interest in the performance of the service, function, business or activity.
- With each party having a right to direct and govern the policy in connection therewith.
- And with a view of sharing both profits and losses, subject to Agreement by the parties.

## Joint Venture Agreements

### A JOINT VENTURE COMPANY MAY BE.....

- **A Corporate JV -**  
An entity registered with SEC by the JV Partners that shall perform the primary functions and obligations of the JV as stipulated under the JV Agreement.
- **A Contractual JV –**  
A legal and binding agreement under which the JV Partners shall perform the primary functions and obligations under the JV Agreement without forming a JV Company.

## Joint Venture Agreements

PREFERRED MODE OF IMPLEMENTING A JV AGREEMENT.....

### JV Company:

- ✿ A Stock Corporation
- ✿ Government Equity Contribution – less than 50%
- ✿ Government Entity represented in JV Board
- ✿ A fixed period for the participation of the Government Entity.
- ✿ Among Others.....

## METROPOLITAN WATERWORKS & SEWERAGE SYSTEM The MWSS Charter

Republic Act No.6234 – June 19, 1971

(Sec.1) DECLARATION OF POLICY.

- ✿ The proper operation and maintenance of water works system.
- ✿ To ensure an uninterrupted and adequate supply, and
- ✿ Distribution of potable water for domestic and other purposes, and
- ✿ The proper operation and maintenance of sewerage systems are essential public services.
- ✿ Because they are vital to public health and safety.
- ✿ It is therefore declared a policy of the state  
That the establishment operation and maintenance of such systems must be supervised and controlled by the state.

## The MWSS Charter

### (Sec.3) POWERS AND FUNCTIONS

(e) To establish the basic and broad policies and goals of the system

(j) To acquire, purchase, hold transfer, sell, lease, rent, mortgage, encumber, and otherwise dispose of real and personal property, including RIGHTS and FRANCHISES, consistent with the purpose for which the system is created and reasonably required for the transaction of the lawful business of the same.

## The MWSS Charter

### (Sec.3) POWERS AND FUNCTIONS

(m) To contract indebtedness in any currency and issue bonds to finance projects now authorized for the NWSA under existing laws and as may hereafter be expressly authorized by law with the approval of the President of the Philippines upon the recommendation of the Secretary of Finance.

## The MWSS Charter

### (Sec.12) RATES AND FEES

The rates and fees fixed by the Board of Trustees..... Shall be of such magnitude that the systems rate of net return shall not exceed 12%, on a rate base composed of the sum of its assets in operation as revalued from time to time plus two months operating capital

## The MWSS Charter

Executive Order No.311 – March 20, 1996

### ENCOURAGING PRIVATE SECTOR PARTICIPATION IN THE OPERATIONS AND FACILITIES OF THE MWSS

- a. The MWSS shall enter into arrangements that will result in the involvement or participation of the private sector in any or all of the segments, operations, and/or facilities of the MWSS.

## The MWSS Charter

Executive Order No.311

b.The involvement or participation of the private sector may include, but shall not be limited to:

(i)Franchising, concession, management or other arrangements;

(ii)Privatization, or

(iii) Contracts for project to be implement under BOT and/or related schemes for the financing, construction, repair, rehabilitation, improvement and operation of water facilities and projects related to consumers.

## MRC

The MANILA-DAGUPAN LINE

The concession to Construct and Operate was bidded out

Only one bidder-London-based  
MANILA RAILWAY COMPANY

It came after an extended advertising effort and was received only after three previous unsuccessful attempts to attract any serious offer.

## MRC

### The MANILA-DAGUPAN LINE

#### Terms of the Concession

1. A concession of 99 years, starting on January 21, 1887.
2. A Spanish subsidiary guaranteeing the MRC an 8% interest on the invested capital.
3. Fiscal control and management, of the railway for the MRC.
4. MRC could back out anytime it felt that construction or operation was not profitable

The railroad was almost entirely a British undertaking

From: The Colonial Iron Horse by A.G. Corpuz.

## MRC

### DURING THE EARLY AMERICAN REGIME

In 1905, bids were invited to concessions covering the construction and operation of railways in the Islands of Luzon, Panay, Negros, Cebu, Leyte & Samar. All three bids submitted were rejected for failing to comply with some of the terms of the limitation.

In 1906, two new bids were opened

- WHITE SYNDICATE of New York, for lines in Negros,
  - \* Panay & Cebu
- SPEYER and COMPANY of New York, for the Luzon
  - \* Lines

## MRC

The New Concession with the Manila Railroad Company,  
(organized under the laws of New Jersey)

Included the following conditions:

1. 694 km. of new railroad lines
2. NO GUARANTEE granted on any of the construction
3. Initial rates based on the Manila–Dagupan railway
4. Government had the power to regulate rates at any time
5. Concession was a perpetual one
6. Government was free to grant competing franchises
7. Tax was fixed at ½% of gross earnings for 30 years and 1 ½ % for next 50 years
8. ROW of 30 meters including land beyond 30 meters for depot, machine shops, station building, workshops
9. Imported materials & equipment, free of duty.

From: The Colonial Iron Horse by A.G. Corpuz



**PREPARATORY SURVEY  
for  
Public Private Partnership (PPP) Infrastructure  
Development Projects  
in the Republic of the Philippines**

**PILOT TRAINING  
Institutional Framework**

**October 20, 2010**

**MR. MITSUO KIUCHI  
Team Leader  
JICA Study Team**



National Economic Development Authority  
(NEDA)



Japan International Cooperation  
Agency (JICA)

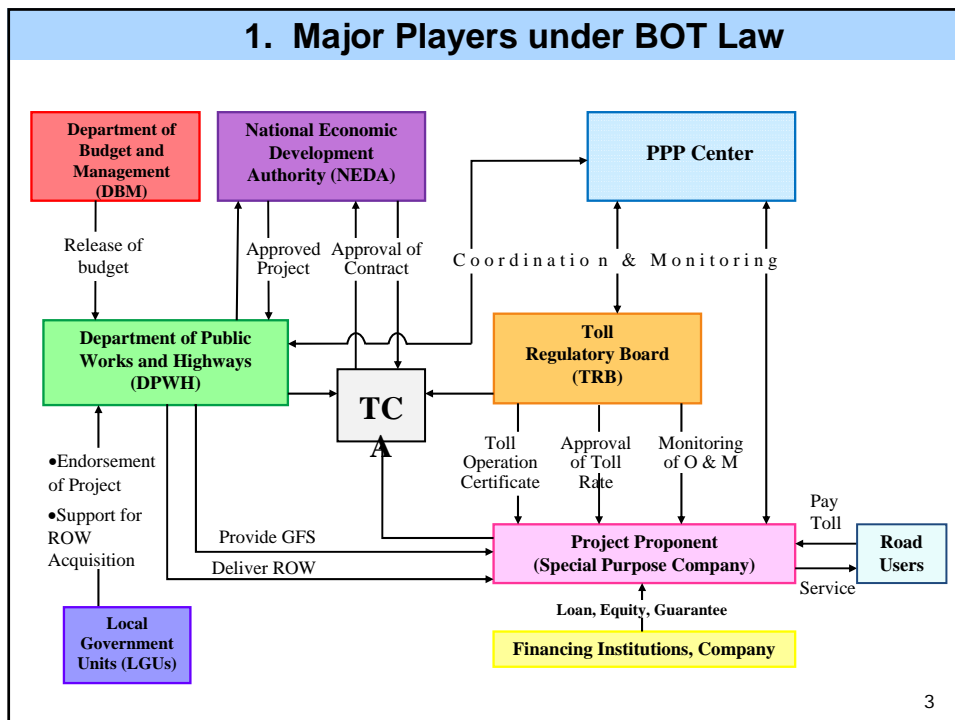
Department of Public Works and Highways  
(DPWH)

1

**OUTLINE OF PRESENTATION**

1. Major Players under BOT Law
2. Major Players under Joint Venture Approach

2



### 1. Major Players under BOT Law

#### 1) NEDA

- Establishment of National/Regional Development Policy
- Establishment of Policy Framework for PPP Projects
- Approval of PPP Projects
- Approval of TOC

PANGASINAN SA KABUHAYAN AT PANGAPALUSAP  
REPUBLICA NG PILIPINAS

4

## 1. Major Players under BOT Law

### 2) PPP Center

- Project facilitation and assistance to National Agencies/corporation and LGUs.
- Advisory services and technical assistance.
- Manage and administer PDF.
- Monitor and facilitate PPP projects.



5

## 1. Major Players under BOT Law

### 3) DPWH

- Establishment of policy framework for road sector PPP Projects
- Formulation of Master Plan
- Project Identification
- Project preparation (business case study/feasibility study)
- ROW acquisition
- Selection of project proponent
- Toll concession agreement
- Government financial support
- Detailed design and construction of Government's responsible section.



6

## 1. Major Players under BOT Law

### 4) TRB

- Toll concession agreement (TCA)
- Toll operation certificate (TOC)
- Approval of toll rate and toll rate adjustment
- Monitoring of O & M.



7

## 1. Major Players under BOT Law

### 5) LGUs

- Endorsement of project
- Support for ROW acquisition and resettlement.

### 6) Project Proponent

- Toll concession agreement.
- Design, construction, and O & M.
- Financing of above.

8

## 1. Major Players under BOT Law

### 7) Financing Institutions/ Company

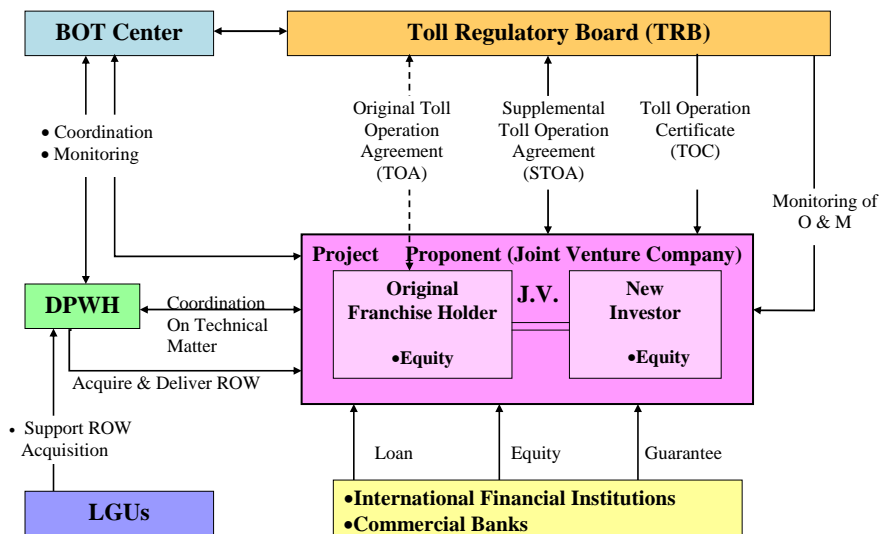
- Provide loans, equity, and/or guarantee.

### 8) Road Users

- Receive efficient transport services
- Pay for the services received as toll fee

9

## 2. Major Players under Joint Venture Approach



10

**Maraming Salamat Po!**

# **Day 3: October 21**

- Project Identification
- Business Case/Feasibility Study

**PREPARATORY SURVEY**  
for  
**Public Private Partnership (PPP) Infrastructure  
Development Projects  
in the Republic of the Philippines**

**PILOT TRAINING**  
**Project Identification**  
October 21, 2010

**MR. MITSUO KIUCHI**  
Team Leader  
JICA Study Team



National Economic Development Authority  
(NEDA)



Japan International Cooperation  
Agency (JICA)

Department of Public Works and Highways  
(DPWH)

1

**OUTLINE OF PRESENTATION**

1. Needs of Master Plan
2. Project Identification Procedure
3. Case Study: Metro Manila and its 200 km Sphere
4. Prioritization of Projects

2



## 1. Need of Master Plan

- Master Plan should be preferably prepared for the consistent development of PPP Projects.
- Master Plan identifies all possible projects and prioritizes their implementation orders
- In case of a road sector, important thing is that projects should be so implemented that tollway network is formed. Currently tollways are functioning individually and network is not formed yet.
- DPWH prepared Master Plan, but no master plan or no updated master plan for the rail sector, the port sector, and the airport sector, is prepared.

3

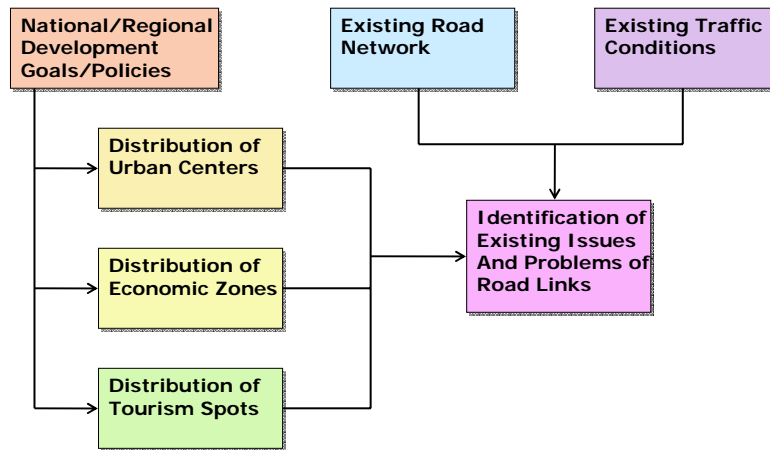
## 2. Project Identification Procedure

- Step-1 : Assessment of Existing Conditions
- Step-2 : Assessment of Future Conditions
- Step-3 : Project Identification
- Step-4 : Prioritization and Implementation  
Schedule

4

## 2. Project Identification Procedure

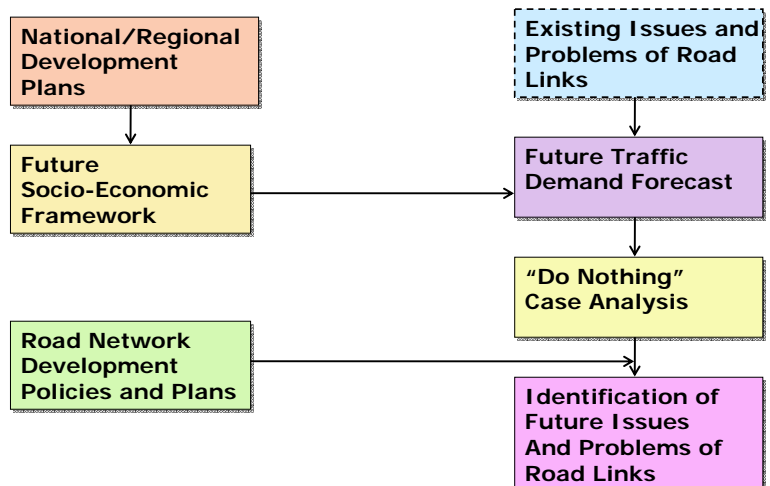
### Step-1 : Assessment of Existing Conditions



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## 2. Project Identification Procedure

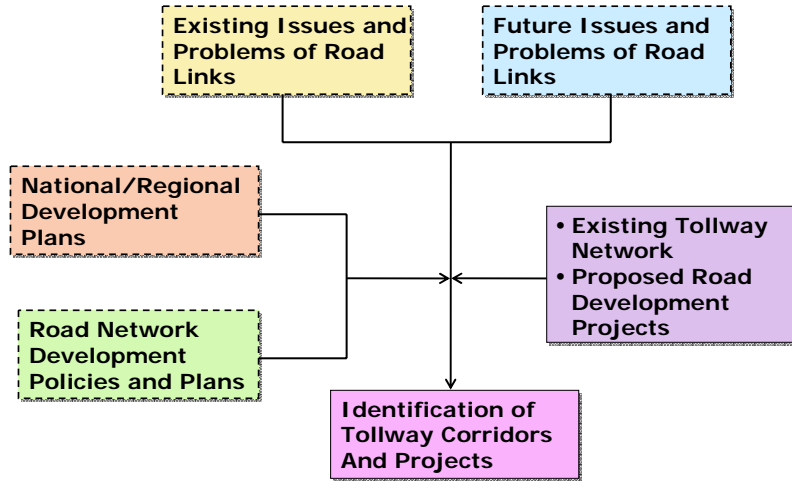
### Step-2 : Assessment of Future Condition



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## 2. Project Identification Procedure

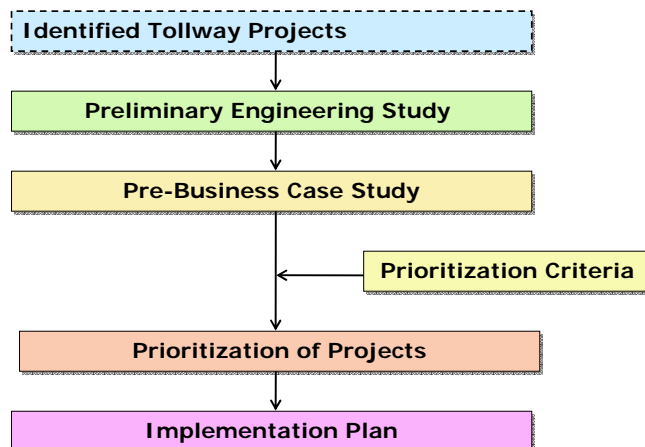
### Step-3: Project Identification



7

## 2. Project Identification Procedure

### Step-4 : Prioritization and Implementation Plan



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### **3. Case Study: Metro Manila and its 200 km Sphere**

#### **1) National Development Policy**

- Promotion of decentralization through infrastructure development.
- To decongest Metro Manila traffic.
- To develop Clark and Subic corridor as International Logistics Center.

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### **3. Case Study: Metro Manila and its 200 km Sphere**

#### **2) Regional Development Scenario**

##### **a) Study Area as a whole**

- Metro Manila together with Region III and Region IV-A will continue to propel the country's economy.
- To promote decentralization and to mitigate overconcentration of Metro Manila, regional urban centers outside Metro Manila will be developed.
- Strategic areas along the Pacific coast shall be designated as the core development and accessibility to those areas shall be strengthened.
- In order to support tourism development, the tourism development axes will be developed for the strategic areas of tourism development.

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### **3. Case Study: Metro Manila and its 200 km Sphere**

#### **2) Regional Development Scenario**

##### **b) Metro Manila and its suburbs**

- Due to accumulation of infrastructure of expressways, international airports and ports and economic zones along the north-south direction, the north-south industrial development beltway which connects Batangas-Metro Manila-Clark-Tarlac will be the key axis for the development of the Metropolitan areas and the country as a whole.
- Sound urbanization of Metro Manila and its suburbs will be achieved.

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### **3. Case Study: Metro Manila and its 200 km Sphere**

#### **2) Regional Development Scenario**

##### **c) North of Metro Manila**

- Clark-Subic corridor will be developed as a logistic axis not only for the country but also for the southeast and ASEAN countries.
- To support the development of CAR and Region-I, the North-West Luzon development axis will be developed.
- For the development of Region II, the North-East Luzon development axis will be developed.

##### **d) South of Metro Manila**

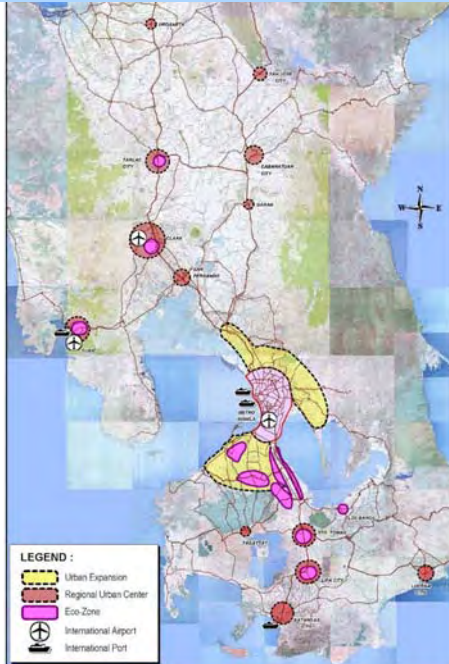
- To support the development of Region V, the South Luzon development axis will be developed.

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### 3. Case Study: Metro Manila and its 200 km Sphere

## Urban Development Structure

Source: JICA Study Team

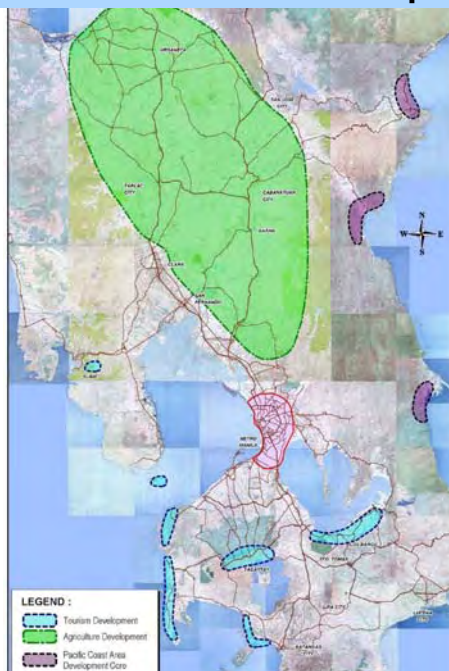


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### 3. Case Study: Metro Manila and its 200 km Sphere

## Agriculture and Tourism Development and Pacific Coast Development

Source: JICA Study Team



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### 3. Case Study: Metro Manila and its 200 km Sphere

## Development Axis

Source: JICA Study Team

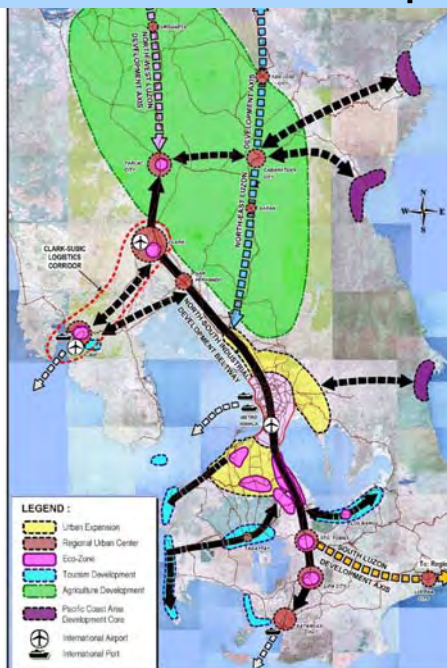


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### 3. Case Study: Metro Manila and its 200 km Sphere

## Development Strategy: 200 km Radius Sphere of Metro Manila

Source: JICA Study Team



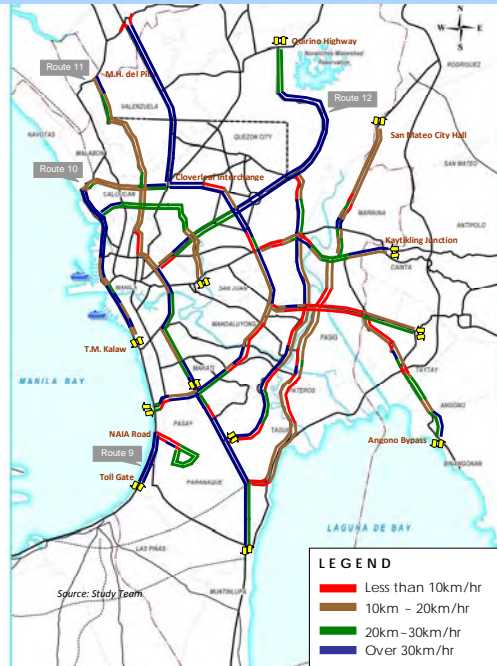
16

### 3. Case Study: Metro Manila and its 200 km Sphere

#### 3) Traffic Condition

#### Travel Speed in Metro Manila

Source: JICA Study Team



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### 3. Case Study: Metro Manila and its 200 km Sphere

#### 4) Tollway within Metro Manila

- Area within Metro Manila is highly developed and urbanized.
- New ROW acquisition for a tollway is practically impossible.
- Tollway network planning and selection of tollway corridors is required to utilize existing/available ROW such as;
  - Wide roads ROW
  - Railway ROW
  - River ROW
- There exist various 2 to 3 level structures along the existing wide roads which make it difficult to plan a tollway;
  - 2-3 level Interchanges
  - LRT & MRT Structures
  - LRT & MRT Stations

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### 3. Case Study: Metro Manila and its 200 km Sphere

**ROADS  
with  
ROW  
more  
than  
35 m.**

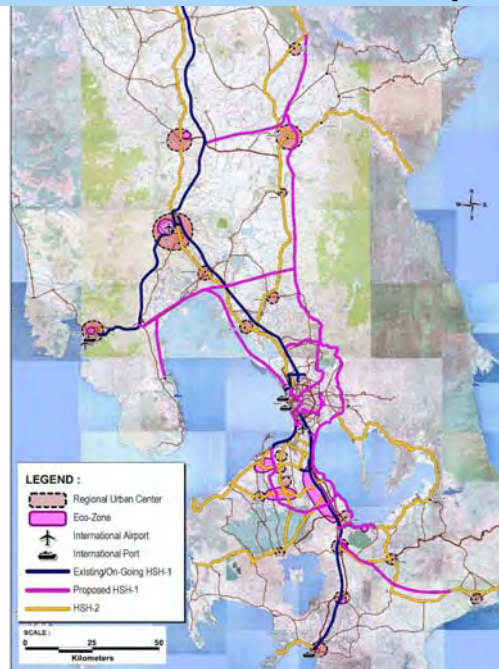
Source: JICA Study Team



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### 3. Case Study: Metro Manila and its 200 km Sphere

**5) Proposed  
Tollway  
Network**



20

4. Prioritization of Projects				
1) DPWH's Prioritization Criteria for Conventional National Road Projects	Indicators for New Projects		Score Points	Max. Points
	<b>1. Project Preparedness</b>			<b>65</b>
	1.1 Current Project Status			10
	1.1.1	Approved by ICC (within 18 months validity)	10	
	1.1.2	Approved by ICC (within 18 months validity) but deferred by lending institution	8	
	1.1.3	Approved by ICC (after 18 mos.) but deferred by lending institution	4	
	1.1.4	Not approved by ICC. New proposal needs to be submitted to ICC	0	
	1.2	Detailed Design Carried Out	5	5
	1.3 Economic Viability			30
	1.3.1	NPV/C $\geq 2.0$	30	
	1.3.2	NPV/C $< 2.0$ but $\geq 1.0$	25	
	1.3.3	NPV/C $< 1.0$ but $\geq 0.5$	20	
	1.3.4	NPV/C $< 0.5$ but $\geq 0.3$	15	
1.3.5	NPV/C $< 0.3$ but $> 0$	10		
<b>Note:</b> All projects in this list must be feasible (NPV/C $> 0$ at 15% discount rate)  *IEE – Initial Environmental Examination;  EIS – Environmental Statement;  EIA - Environmental Impact Assessment  **LAPRAP – Land Acquisition Plan and Resettlement Action Plan				
21				

4. Prioritization of Projects				
1) DPWH's Prioritization Criteria for Conventional National Road Projects	Indicators for New Projects		Score Points	Max. Points
	1.4 Environmental Assessment (Project with IEE or EIS or EIA; otherwise 0)*			10
	1.4.1	Minor or negligible negative impact and any mitigation accounted for in project costs	10	
	1.4.2	Moderate negative impact but mitigation accounted for in project costs	8	
	1.4.3	Considerable negative impact but mitigation accounted for in project costs	4	
	1.5 Social Impact (Project with LAPRAP, if required; otherwise 0)**			10
	1.5.1	No resettlement	10	
	1.5.2	Minor resettlement but mitigation accounted for in project costs	8	
	1.5.3	Major resettlement but mitigation accounted for in project costs	4	
	<b>Note:</b> All projects in this list must be feasible (NPV/C $> 0$ at 15% discount rate)  *IEE – Initial Environmental Examination;  EIS – Environmental Statement;  EIA - Environmental Impact Assessment  **LAPRAP – Land Acquisition Plan and Resettlement Action Plan			
22				

4. Prioritization of Projects					
1) DPWH's Prioritization Criteria for Conventional National Road Projects	Indicators for New Projects	Score Points	Max. Points	<b>Note:</b> All projects in this list must be feasible (NPV/C > 0 at 15% discount rate)  *IEE – Initial Environmental Examination; EIS – Environmental Statement; EIA - Environmental Impact Assessment  **LAPRAP – Land Acquisition Plan and Resettlement Action Plan	
	<b>2. Road Network Importance</b>				<b><u>20</u></b>
	2.1 Road Category				15
	2.1.1 North-South Backbone, Arterial National Roads	15			
	2.1.2 East-West Laterals, Arterial National Roads	12			
	2.1.3 Other Arterial National Roads of Strategic Importance	8			
	2.1.4 Secondary National Roads	4			
	2.2 Road Strategic Network				5
	2.2.1 Identified under major DPWH studies	5			
	2.2.2 Not identified under 2.2.1	0			

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4. Prioritization of Projects					
1) DPWH's Prioritization Criteria for Conventional National Road Projects	Indicators for New Projects	Score Points	Max. Points	<b>Note:</b> All projects in this list must be feasible (NPV/C > 0 at 15% discount rate)  *IEE – Initial Environmental Examination; EIS – Environmental Statement; EIA - Environmental Impact Assessment  **LAPRAP – Land Acquisition Plan and Resettlement Action Plan	
	<b>3. Economic and Social Development Policy</b>				<b><u>15</u></b>
	a) Provide access to basic services which currently are not available				
	b) Develop economically and socially underdeveloped/depressed areas (resource base must be available)				
	c) Support law and order				
	d) Support agricultural modernization				
	e) Support traffic decongestion				
	f) Support industrial and tourism development				
	3.1.1 All points met	15			
	3.1.2 Point 3b) met another four out of the six points met	12			
3.1.3 Point 3b) met and another two of the six points met	8				
3.1.4 Only point 3b) met	4				
3.1.5 None of the points met	0				
<b>Total Maximum Score</b>			<b><u>100</u></b>		

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## 4. Prioritization of Projects

### 2) Prioritization Criteria Adopted by HSH Mater Plan Study

Item	Weight	Sub-Item	Sub-Weight
1.Functional Importance of a link in HSH Network and Improvement of Inter-modal Linkage	17	1.1 Functional Importance <ul style="list-style-type: none"> <li>This is to evaluate conformity with National Policy of Decentralization; therefore, second highest weight was given.</li> </ul>	15.0
		1.2 Improvement of Intermodal Linkage <ul style="list-style-type: none"> <li>This is to evaluate improvement of logistic system. Additional weight to above.</li> </ul>	
2. Urgency based on contribution to traffic decongestion	17	1.3 Number of traffic attracted to a link. (pcu/day) <ul style="list-style-type: none"> <li>This is to evaluate contribution to traffic decongestion which is one of the HSH-1 development policy, thus given high weight.</li> </ul>	7.0
		1.4 Reduction of travel time (pcu-hour/ day). <ul style="list-style-type: none"> <li>This is to evaluate contribution to delivery of people and goods faster and on time which is the major function of HSH-1, thus given high weight.</li> </ul>	

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## 4. Prioritization of Projects

### 2) Prioritization Criteria Adopted by HSH Mater Plan Study

Item	Weight	Sub-Item	Sub-Weight
3. Project Readiness	15	<ul style="list-style-type: none"> <li>This item clearly shows the DPWH's and the Private Sector's implementation priority, thus given second highest weight</li> </ul>	15.0
4. Contribution to National/Regional Socio-Economic Development	10	3.1 Contribution to National/Regional Economic Development <ul style="list-style-type: none"> <li>This is to evaluate contribution to economic development. Sub-item 8.1 does not quantify this benefit.</li> </ul>	5.0
		3.2 Contribution to Social Development: Contribution to Job Creation <ul style="list-style-type: none"> <li>This is to evaluate contribution to social development in terms of job creation which is not quantified in Sub-item 8.1.</li> </ul>	

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## 4. Prioritization of Projects

### 2) Prioritization Criteria Adopted by HSH Mater Plan Study

Item	Weight	Sub-Item	Sub-Weight
5. Initial Investment Fund Requirement	10	5.1 Construction Cost	6.0
		<ul style="list-style-type: none"> <li>This is to evaluate Government's or Private Sector's fund preparation difficulty.</li> </ul>	
6. Environmental and Social Impact	8	5.2 ROW Acquisition and Resettlement Cost	4.0
		<ul style="list-style-type: none"> <li>This is to evaluate Government's fund preparation difficulty.</li> </ul>	
6. Environmental and Social Impact	8	6.1 Natural Impact	3.0
		<ul style="list-style-type: none"> <li>During F/S or D/D, this impact can be mitigated by selecting appropriate route, thus given low weight.</li> </ul>	
6. Environmental and Social Impact	8	6.2 Social Impact (No. of Structure Affected)	5.0
		<ul style="list-style-type: none"> <li>Relocation of PAPs is one of the bottlenecks in implementation though during F/S and D/D, this impact can be mitigated.</li> </ul>	

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## 4. Prioritization of Projects

### 2) Prioritization Criteria Adopted by HSH Mater Plan Study

Item	Weight	Sub-Item	Sub-Weight
7. Impact of a project on viability of Existing Toll Expressway	3	7.1 Impact on Traffic Volume of Existing Expressway	3.0
		<ul style="list-style-type: none"> <li>This is to evaluate if revenue of existing toll road is affected or not.</li> </ul>	
8. Economic and Financial Viability	20	8.1 Economic Viability (Is the Project economically justifiable?)	16.0
		<ul style="list-style-type: none"> <li>This is DPWH's top concern, thus given highest weight.</li> </ul>	
8. Economic and Financial Viability	20	8.2 Financial Viability (Is the Chance of Private Sector Participation high?)	4.0
		<ul style="list-style-type: none"> <li>This is to evaluate chances of private sector's participation and possibility to reduce Government's financial burden.</li> </ul>	
<b>Total</b>	<b>100</b>		<b>100</b>

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## 4. Prioritization of Projects

### 3) Prioritization Criteria Adopted by PEGR Study

	<b>Criteria/ Assessment</b> Max. Score=15, Min. = 0	<b>Higher Score</b> Score: 10 to 15	<b>Moderate Score</b> Score: 5 to 9	<b>Lower Score</b> Score: 0 to 4	<b>Proposed Weight</b>	<b>Adjusted to 100</b>
1	Financial Feasibility/ Fiscal Support	Viable:>20%; and No fiscal support	Marginal 14-20%; and Limited fiscal support	Not viable <14%; High fiscal support	14	9.4
2	Readiness and Risk	Few major issues/ risks and Project 'Ready'	Identified risks but largely can be mitigated and can be made 'Ready'	Many risks, few can be mitigated sufficiently and project not ready	15	10.0
3	Socio Economic Benefits (including employment and poverty alleviation) For all Projects EIRR should be more than 15%	Major Macro Impact	Moderate Macro Impact	Minor Macro Impact	10	6.7

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## 4. Prioritization of Projects

### 3) Prioritization Criteria Adopted by PEGR Study

	<b>Criteria/ Assessment</b> Max. Score=15, Min. = 0	<b>Higher Score</b> Score: 10 to 15	<b>Moderate Score</b> Score: 5 to 9	<b>Lower Score</b> Score: 0 to 4	<b>Proposed Weight</b>	<b>Adjusted to 100</b>
4	Regional Development/ National Integration Contribution to GDP	Impact on Low GRDP provinces and/or High Poverty alleviation focus	Impact on Low-Medium GRDP provinces and/or medium poverty alleviation focus	Impact on High GRDP provinces and/or Low Poverty alleviation focus	5	3.3
5	Sector Network Role and Importance in Sector Plan	Forms integral part and already included	Part of Sector Plan	Ad hoc project-but not in conflict with sector plan	12	8.0
6	National Security/ National Integration	Strengthens National security/ integration	Medium Impact	Low Impact	0	0

30

## 4. Prioritization of Projects

### 3) Prioritization Criteria Adopted by PEGR Study

	<b>Criteria/ Assessment</b> Max. Score=15, Min. = 0	<b>Higher Score</b> Score: 10 to 15	<b>Moderate Score</b> Score: 5 to 9	<b>Lower Score</b> Score: 0 to 4	<b>Proposed Weight</b>	<b>Adjusted to 100</b>
7	Land Acquisition	All/Most land acquired  (Say 85-100%)	Some land acquired  (25%-85%)	None or little land acquired  (<25%)	11	7.3
8	Environmental Impacts	Few Issue/Low impact	Some Issues/Mid impact	Many Issues/Severe impact	10	6.7
9	Involuntary Resettlement	a. Few affected	b. Mid. affected	c. Many affected	11	7.3
10	Impact on Export Earnings	Major overseas trade and/or tourism impact:	Limited o'seas trade or tourism impact	Little o'seas Trade or tourism impact	5	3.3
11	Safety	High Safety Focus	Moderate Safety Focus	Low Safety Focus	12	8.0

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## 4. Prioritization of Projects

### 3) Prioritization Criteria Adopted by PEGR Study

	<b>Criteria/ Assessment</b> Max. Score=15, Min. = 0	<b>Higher Score</b> Score: 10 to 15	<b>Moderate Score</b> Score: 5 to 9	<b>Lower Score</b> Score: 0 to 4	<b>Proposed Weight</b>	<b>Adjusted to 100</b>
12	Project Type/Cost	Primary Infrastructure;  >\$100m.	Medium scale Infrastructure;  \$100m-\$50m	Operational/ Maintenance  <\$50m	15	10.0
13	a) Demand Growth % or b) Traffic Volume	a. >15% pa b. High	a. 15%-5% pa b. Average	<5% pa Low	15	10.0
14	Capacity Expansion	High Expansion	Medium Expansion	Low Expansion	12	8.0
15	Meets Other Specific Needs; Industry/ Agriculture/ Mineral Resources, etc.	Allows Specific Major need to be met	Medium	Low	3	2.0
<b>Total</b>					<b>150</b>	<b>100</b>

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## 4. Prioritization of Projects

### 4) Prioritization Criteria Adopted by PPP Study for 2<sup>nd</sup> Screening

Category	Evaluation Item	Wt.	Evaluation Indicator	Evaluation Details
Necessity & Urgency of Project  [40]	• Economic Viability	15	• EIRR (%)	EIRR Over 25% = 15    15~25% = 12 Less than 15% = 5
	• Functional Importance of the Highway	6	• Functional Classification	Backbone Road = 6.0 Distributor Road = 4.0 Branch of Backbone Road = 2.0 Independent Road = 1.0
	• Contribution to National/Regional Economic Development	2	• Major Existing and Potential industries along the corridor	Agro-fishery Industry = 1.0 Manufacturing Industry = 1.0 Business/Commercial Industry = 1.0 Tourism Industry = 1.0 (Two or more industries = add weights, Max = 2.0 points)
	• Contribution to National/Regional Social Development	3	• Contribution to poverty alleviation	Serving for the areas (including hinter-lands) currently depressed/underdeveloped. Poverty incidence over 30% = 3.0 Poverty incidence between 20-30% = 2.0 Poverty incidence less than 20% = 1.0
	• Urgency Based on Contribution to Traffic Decongestion	6	• Represented by Reduction of Travel Time in pcu-hour/day	Over 4,000 pcu-hour/day = 6.0 1,000 ~ 4,000 pcu-hour/day = 4.0 Less than 1,000 pcu-hour/day = 2.0
	• DPWH Priority/Project Readiness	8	• Current Project Status	D/D On-going/Completed = 8.0 F/S Completed/On-going/Committed = 7.0 Pre-F/S Completed/On-going/Committed = 5.0 Conceptual Stage = 2.0

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## 4. Prioritization of Projects

### 4) Prioritization Criteria Adopted by PPP Study for 2<sup>nd</sup> Screening

Category	Evaluation Item	Wt.	Evaluation Indicator	Evaluation Details
Profitability  [30]	• SPC's Profitability	10	• IRR for SPC	Over 20% = 10.0    15% ~ 20% = 9.0 13% ~ 15% = 8.0    Less than 13% = 4.0
	• Equity Investor's Profitability	3	• Equity-IRR	Over 20% = 3.0    15% ~ 20% = 2.0 13% ~ 15% = 1.0    Less than 13% = 0
	• Relief of Government's Financial Burden	10	• Amount of Cost Saved by the Government	Over 50% = 10.0 40% ~ 50% = 8.0 30% ~ 40% = 6.0 Less than 30% = 4.0
	• Potential Project Cost Risk (cost increase by 10%)	3	• SPC-IRR	Over 20% = 3.0    15% ~ 20% = 2.0 13% ~ 15% = 1.0    Less than 13% = 0
	• Potential Revenue Risk (revenue decrease by 10%)	4	• SPC-IRR	Over 20% = 4.0    15% ~ 20% = 3.0 13% ~ 15% = 1.0    Less than 13% = 0

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## 4. Prioritization of Projects

### 4) Prioritization Criteria Adopted by PPP Study for 2<sup>nd</sup> Screening

Category	Evaluation Item	Wt.	Evaluation Indicator	Evaluation Details
[30]	• ROW Acquisition Difficulty	10	• Land Area to be Acquired by Land Use	<b>Urban Land</b> Less than 5.0 ha = 10.0      5.0 ~ 10.0 ha = 7.0 10.0 ~ 20.0 ha = 4.0      Over 20 ha = 2.0 <b>Rural Land</b> Less than 50.0 ha = 10.0      50 ~ 100.0 ha = 7.0 100.0 ~ 200.0 ha = 4.0      Over 200.0 ha = 2.0
	• Social Impact	10	• No. of Structures Affected	Less than 200 = 10.0      200 ~ 400 = 7.0 400 ~ 800 = 4.0      Over 800 = 2.0
	• Natural Environment	5	• Pass near environmentally critical area	• Does not pass near environmentally critical area = 5.0 • Passes near environmentally critical area = 2.0
	• Construction Difficulty	5	• Location of Project Site, Working Space During Construction and Type of Work Required	Rural/ at-grade = 5.0 Urban/ at-grade = 2.0 Urban/ Elevated = 1.0

**Maraming Salamat Po!**