## Bus Reform Projects for Metro Manila and Cebu City, Philippines

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# CEBU Bus Rapid Transit

## Brief Background

- Cebu is located in Region VII, Central Visayas
- Its capital, Cebu
  City, is called the
  "Queen City of the
  South"





## Brief Background

 The Philippine Government through the Department of **Transportation and** Communications (DOTC) has embarked upon a program of development and implementation of Bus Rapid Transit (BRT) in the Philippines.





## Brief Background

 The development and implementation of BRT in the Philippines, beginning with the Cebu BRT Project, is supported by the World **Bank** with additional funds provided by the **Clean Technology Fund** (CTF), by the French **Development Agency** (AFD), and the **Philippine Government.** 





## **BRT** Route



 Consists of segregated operation between Bulacao and Ayala, and buses running with priority between Ayala and Talamban



## Branding

 Through quantitative assessment of the general public, the Cebu BRT will be called "Trans Cebu"





## Facilities

- 23-km corridor
- Total of 33 stations
- Total of 176 buses
- Are stop light control for the entire city
- Central Transport
  Control Room will be set up





## Timeline

Milestone	Target
DED Completion	January 2016
Construction tender	February 2016
Notice of Award	***June 2016
Construction Start	July 2016
Construction Completion	July 2018
Operational Start Date	July 2018





# Automated Fare Collection System for Metro Manila Buses

## Public Transportation with AFCS

### • Rail - LRT1, LRT2, MRT

- AF Payments Inc. is the only supplier of the fare media
- AF Payments Inc. has the right to exclusively issue the fare media for 5 years
- AF Payments Inc. will provide their own clearing house for 10 years, then it will be turned over to the government
- Bus Green Frog & BGC
- E-jeepney





## Objectives

### • COMMUTER BENEFITS

- In the future, commuters will have easy access and/or easy transfers to buses and trains
- Easier mode of payment; safer commute for the people since the transactions will be cashless





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### • OPERATOR BENEFITS

- Boarding of passengers will be faster
- Proper accounting of revenue due to the automatic collection
- Leakage of revenue will be avoided which results to more income



TRANSPARENCY



## Set-up

- SCHEME PROVIDER
  - The Scheme Provider is a regulatory unit under DOTC
  - Will be the regulator of Automated Fare Collection
    System
    - Initially for rail (LRT1, LRT2, MRT)
    - In the future, their regulatory power will be nationwide



## Set-up

- SCHEME PROVIDER
  - As of today, the Department Order for the Scheme Provider is still being developed
  - The Department Order will widen the scope and the role of the Scheme Provider
  - In the future, the Scheme Provider will be in charge of the AFCS nationwide, and in all applicable modes of transportation



## Set-up

- SCHEME PROVIDER
  - All modes of transportation that will participate in the AFCS need to register their devices to the Scheme Provider
  - The Scheme Provider will test and accept/decline the devices based on their set qualifications and guidelines























## Timeline

September 2015	Conduct meeting with bus operators Conduct a market sounding
October 2015	Issue Department Order to authorize the Scheme Provider. This will widen the scope of the Scheme Provider nationwide.
November 2015	Selection of 3 to 5 qualified AFCS providers
December 2015	Mandate all bus operators to install AFCS devices
July 2016	All city buses must be operational with AFCS





# **Public Transport** Information and Management Center

## **Project Scope**

- Central system to perform the ff
- functions:
  - 1. Data collection
  - 2. Data Analytics
  - 3. Exportation of relevant data to other agencies
- Project components are the ff:
  - 1. Hardware (servers, computers, etc.)
  - 2. Software
  - Operations and Maintenance (2-4 years)





# Objectives

- To have a <u>centralized planning and</u> <u>monitoring system</u> for the transport network that uses data derived from the Intelligent Transportation System (ITS) to inform mobility plans;
- To <u>improve the safety and reliability</u> of the transit system by ensuring compliance to schedules and service quality;
- To provide the public information needed for trip planning;
- To <u>develop a scalable software/database</u> that can easily be used to handle and analyze similar information from other cities and;
- To <u>construct a system which can be used as</u> <u>a reference</u> in subsequent function expansion.





## **Project Outputs**

- Identifying <u>vehicle location and speed</u>
- Monitoring vehicle schedule and estimated arrival times
- Monitoring <u>vehicle movement</u> (i.e., whether it is within its prescribed route)
- Managing bus dispatching and <u>intervals/spacing</u> between buses to respond to real time demand and deliver better reliability and convenience
- <u>Communicating</u> with the driver or conductor for instructions <u>or in case of emergencies</u>
- Identifying <u>colorum buses</u> and conducting speeding analysis
- <u>Gathering other relevant data</u> including: ridership data, traffic pattern, traffic statistics, etc.



## Structure





## **Data Collection Scheme**





## Timeline

Milestone	Target Schedule
Advertisement	October 2015
Publication of Bid Docs	October 2015
Bid Submission	November 2015
Issuance of Notice of Award	December 2016
Issuance of Notice to Proceed	February 2016
Start of Construction	March 2016
Operational	August 2016





# Project Challenges and Solutions

## Cebu BRT

#### **CHALLENGES**

- Institutional arrangement
  - Coordination with other offices
- Personnel
- Social Management
  - PR Campaigns
- Budget
  - Coordination with various budget source

#### **SOLUTIONS**

- Better communication
- Make strategic planning for institutional staff
- Stakeholders' consultation
- Proper coordination

## **Automated Fare Collection System**

#### **CHALLENGES**

- Interoperability of fare media between rail, buses, and other modes of transportation
- Coordination between different service providers
- Getting all the bus operators to agree with this development

#### **SOLUTIONS**

- Different set-ups were established for a solution that would be beneficial for everyone
- Acceptance of cards from different service providers
- Market sounding
- Conference with all city bus operators and AFC suppliers

## Public Transport Information and Management Center

CHALLENGES Stakeholders— bus operator compliance GPS device issues — compliance with the communication requirements Data Center — operations and maintenance ISP Connectivity — ensuring seamless communication between the data center and the bus device SOLUTIONS Stakeholders— conduct consultation with the stakeholders GPS device issues — constant update of the system Data Center — establish an institutional arrangement for the team ISP Connectivity — provide an exclusive line connection for this specific service

## CONCLUSION

## Conclusion

- It is very challenging to implement projects with new concepts.
- However, it is necessary to provide better transportation alternative for the commuters also to keep up with the currents trends.
- It is important to conduct constant consultation with the concerned stakeholders.
- Every project is unique and we can use all the challenges as new learning experiences

## THANK YOU