

	<ol style="list-style-type: none"> <li>2. Shall the bus operation in Vientiane separate to other bus company to operate?</li> <li>3. In case of there are many companies which section will be responsible on IT system?</li> </ol>	
Dr. Nakamura Fumihiko	<ol style="list-style-type: none"> <li>1. There are seven bus companies and state bus enterprise have competed in Yokohama City. Previously there were many companies competed on the same route. Therefore, it was the cause of dangerously driving because its competition.</li> <li>2. There was a bidding on the bus operation between the companies, the winner of bidding was depend on the number of buses, drivers, etc.</li> </ol>	
Mr. Yukihiro Koizumi	Mr. Yukihiro Koizumi attended on seminar will be useful for the implementation in the future.	
Mr. Keophilavan	The Vice Mayor Mr. Keophilavan expressed the gratitude to the attended guests especially for all bus companies. The seminar had given valuable lessons to improve public transportation in Vientiane and hopefully in the future public transportation sector will be maintained supporting and grants from JICA.	

The seminar was closed at 15:00 P.M on 14 March 2014

Chairman by

Mr. Sommard Phonsena

Seminar Record by

Ms. Palitda Chansy

## Mechanism and role of Yokohama City bus



13・14 March 2014  
Yokohama city department of traffic

## 1 Yokohama City (Japan)



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## 2 Yokohama City Bus

### (1) Over view (Fiscal year 2012)

※ ( ) shows per day average

Item	Data
Commencement of the operation	November 1928
Work criteria	Inner city bus, Inner city sightseeing bus, Bus rent
Branch number	10 branches
Route number	128 routes
Number of vehicles	793 vehicles
Running Km	30,086,000 km (82,000km)
Passenger number	120,670,000 (331,000)
Fare revenue	19,906,000,000 JPY (55,000,000 JPY)
Employee (As of 2013.4.1)	1,213

2

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## 2 Overview of Yokohama City Bus

### (2) Coverage area

《Bus route map of Yokohama City》  
(See White color area)  
Around 50% of share at the city core area  
(See colored area)  
Around 50% of share at Urban are of the city surrounding area  
⇒ Number of main private companies : 7 companies

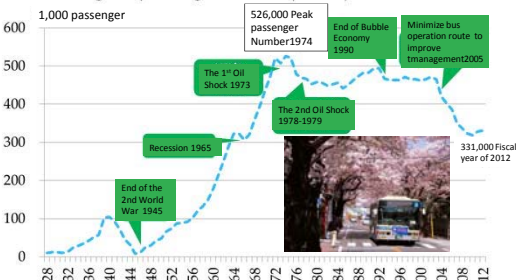


3

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## 2 Overview of Yokohama City Bus

### (3) Change of passenger number per day



4

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## 3 Mechanism of regional government enterprise

### <Regional government enterprise>

(An enterprise that was established for the purpose of inhabitants' welfare improvement.)

Establishment : resolution by regional government assembly

Administrator : Appointed by the leader of regional government

- General governance activity...Activity that fulfill public demands.
- Regional government enterprise activity...The impact is directly vested to individuals. Property and Service beneficially owes the cost.

### <Principal of The management>

① Effective economy of private company style (self-supporting accounting system)

② Enhance public welfare

### <Main coverage field of Regional government enterprise >

Water supply, Railway, Bus, hospital, etc.

5

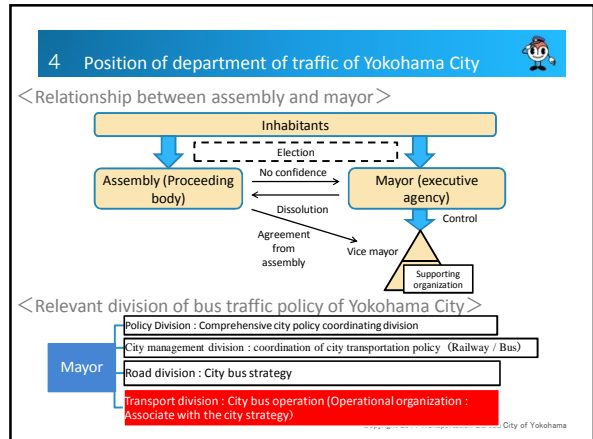
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### 3 Mechanism of regional government enterprise

<Difference from private company>

Item	Regional government enterprise	Private company (cooperation)
Purpose of the management	Enhancement of inhabitants' welfare	Pursue profit
Decision making organization	Assembly (Inhabitants)	Stock holders' meeting (Board of directors)
Accountability and approval	Explain adequate execution of the budget, clearance, fare setting, etc. → Approval by Assembly (Inhabitants)	Explain the result of profit acquisition → Approval by Stock holders (Stock holders' meeting)
Occupation of employee	Local government employee	-
Fundraising	Local bond	Issuance of stock
Regal obligation to pay tax	None (Partially ex; consumer tax)	Yes (Corporate tax, residents' tax, real estate tax, consumer tax, etc.)
Return of profit	Return to bus users and etc. (Improvement of convenience, etc)	Stock dividend

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### 5 Management of Yokohama City Bus

(1) Transition of the city bus management improvement

Past (Until 2003) management situation

- Rely on the city subsidy
- The operation cost including salary was quite high compare to private company.
- Main operation areas are located in metropolitan area. ⇒ "favorable business area".

Consideration of the management structure

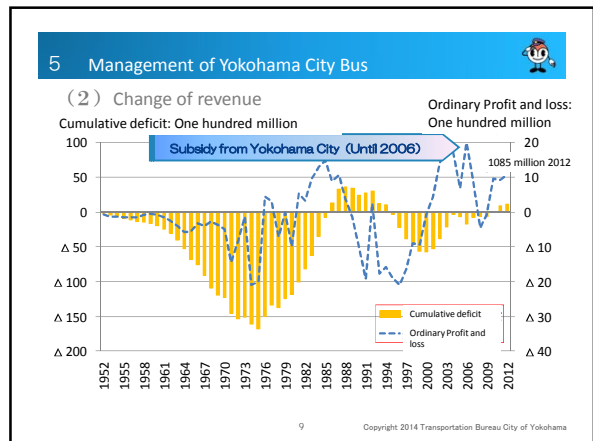
Strained finance situation of the city ⇒ Change from subsidy depended model to self-supporting model.

<Considered management models>

① Privatization ② Business transfer to private company ③ Self-supporting accounting system regional government enterprise

Decision making of management formation

Consider stable supply of transportation service as "citizens transportation mean", employment of officials, additional financial burden, Yokohama City Bus decided to reform as a self-supporting management enterprise without rely on the city subsidy based on the principle of self-supporting enterprise, and perform business innovation under the scheme of regional government enterprise.



### 5 Management of Yokohama City Bus

(3) Principle for the City Bus Management

- ✓ Continue self-supported management  
Maintain healthy self-supported management without receiving subsidy for deficit management compensation from the city.
- ✓ A certain amount of profit recognition by improving management level  
Strengthen profitability by enhancing network between bus and metro, etc. Continue sustainable profitable self-supported management by improving cost revision and productivity of business.
- ✓ Creation and expansion of 'common benefit'  
Return the profit to users and local communities by the effort of continuous effective management. Create and expand "Common benefit" among the enterprise, users and local community.
- ✓ Circulate management system  
Built reliability among the enterprise, users and local community by creating "common benefit", set up management system that creates virtuous circle by strengthening management and enterprise value that lead to progress of the enterprise, and take charge of "citizens transport mean".

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### 5 Management of Yokohama City Bus

(4) Action as a regional government enterprise

① Environment and welfare measures

~Enhance measures as a regional government enterprise~

- Enhance electric type hybrid bus introduction
- Consideration of EV installation
- Enhance bailer free vehicle introduction (Non step bus)
- Cooperation with city disable people care center (Bus terminal, Vehicle cleaning)


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5 Management of Yokohama City Bus

(4) Action as a regional government enterprise

② City government policy and cooperation  
 ~ Bus operation supply in corporation with city policy.

- Contribution to community planning  
 (Routes to governmental office such as New town district, Minato Mirai district, city ward office, etc.)
- Connect between hillock area and other transport inconvenient area to railway station.
- Contribution to tourism strategy (Ticket system, tourist bus, route bus in tourism area)



Mini Bus      Tourist Bus      Sightseeing special bus

5 Management of Yokohama City Bus

(4) Action as a regional government enterprise

③ Improvement of convenience and comfortableness  
 ~ Return the profit to bus users ~

- Bus stop facility improvement  
 (install bus stop seating and bench, bus location system by using tablet type mobile)
- Install bus stop with seating and advertisement
- Installation of liquid crystal panel inside of bus.




Bus stop with advertisement      Tablet type bus location system

5 Management of Yokohama City Bus

(4) Action as a regional government enterprise

④ Secure additional revenue

- Effective use of the company management resource
- Strengthen Bus rent business (Ex; School event, private company shuttle bus use, etc.)
- Advertisement revenue (Wrapping bus advertisement, inside bus advertisement)
- Business by using effective use of Property (ex; land)



Bus for rent      Wrapping Bus advertisement

5 Management of Yokohama City Bus

(5) Detail of the clearance in FY2012

	(Million)	
Sales revenue	19,728	100.0%
Fare revenue	19,203	97.3%
Sales expense	19,363	98.1%
Salary	12,833	65.0%
Operation cost	1,013	5.1%
Vehicle maintenance	382	1.9%
Depreciation	1,988	10.1%
<b>Profit and loss</b>	<b>365</b>	<b>1.9%</b>
Profit from financial activity	821	4.2%
Expense from financial activity	101	0.5%
Paid interest	29	0.1%
<b>Ordinary profit and loss</b>	<b>1,085</b>	<b>5.5%</b>
<b>Net profit and loss</b>	<b>1,085</b>	<b>5.5%</b>

<<Clearance>>  
 - Profitable management without subsidy from the city.  
 (autonomy)  
 - Contents of main operation cost are;  
 Salary, depreciation, bus operation cost  
 <Issue>  
 - Strengthen sustainable management structure  
 (Practice of self reliable management)  
 → Operation management corresponding to demand change  
 → Mitigate salary cost  
 → Mitigate fuel cost  
 (Mitigate use of petrol by appropriate driving, reduce purchase cost of fuel)  
 - Return the profit to users and others.





## Management and Operation of Ryobi Group

Wakayama Electric Railway Co Ltd  
Okayama Electric Railway Co Ltd  
Shogo ISONO Senior Managing Director



## Ryobi Group

- Comprising of 55 companies
  - Mainly, Land, Sea and Sky transportation business field.
    - Railway·Tram·Bus·Taxi·Truck·Ship·Airport operation agency, and others.
  - Others
    - Real estate, IT, Food service, Hotel, and others.
- Total number of employees: 8,500
- Total sales amount :125.5 Billion JPY
- Ordinary Profit: 4.7 billion JPY



## Location of "Oka-den" HQs

Managing Area by the "Ryobi Holdings"



## Feature of Ryobi Group

- 20% of staffs belong to the group companies of IT related business.
- Contribution to Okayama, company home land development (CSR)
  - Set up "Ryobi Cultural Foundation"
    - Museum of Artist "Yumeji Takeshisa"
    - Preservation of Yumeji's house and Exhibition to public.
- Trust Management
  - Respect independency of each group company management method.
- Proposal for Rehabilitation and Renovation
  - Tsu Airport Line
  - Wakayama Electric Railway Co; Ltd.
  - Renovation of Chugoku Bus Company.
  - Kobe Bay Clues Company
  - Hello Tokyo Company
  - Takashimaya Department Store in Okayama Prefecture, etc.



## What is Trust Management?

Ryobi Group

Mr. KOJIMA, Chairman of Ryobi Group bear final company management responsibility.

The chairman does not direct to business in practice but make decision to the company strategy setting, a large scale investment plan and significant and influential matters for the other group companies' level.

Senior management directors and managing directors bear responsibility of business in practice.

The chairman also hold the post of Ryobi group CEO. It reduces the cost of company management.



## The group business principles

- Corporate management philosophy "Chu-u-Jyo"
- Whole-hearted considerationMotto of the founder of Ryobi Group, Mr. Yosaburo MATSUDA
  - warm-heartedness.
- Business management principle
  - Kindness to society → Social Justice
  - Kindness to customer → Customer first
  - Kindness to employees → Happiness of the employees



## The Group Marketing

- ① Revenue from advertisement at vehicles and depots.
- ② Travel business by bus or train.
- ③ Bus + Car maintenance service business.
- ④ Design and production of entertainment bus and train.
- ⑤ Event campaign on bus or train.
- ⑥ Souvenir goods sales.
- ⑦ Promotion of PT use by sales to periodic user pass to private companies.
- ⑧ Shearing bus operation with competitor company.
- ⑨ Promotion of park and ride.
- ⑩ Set up bus stop shelters with advertisement.



## LRV in Okayama City



## Electric train. TAMA Train



## Tama train interior



## Mr. Kojima, CEO of Ryobi Group and Tama Station Master Cat



## Tama station master cat and Tama junior new station master cat



Tama Station or Cat House



Strawberry Train



Strawberry gathering at Strawberry Train



Toy Train



Toy Train Interior



Toy Train Interior





ECOな地域づくり

### Variation of Ryobi Group special design buses (Eco conscious vehicle)

Solar panel EV bus "SOLAERVE"

Bus with Bicycle carriage "SAIBUS"

Mitsubishi EV, Toyota EV taxis. Virus cleaning equipment is introduced in all taxis.

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### Future Concept of Public Transportation in Okayama City

Target year

1	2	3	4	5	6	7
1~2 year	2~3 year	3~4 year	4~5 year	6~10 year	2~7 year	Within 10

- Park & Rail and Bus Ride At Entering Limitation
- Bus Location System
- All Barrie Free Bus Vehicles
- Electric & LNG Bus
- Extension of Tram: Kyosei Bridge
- Extension of Tram: Kiyosei
- Okaden Kowam Office, Water Bureau
- JR Omoto Station
- Extension of Tram from Shirotsuta to Koraku Japanese Garden
- Entering to Western gate of Okayama Railway Terminal
- Heikou area: Okayama Terminal Onomemachi Shopping mall
- Extension of Tram Track
- Ring routing: Okayama St. City Hall
- Water dr. Okayama Univ. Hospital, Kyosei Bridge - Chang Lines
- Entering of Tram to Okayama Railway Terminal
- Tram and Bus Separate Stations by route direction
- MOMO Two "Okayama Go"
- Eco-PT City Nomination
- Citizen Committee

● Route expansion plan ● Improvement of user convenience ● Environment friendly Elderly people friendly

### Image design of LRT station introduction at Okayama railway station east gate

Set up LRT, bus, taxi plat home at the second floor, same level of Shinkansen bullet train and local train plat home to increase users' convenience.

Access to other transportation stations by transparent tube design escalator to downward which images future transportation mean.

### Inner City Zoning by expanding public transportation routes

### Expectation of Project Impact

1. Okayama as the world number one "Eco public transportation city"
2. By improving traffic circulation among 3 shopping malls, increase 600,000 territory population to 1,400,000.  
**Expecting economic effect of more 10 billion yen of income to service industry**
3. Okayama as Tourism City, extending a tram line to Korakuen Japanese Garden, as tourism center, nominated by Micheran Three Stars, and applying a know-how of making tourism active, getting in rehabilitation of the Wakayama Dentestu, to Okayama City

### Expectation of Project Impact

4. Okayama as Healthy & Better City, applying PT free policy for the elderly with PPP (publicly construct and privately operate), to promote the elderly mobility for outdoors activities, and to recover the elderly disease, with creation of health, independent, and hopeful city
5. Okayama as world environmental model city, by achieving 25% of reduction of CO<sub>2</sub>, as international commitment.

## Secondary Impact of Public Transportation

### Walking and Enjoying City with Use of Public Transportation

- DREXEL university, USA Dr. Robert's research result
- Research of fatting risk before and after LRT in Sharlet , North Carolina State
- Tokyo metropolitan Institute of gerontology Dr. Shinkai's research result
- Going out not less than one time a week reduce risk of disease.



Mitigate risks of overweight, the elderly walking handicap, dementia,



## Suggestion for better society

- Provision of basic public transportation means is essential condition to maintain local community.
- It is important to coexist private car and bicycle by introducing public transportation use enhancement measures such as Park and Ride .
- It is necessary to obtain source of revenue together with measure setting on nation's health and environment improvement.
- Thank you for listening!





**A Model for Scheduled Bus Service Optimization Using IT and Marketing Augmented by Increased Tourism**



EAGLE BUS CO., Ltd  
CEO Masaru Yajima, MBA, PhD

© EAGLE BUS CO., LTD 2007


### Eagle Bus Company Profile

Founded: 1980  
Capital: ¥50,000,000 (US \$588,000.00)  
Business: Route Bus service, Sight Seeing Bus Service, Company Pick-up service

Head Quarters : Nakahara, Kawagoe, Japan

Bus Depot Kawagoe Bus Depot, Tokigawa Bus Depot, Tokyo Bus Depot

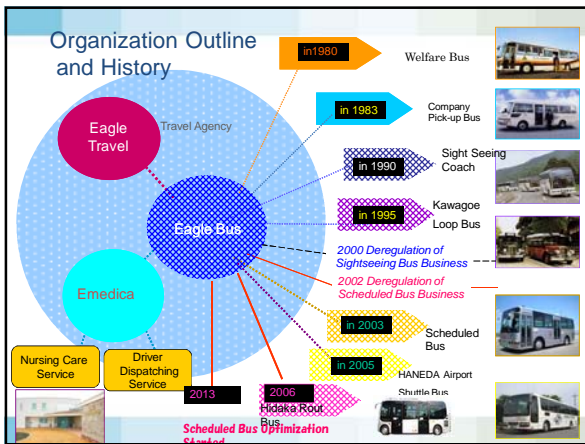
Bus Fleet 107 Vehicles  
Employees 200



Affiliated Companies

- Eagle Travel Co., Ltd: (Travel Agency)
- Emedica Co., Ltd: Driver Dispatching Service, Nursing Care Service

Group Employees: 420



### High Quality Oriented

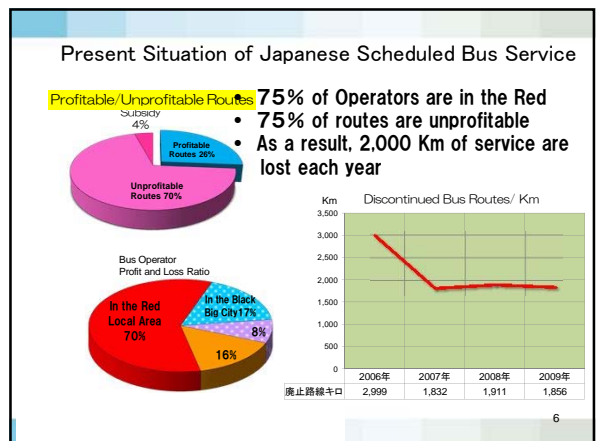
ISO Certified



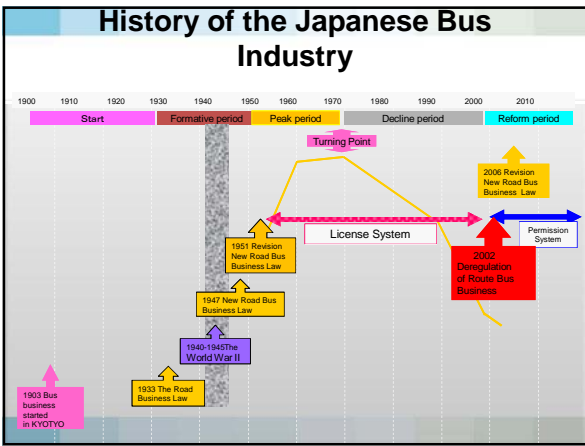
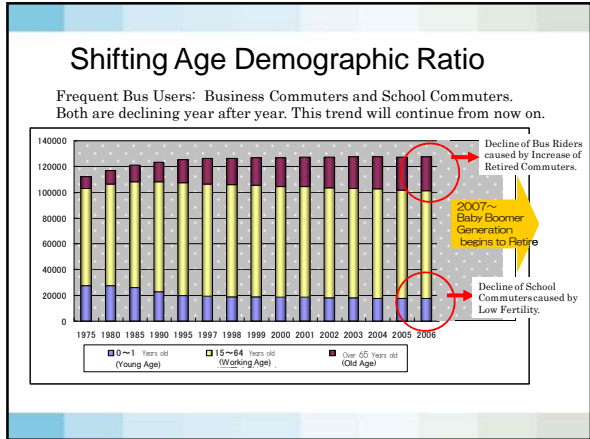
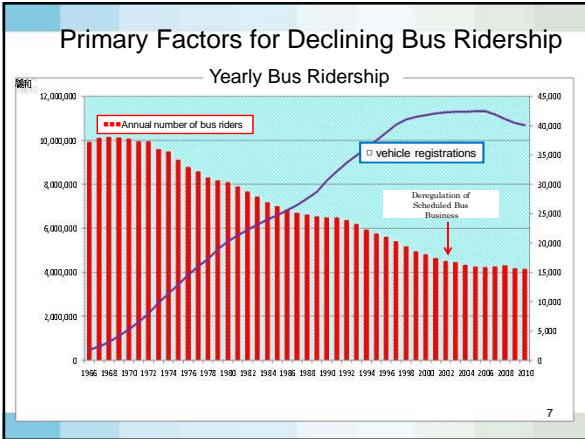
- (JAB) 2002 April ISO1400
- (UKAS) 2004 April ISO9001
- From 1999 for 16 Years Best 30 Bus Company Award
- 2008, Mar High service companies Best 300 in Japan award
- 2011 March First Transportation Master in Japan Nominated
- 2011 August First in Safety Bus Company Saitama Prefecture
- 2011 September Nikkei Best 100 Innovator Nominated
- 2012, Dec. Japan Innovator Grand Pré Special Award



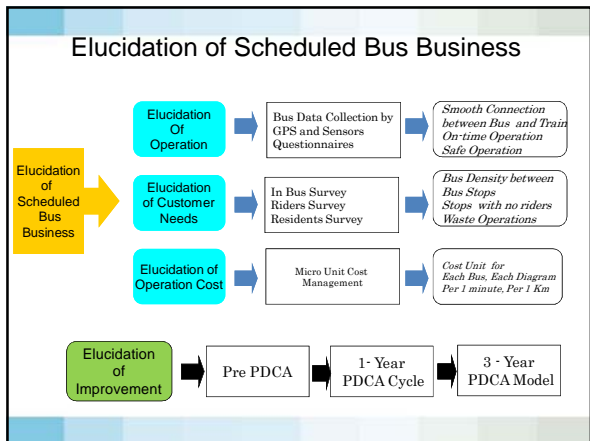
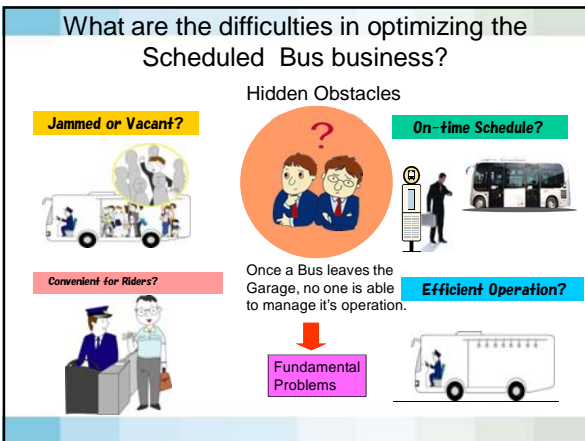
### 1. Issues Facing the Japanese Scheduled Bus Industry

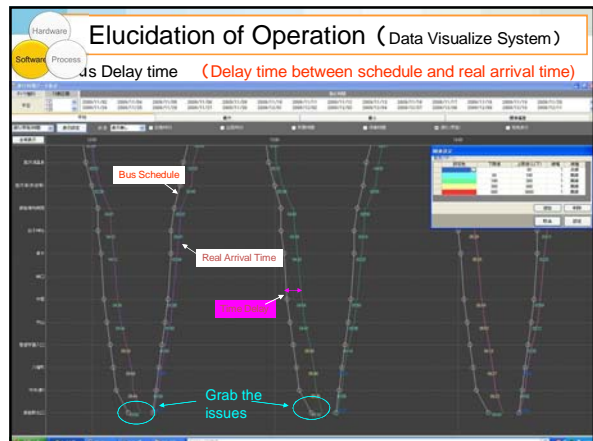
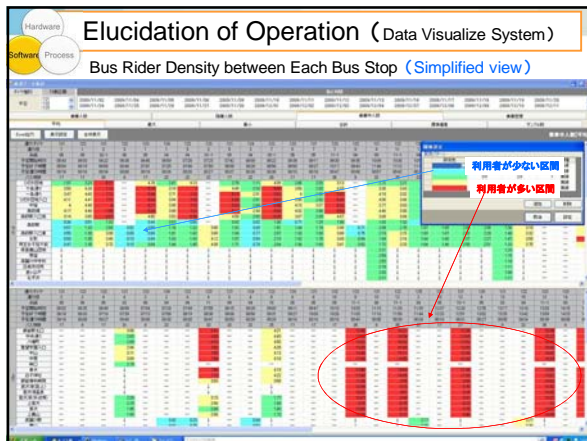
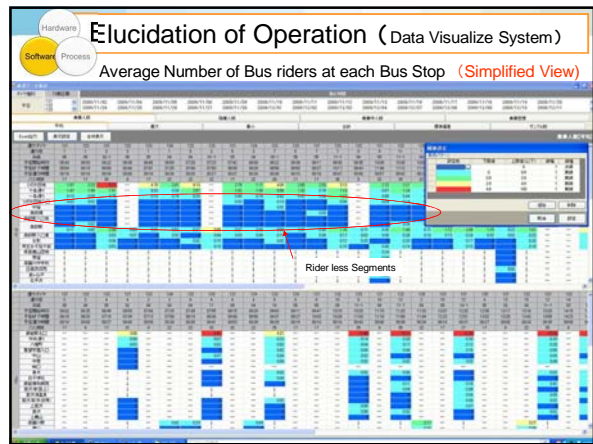
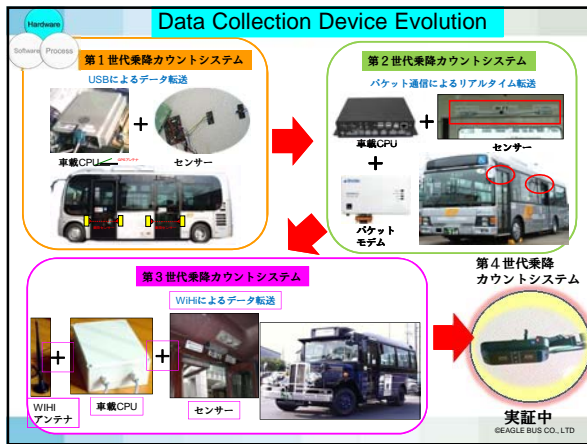
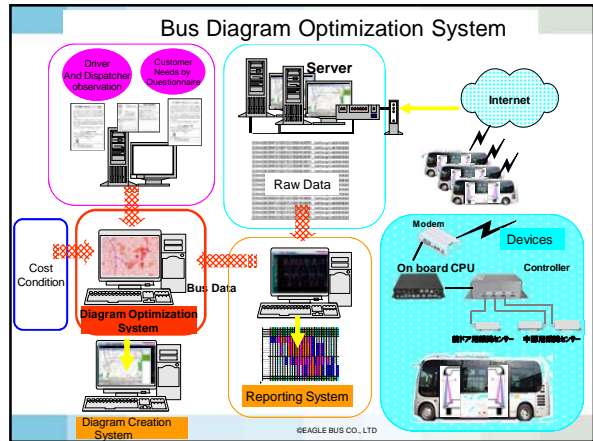
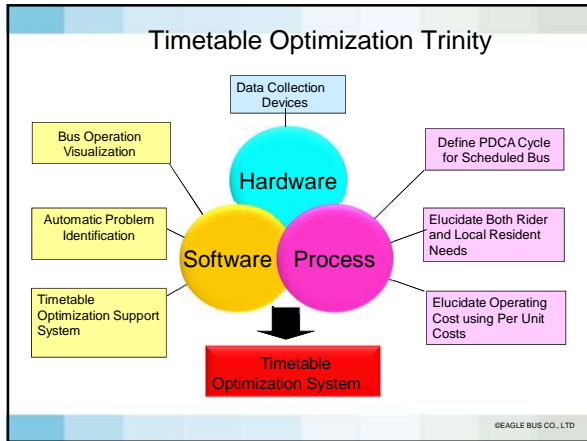


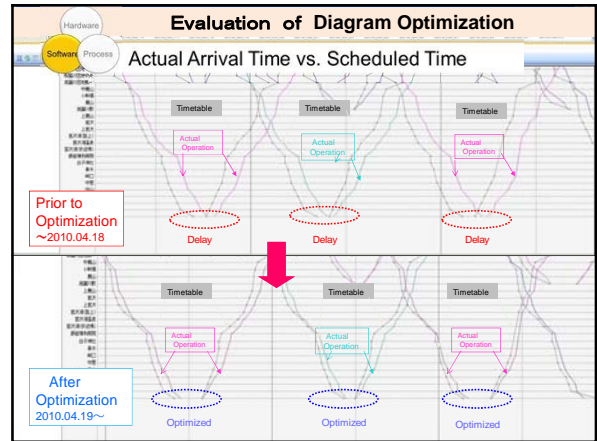
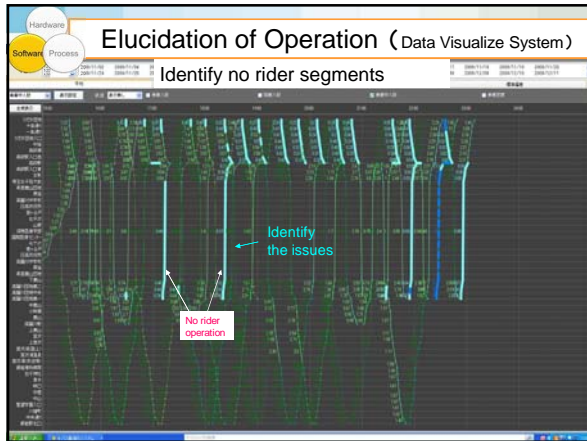




## 2. Improving the Scheduled Bus Business Model by Timetable Optimization

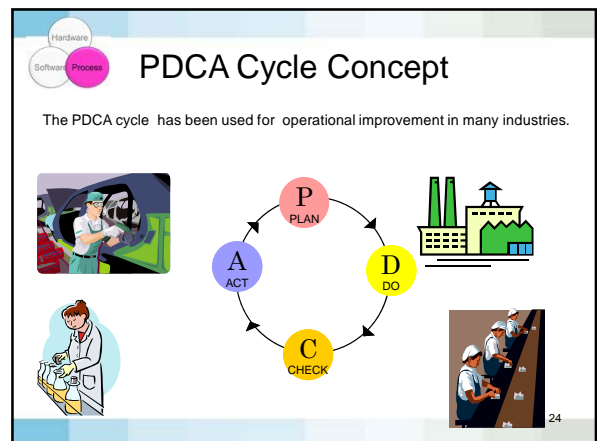
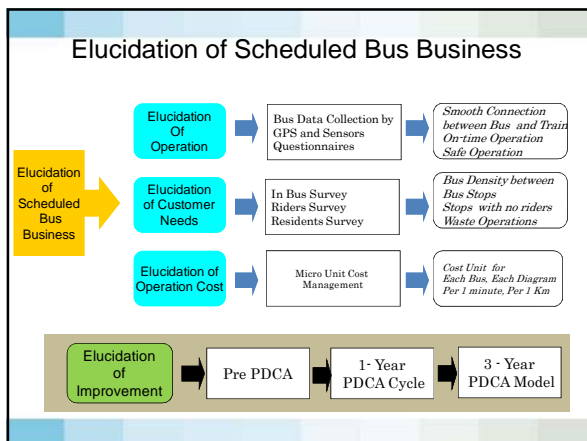
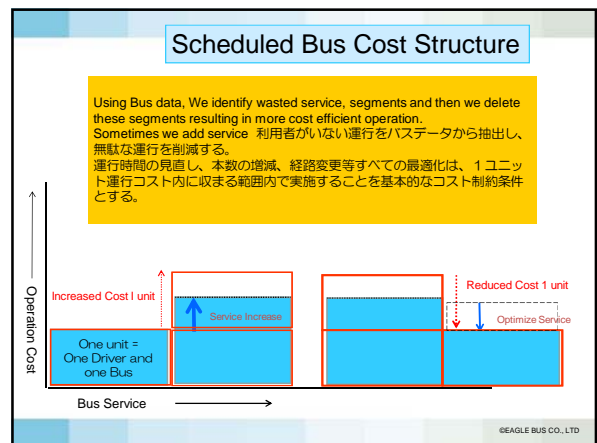


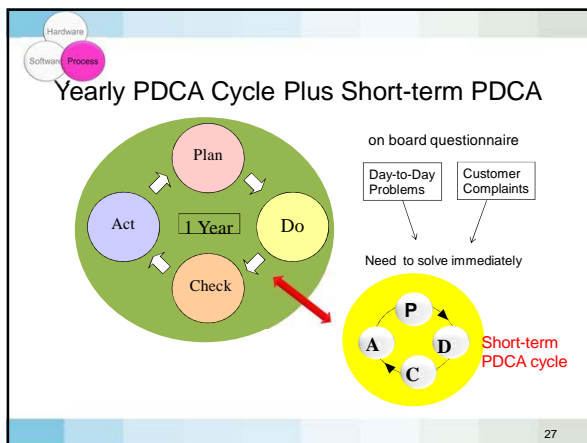
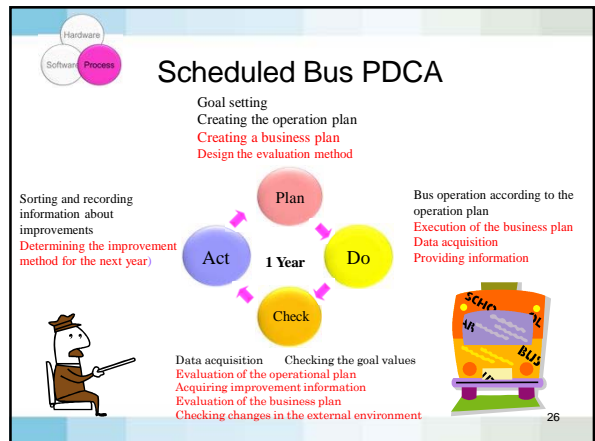
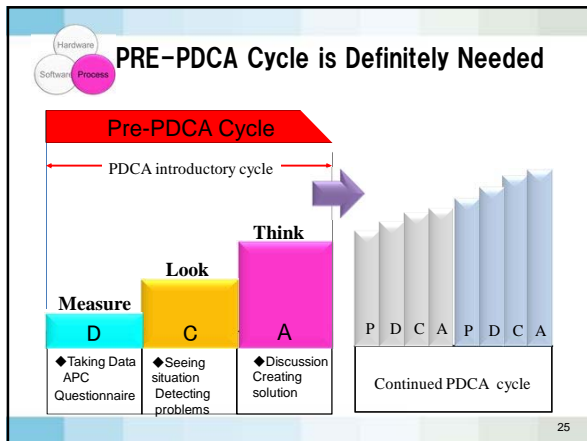




### Elucidation of Operation Costs (Micro Unit Cost Management)

Micro Components	Before Revision 2007	After Revision 2008	Improving
Total Km	356,506km	309,783km	-46,724km
Out of Service Ratio	12.0%	12.6%	+0.6%
Runs per day	Weekday 129 Weekend 99	Weekday 115 Weekend 98	Weekday -13 Weekend -1
Total Driver Shifts	2,676	2,433	-243
Total Operation Hours	15,172H	15,076H	-96H
Labor Cost	¥24,084,000	¥21,897,000	¥-2,187,000
Fuel Cost	¥10,695,000	¥9,293,000	¥-1,401,000
			<b>Cost Reduction 10%</b> ¥-3,589,000



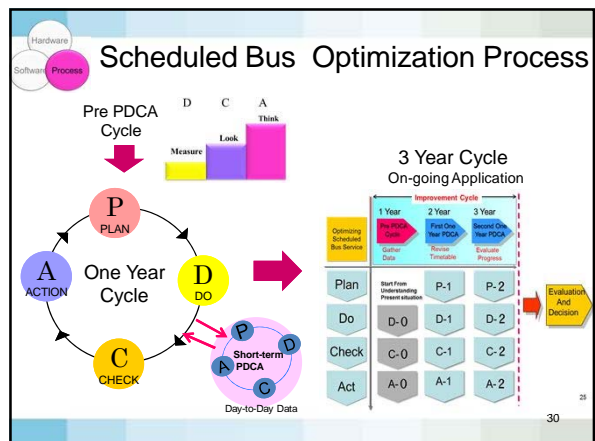
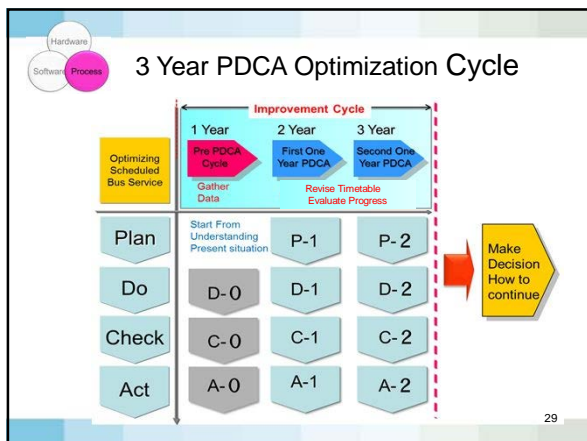


### HIDAKA –HANNOU Optimization

Exploratory Period → 3 Year PDCA → Continuing PDCA

	2006	2007	2008	2009	2010	2011	2012
<b>Diagram change</b>	Apr. Took Over Bus route from Former Company	April: The First Timetable Optimization	April: The Second Timetable Optimization	April: The Third Timetable Optimization	April: The Fourth Timetable Optimization	April: The Fifth Timetable Optimization	April: The Sixth Timetable Optimization
<b>Questioners</b>	July: The First Questionnaire to all residents	Dec: The First Questionnaire to Bus riders	July: The Second Questionnaire to Bus riders	July: The Third Questionnaire to Bus riders	July: The Fourth Questionnaire to Bus riders	July: The Fifth Questionnaire to Bus riders	Jan: The Second Questionnaire to all residents
<b>Results Of Optimization</b>		X Failure Decline Passengers cost up	Δ Even Recovered Cost down	○ Improved Increased Passengers Improving	○ Improved Increased Passengers Improving	○ Improved Down and recovered Improving	○ Improved Increased Passengers Improving
<b>PDCA</b>	Define PDCA cycle	Pre-PDCA	Short-term PDCA	3Year ODCA			
<b>Measure</b>	APC V.1 Developing		APC V.2 Developing	APC V3 Developing			3 Year Model
<b>Look</b>		Elicitation	Find problems	Evaluation	Simulation		
<b>Think</b>			Hub & Spoke	On demand bus			

28



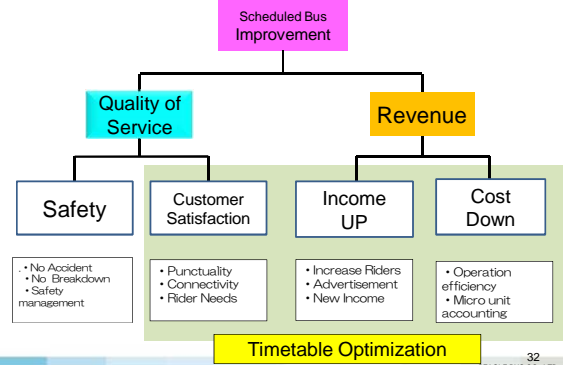




#### 4. Three Case Studies Showing our 3-Year Optimization Model Evolution

- a) Kawagoe Loop Bus
- b) Hidaka-Hannou Scheduled Bus
- c) Tokigawa Town Scheduled Bus Reorganization

#### Case Study for Timetable Optimization



32  
EAGLE BUS CO., LTD.

#### a) Kawagoe Loop Bus Case Study: Improving Service by Marketing

#### Kawagoe Loop Bus Optimization by Marketing

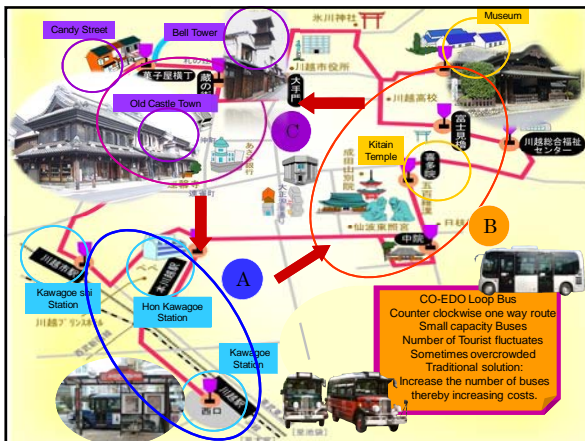
Little EDO (Nostalgic Old Castle Town)

40 minutes From Tokyo

Bell Tower

Loop Bus

Old castle town area

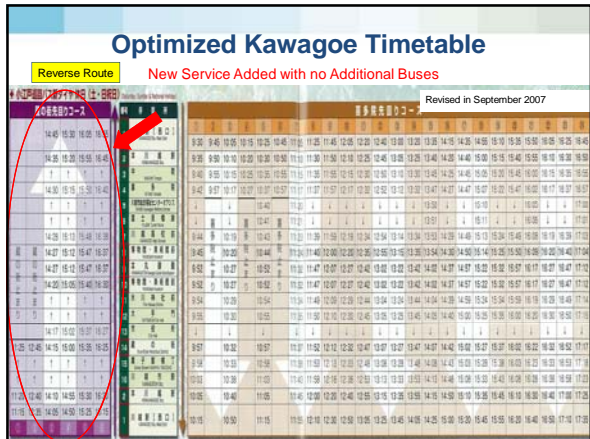
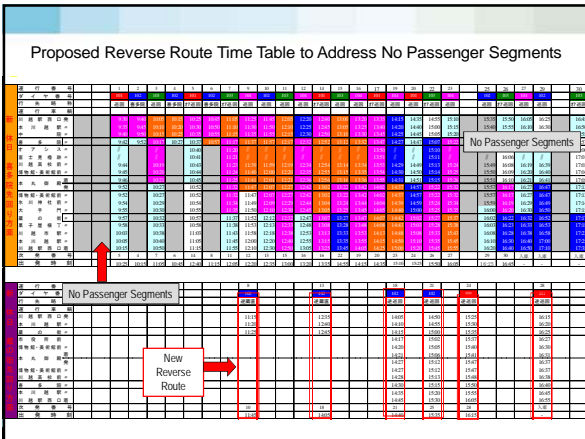
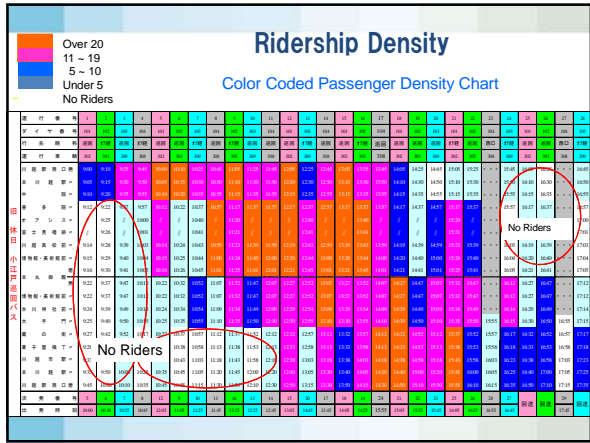
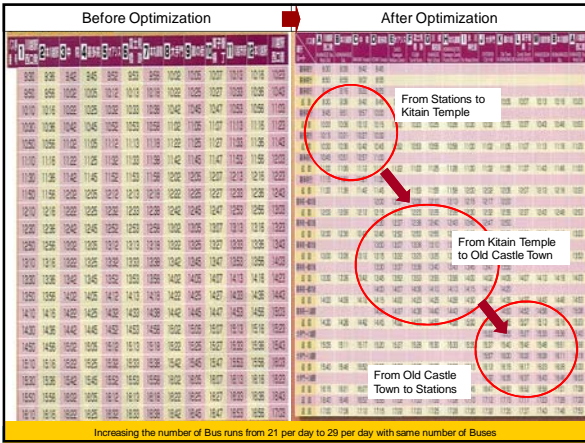
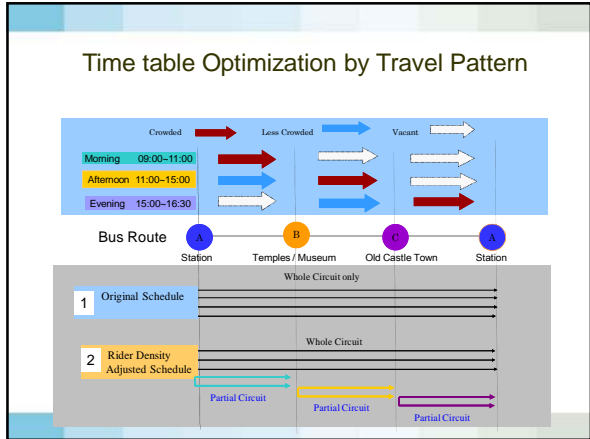
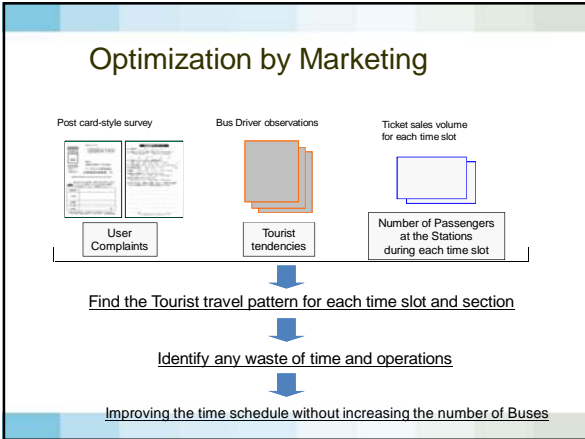


#### Issues of Kawagoe Loop Bus

- Small capacity Buses.
- The Number of Tourists fluctuates.
- Sometimes overcrowded.
- Increasing the Buses is the traditional solution.
- No lasting costs and revenue improvement.

We begin rationalization using a Marketing approach



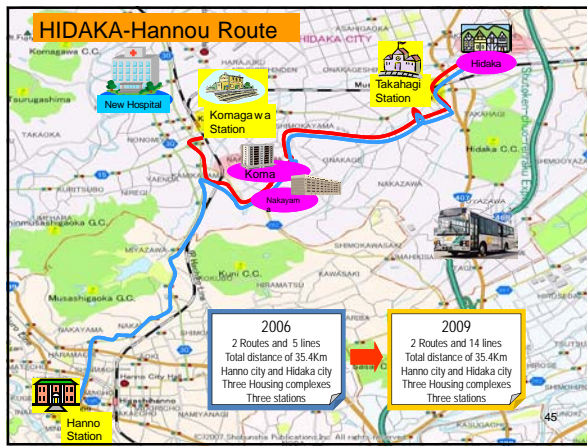




### Automatic Passenger Counting System

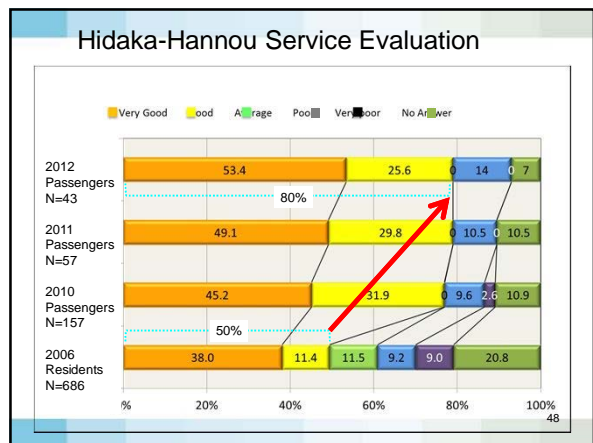
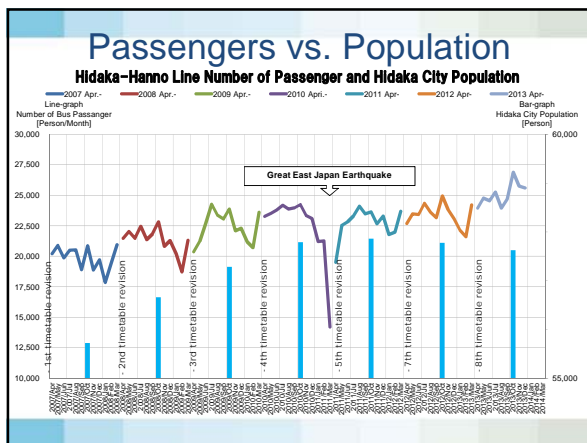


### b) Hidaka-Hannou Case Study: Introducing Optimization via Elucidation and PDCA



### HIDAKA - HANNOU Optimization

	Exploratory Period			3 Year PDCA			Continuing PDCA	
	2006	2007	2008	2009	2010	2011	2012	
<b>Diagram change</b>	Apr. Took Over Bus route from Former Company	April: The First Timetable Optimization	July: The Second Timetable Optimization	April: The Third Timetable Optimization	April: The Fourth Timetable Optimization	April: The Fifth Timetable Optimization	April: The Sixth Timetable Optimization	
<b>Questioners</b>	July: The First Questionnaire to all residents	Dec: The First Questionnaire to Bus riders	July: The Second Questionnaire to Bus riders	July: The Third Questionnaire to Bus riders	July: The Fourth Questionnaire to Bus riders	July: The Fifth Questionnaire to Bus riders	Jan: The Second Questionnaire to all residents	
<b>Results Of Optimization</b>		X Failure Decline Passengers cost up	△ Even Recovered Cost down	○ Improved Increased Passengers Improving	○ Improved Increased Passengers Improving	○ Improved Down and recovered Improving	○ Improved Increased Passengers Improving	
<b>PDCA</b>	Define PDCA Cycle							
<b>Measure</b>	APC V.1 Developing		APC V.2 Developing		APC V3 Developing		3 Year Model	
<b>Look</b>	Elucidation		Find problems		Evaluation			
<b>Think</b>			Hub & Spoke		On demand bus			





c) Tokigawa-town Case Study:  
Optimization and Structural reorganization  
Augmented by Tourism

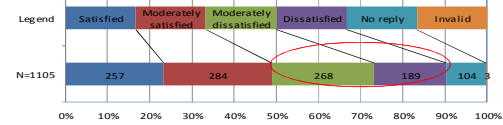
Tourist Attractions



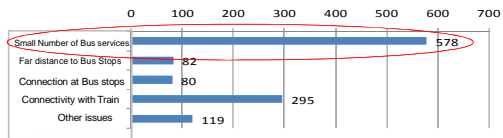
Tourist Attractions



Satisfaction levels for Tokigawa town municipal bus (pre-reorganization)



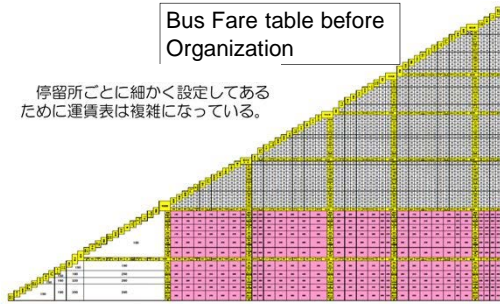
Reason for dissatisfaction



Complex Fare System

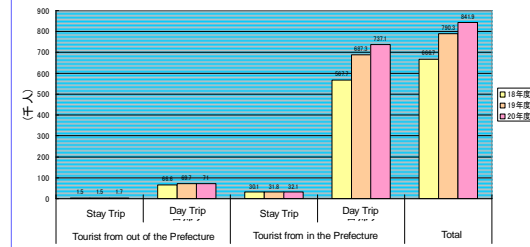
Bus Fare table before Organization

停留所ごとに細かく設定してある  
ために運賃表は複雑になっている。



Increase in Tourist vs mismatched service

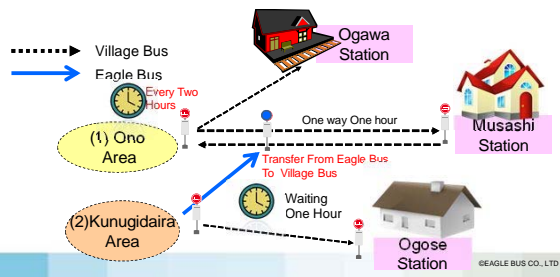
Increasing Tokigawa Tourism Increase



Eventhought Bus service was cut on Holidays and weekend Bus ridership stayed nearly same at 90% due to Tourist

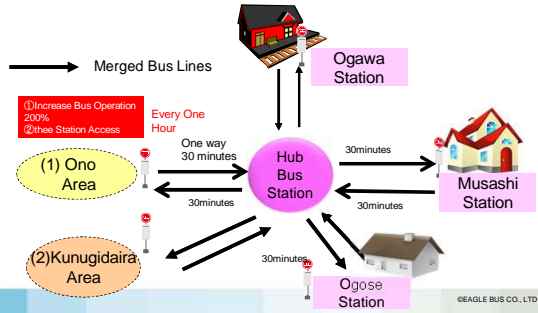
## Insufficient bus interval prior reorganization

The One issue of Scheduled Bus service in Rural areas is less bus operation.  
Main reason of inefficient operation is long operation



## Introducing Hub and Spoke System

One good solution is Hub & Spoke System . Putting a Hub Station center of town and connect all bus lines to this Hub station. We could increase bus operation without add buses and three station access is available changing buses at the Hub station.



## Hub Bus Station at Tokigawa Town



## 2. DRT- Demand Responsive Transport Introducing New Transport system for Elderly people

山間地域は高齢率が高く、バス停留所も離れているので実質的な交通空白地域となっている。この地域に朝の通勤・通学帯は今までのバスによる定時運行とし、10時以降は、バスからミニバンに変えて、定時バス路線から更に奥まったところに設定したサブバス停留所〜ハブ停留所間運行を行う。

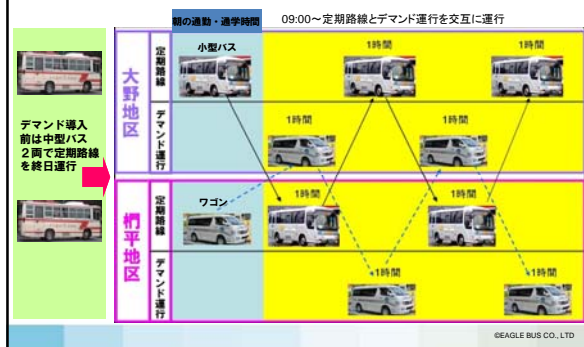
### Special Fetures

1. システムにお金をかけない。
2. ドア to ドアでなくサブ停留所〜ハブバスセンターへ間運行
3. ワゴン車両をバリアフリーの適用  
除外申請を受けて、時間帯によって路線定期運行と区域運行を実施。

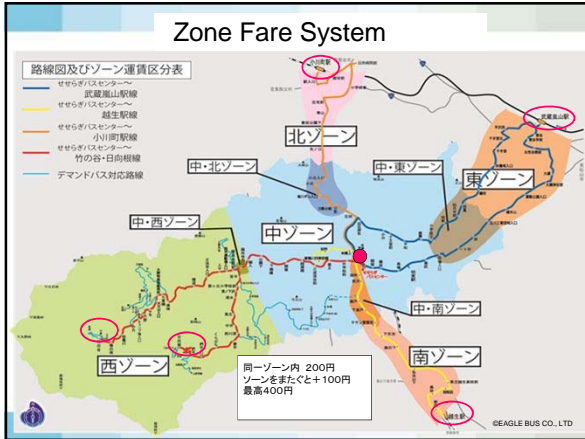


## Tokigawa DRT Operation

大野地区と柗平地区は従来中型バス2両で定期運行。改訂後は小型バス1両とワゴン1両で定期路線と区域運行を交互に運行同時に2地区間で車両も交互に運行







### Increased bus service after re-organization

Service increased by 150% to 300%; added equipment one mini van

地区	行先	小川駅				武蔵嵐山駅				越生駅			
		改正前	改正後	増減回数	増減率	改正前	改正後	増減回数	増減率	改正前	改正後	増減回数	増減率
竹の谷	日課	0	9	3	150%	0	13	7	217%	11	14	3	127%
	夜課	6	11	5	150%	3	14	11	467%	11	13	2	118%
日内線	日課	6	9	3	150%	6	13	7	217%	11	14	3	127%
	夜課	6	11	5	183%	2	14	12	700%	11	13	2	118%
日影	日課	7	11	4	157%	6	12	6	200%	8	12	4	150%
	夜課	7	11	4	157%	3	11	8	183%	7	8	1	114%
十王堂前	日課	7	8	1	114%	6	8	2	133%	8	7	-1	88%
	夜課	6	6	0	0%	4	4	0	0%	4	4	0	0%
田島	日課	7	4	-3	57%	6	9	3	150%	7	6	-1	86%
	夜課	7	6	-1	86%	8	11	3	138%	8	9	1	113%
原	日課	7	6	-1	86%	8	11	3	138%	7	8	1	114%
	夜課	7	8	1	114%	4	4	0	0%	4	4	0	0%
別所	日課	0	8	8	1000%	0	10	10	1000%	0	16	16	1000%
	夜課	0	5	5	1000%	0	9	9	1000%	0	16	16	1000%
瀬戸	日課	7	8	1	114%	7	12	5	171%	17	17	0	100%
	夜課	8	10	2	125%	3	12	9	433%	17	17	0	100%
合計	往路	40	59	19	148%	39	88	49	226%	63	89	26	141%
	復路	41	60	19	146%	28	89	61	318%	60	78	18	130%

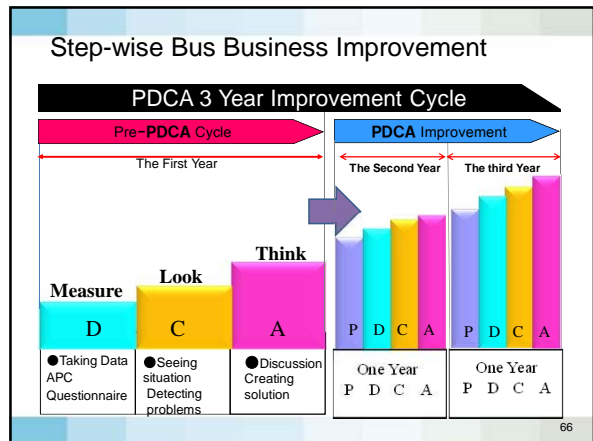
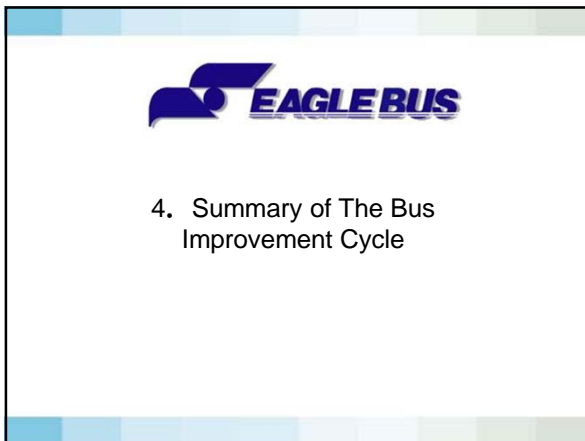
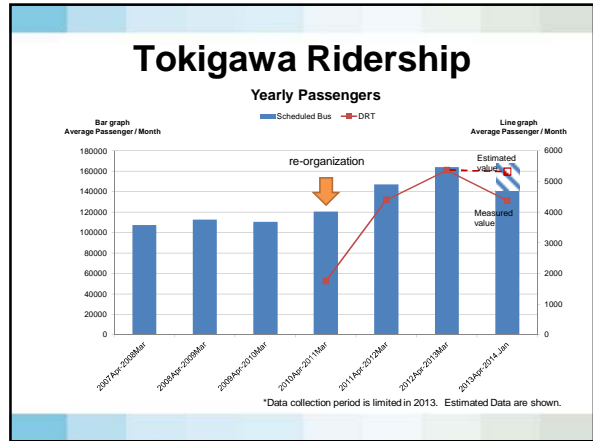
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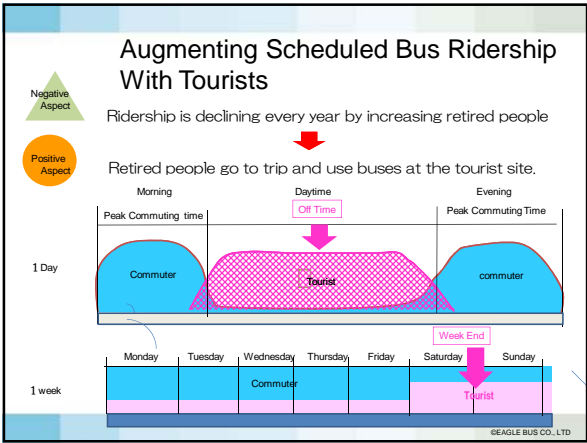
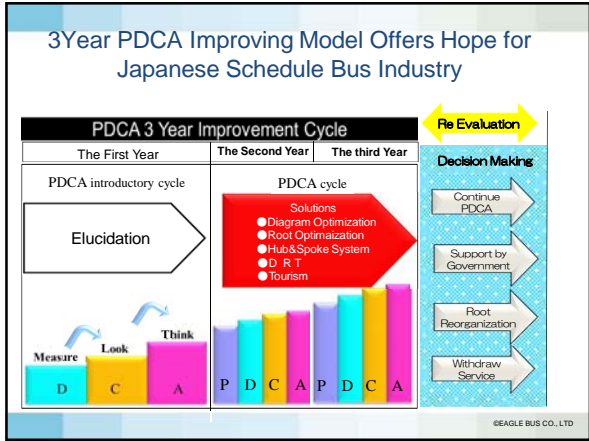
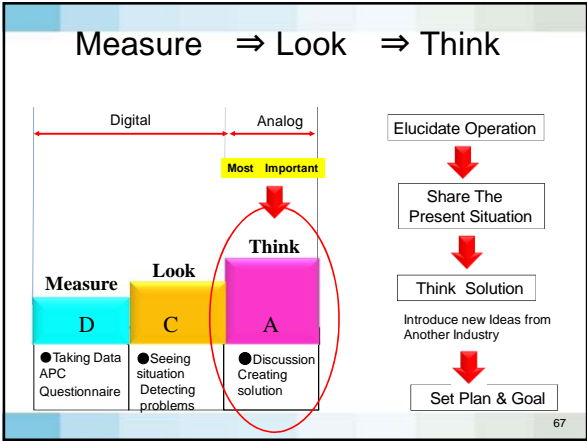
### Operation Efficiency

ハブ&スポークとデマンドバスの導入で総走行キロは旧路線比 **-22,802Km**減少  
車両は**中型4両+嵐山分(中型1両+小型1両)**から **小型4両+ワゴン2両+嵐山分(中型1両+小型1両)**

項目	2010年10月4日												2009年10月1日												対前年度		
	北条町内路線全線				北条町外路線全線+R01+R02+R03				北条町内路線全線				北条町外路線全線+R01+R02+R03				走行キロ	車両	乗客								
	区間	区間	区間	区間	区間	区間	区間	区間	区間	区間	区間	区間	区間	区間	区間	区間				区間							
走行キロ	北条町内路線全線	946.7	231.483	1,178.183	246.308	1,184.566	246.308	1,184.566	246.308	1,184.566	246.308	1,184.566	246.308	1,184.566	246.308	1,184.566	246.308	1,184.566	246.308	-22,802	-18.5	-18.5					
	北条町外路線全線	346.0	89.404	435.404	118.793	554.197	118.793	554.197	118.793	554.197	118.793	554.197	118.793	554.197	118.793	554.197	118.793	554.197	118.793	554.197	-18,126	-18.5	-18.5				
車両	北条町内路線全線	81.0	14,888	14,969	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	北条町外路線全線	779.4	26,789	27,408	1,188	59,834	73,139	1,188	59,834	73,139	1,188	59,834	73,139	1,188	59,834	73,139	1,188	59,834	73,139	1,188	59,834	73,139					
乗客	北条町内路線全線	279.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	北条町外路線全線	779.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
合計	北条町内路線全線	279.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	北条町外路線全線	779.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
合計	北条町内路線全線	279.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	北条町外路線全線	779.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
合計	北条町内路線全線	279.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	北条町外路線全線	779.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
合計	北条町内路線全線	279.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	北条町外路線全線	779.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
合計	北条町内路線全線	279.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	北条町外路線全線	779.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					

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### May Revival of Historic Tea ceremony

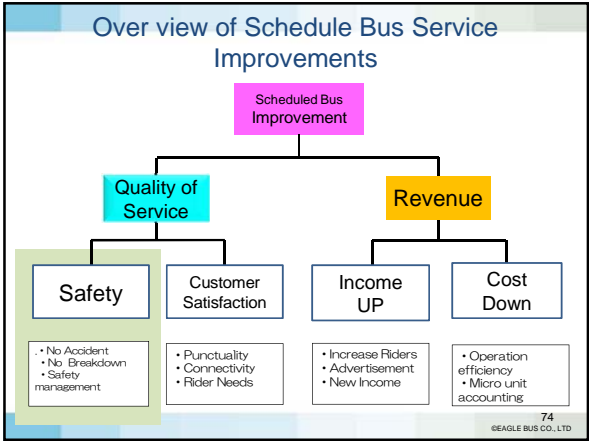
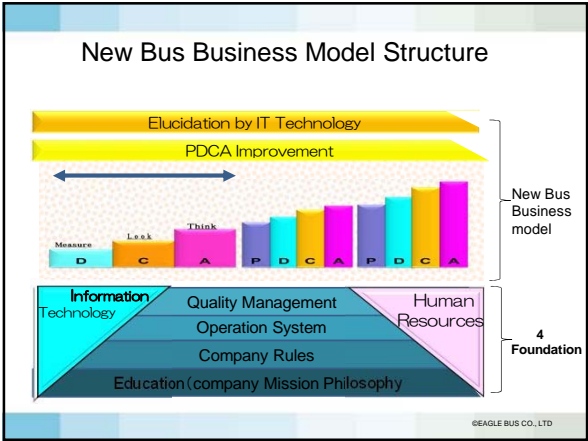
Kawagoe is one of the 3 majeure Japanese Tea place. We used this tradition and revived big tea ceremony Events In Kawagoe Which has Been held 21 places of Kawagoe And attended lot of tourists This

中庭の狭山茶発祥の地の碑

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### 5. Our New Bus Business Model And It's application to Safety

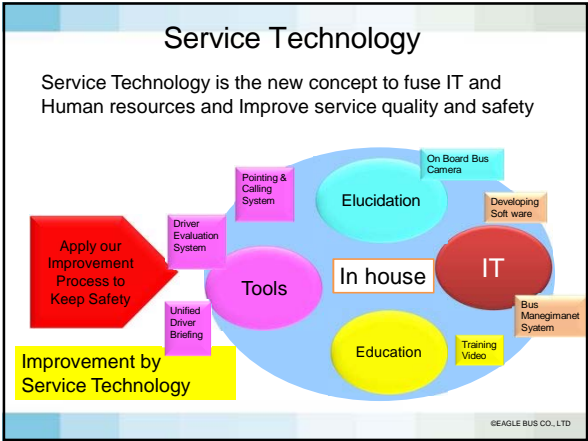
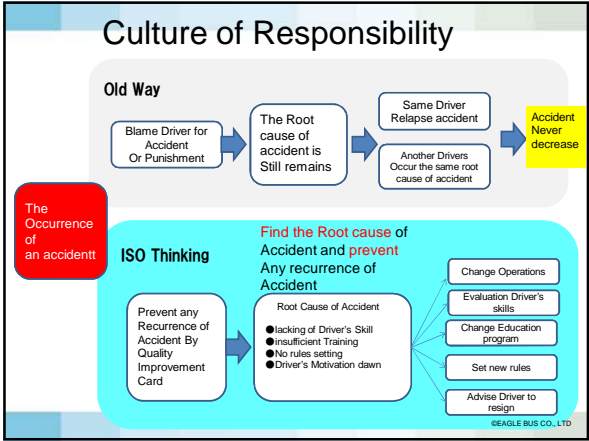


### Safety is Key Stone

2012年4月29日関越自動車道で運転士の居眠りによる死者7名、重軽傷者36名という大事故が発生。運賃ダンピング競争によりコストを下げるためにコンプライアンスを無視。運転士の過重労働、整備コスト、教育コスト等の安全コストが犠牲となる。

After horrific Bus Accident Law was changed to strict Safety regulations

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### When does 100-1 = 0 ?

**100 - 1 = 0**

Safe operation = 100%  
 Driver education = 100%  
 Driver compliance = 100%  
 One failure = 0 = total company failure



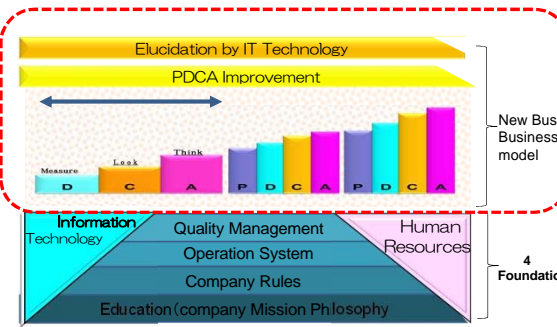


## “New Bus Business Model” and “4 foundation” for Scheduled Bus Service

Dr Kunihiro SAKAMOTO  
Senior Adviser  
EAGLE BUS CO., Ltd



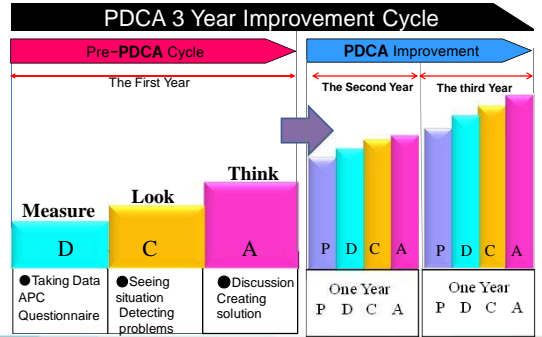

## New Bus Business Model Structure



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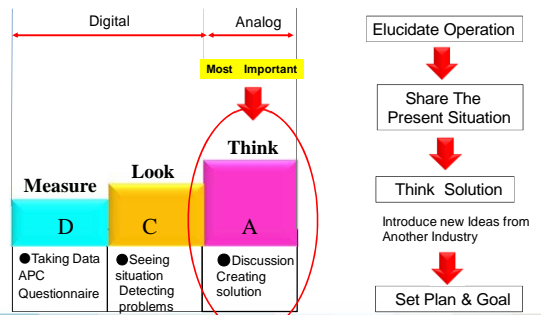
## Step-wise Bus Business Improvement

### PDCA 3 Year Improvement Cycle



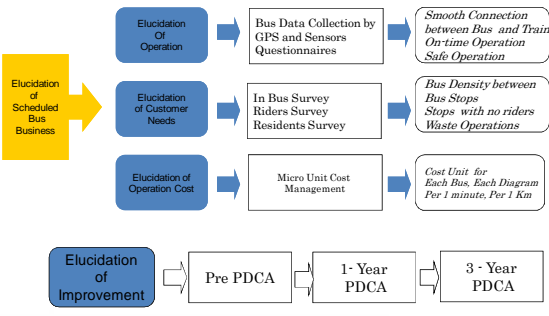
3

## Measure ⇒ Look ⇒ Think

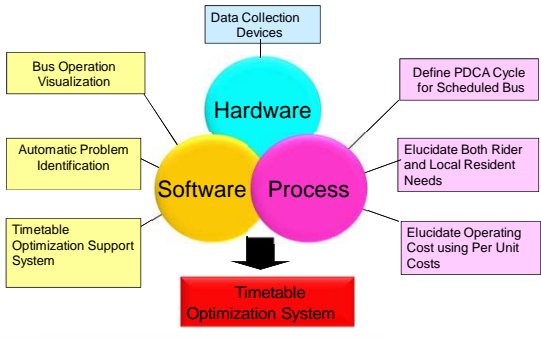


4

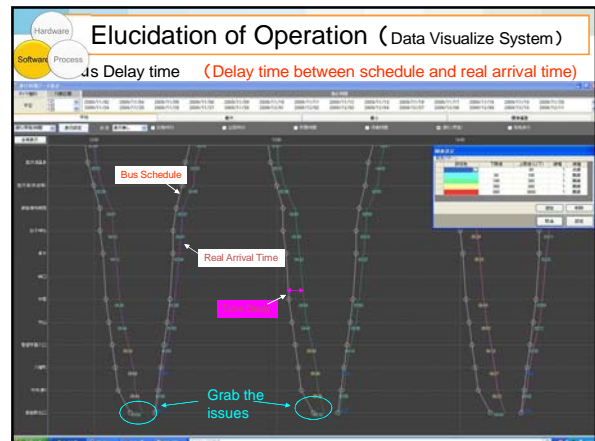
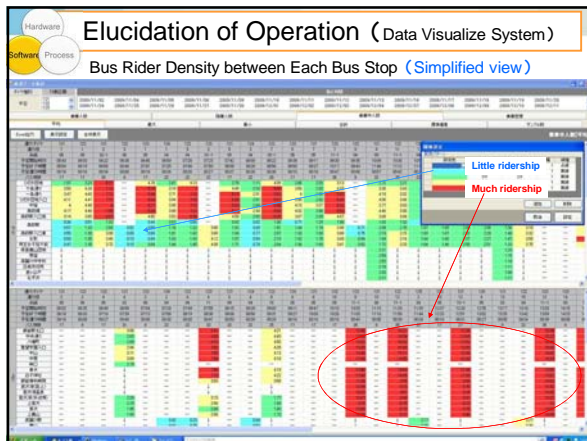
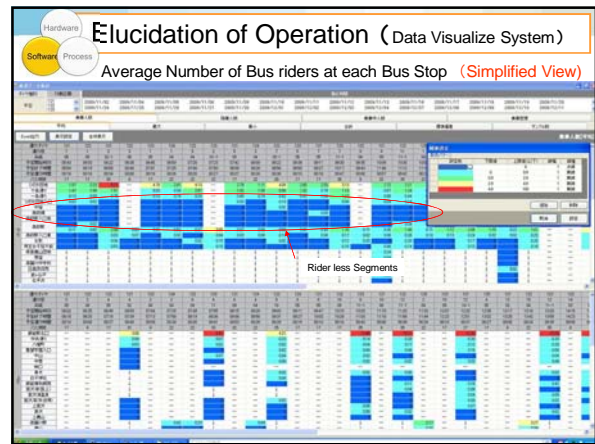
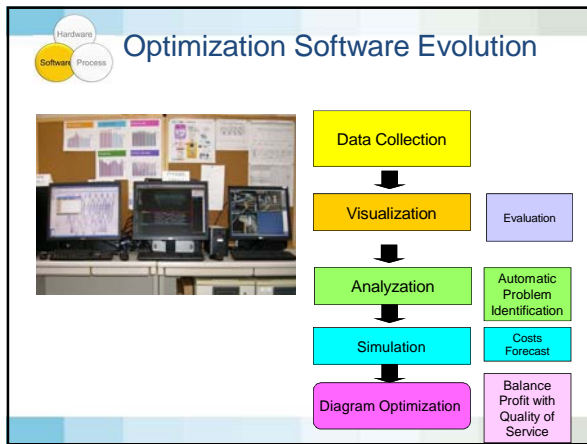
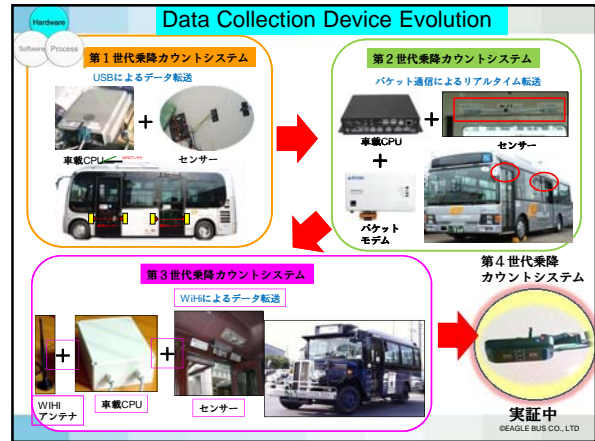
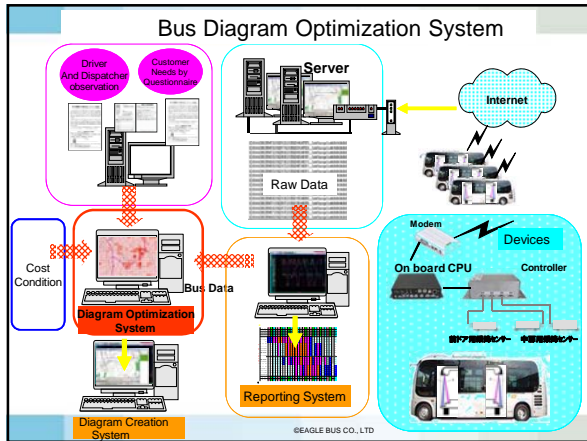
## Elucidation of Scheduled Bus Business

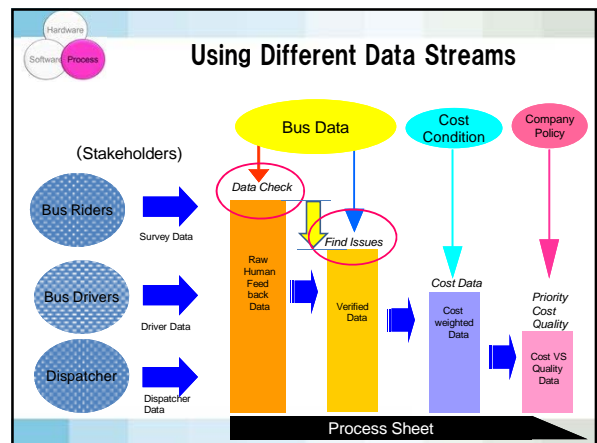
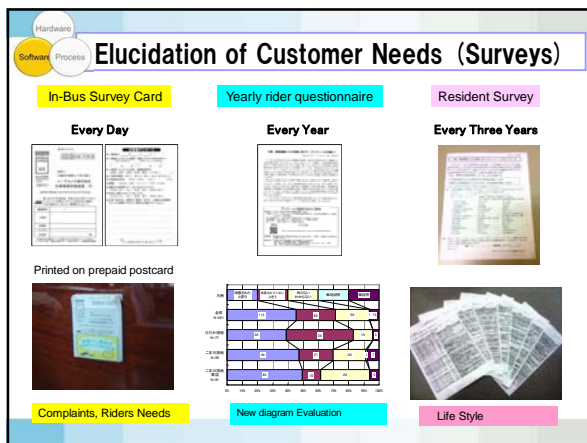
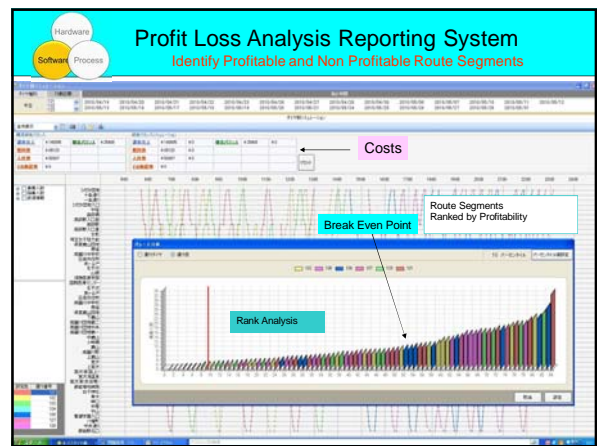
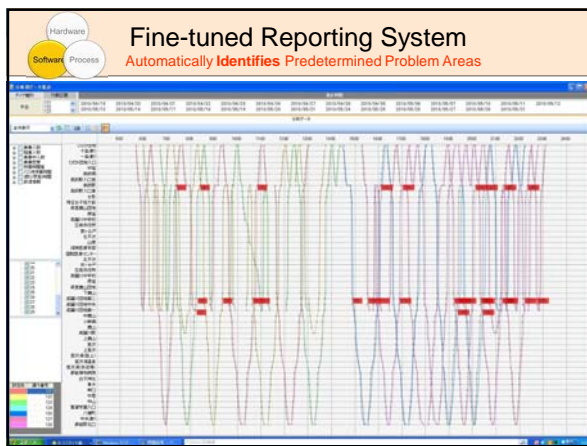
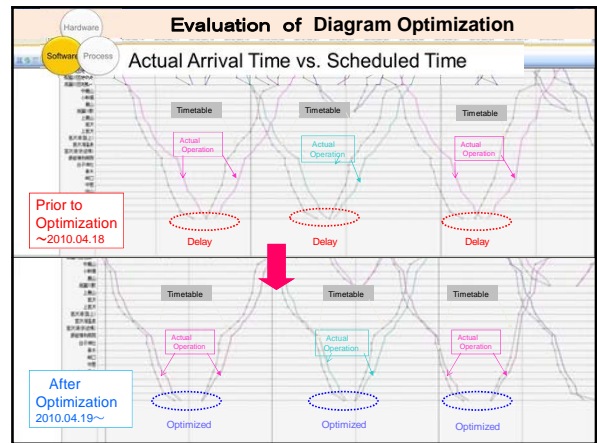
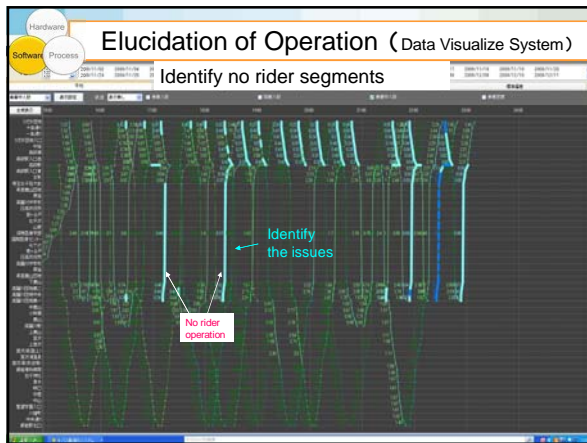


## Timetable Optimization Trinity

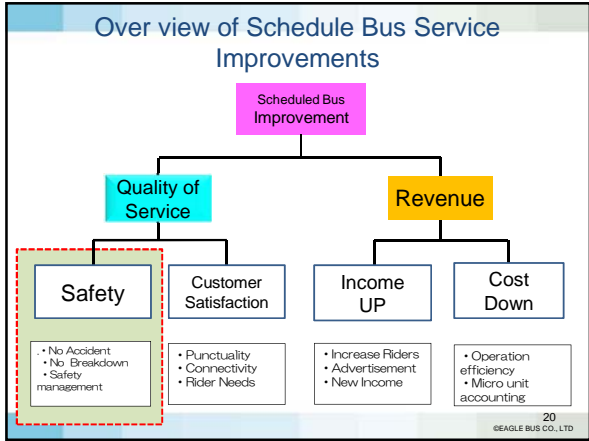
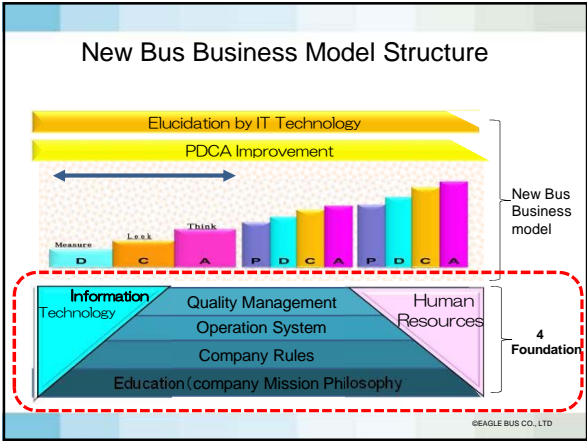


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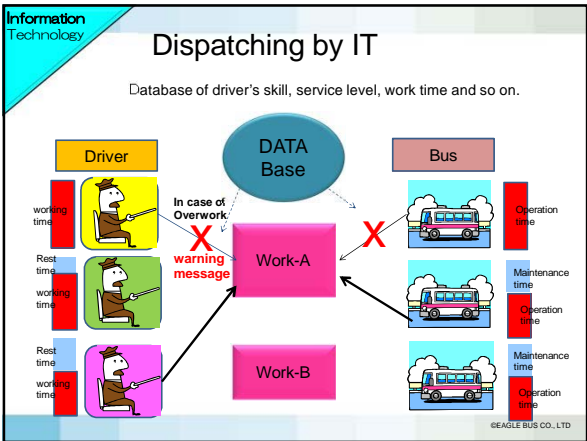
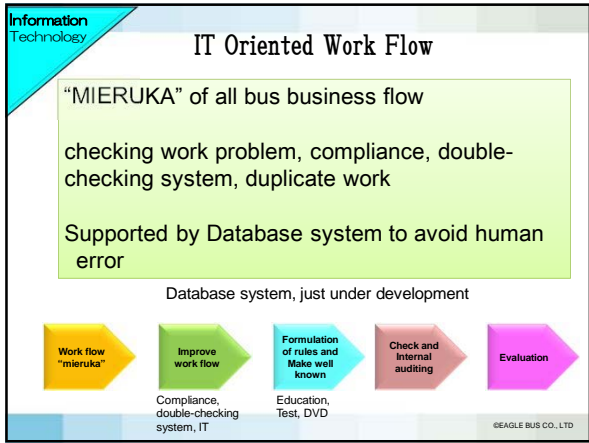
### Safety is Key Stone

2012/4/29 In JAPAN, Kanetsu Express Way  
 7 passengers dead / 38 passengers injured  
 Fall asleep at the wheel

Factors of serious accident;  
 Dumping – cost down – ignoring Compliance  
 Driver overwork, cost cut of vehicle maintenance, education and etc.

After horrific Bus Accident Law was changed to strict Safety regulations

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### In house Safety Group

Human Resources

One of the most Important meeting for safety

- every month
- member; president, executive, manager, sales, driver, dispatcher
- discussion about accident, claim, preventive measure, danger information, customer idea, etc.

- 社長訓示
- 事故・クレームの分析
- ヒヤリ・ハット報告
- 班長報告
- 本社各部門報告
- 決定事項確認

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**Kaizen(Quality Control)** No.119 Resources

車庫巡回  
月曜会議  
事故防止対策会議  
班長会議

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**ISO In-house Inspection** No.120 Resources

技量チェック  
内部監査  
画像を使って運転士指導  
個人面談指導風景

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**Tool Quality Improvement Card** No.121

クレーム対応措置情報

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**Information Technology Using IT Tools On Board Cameras** No.123

Driver Training, Driver Evaluation, Viewing Operation

カメラ1, カメラ2, カメラ3, DVR本体, GPSアンテナ

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**Point and Calling Safety Method** No.124 Resources

指差喚呼で 事故0ゼロ

指差喚呼マニュアル  
イクルバス株式会社  
指差喚呼教育ビデオの制作

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**5 Key Points and 2 Cautions** No.125 Resources

当社では、特に注視すべき「5つの重点実施ポイント」ならびに「2つの危険予知対象」を選定し、事故なく安全で快適な輸送を目指し運行を実施します。

**5 Key Points**

- (1) Starting
- (2) Reversing
- (3) Intersection
- (4) Railroad Crossing
- (5) Bling Curve

**2 Cautions**

- (1) Bicycle
- (2) Stop Vehicles

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Information Technology **No.129**

## Unified Briefing System

1. Unify Briefing System → One Driver 2minutes
2. Making Video Manual for training
3. Practice Every Dispatcher to master Unified Briefing
4. Change Floor Plan of Optimize Work Flow

©EAGLE BUS CO., LTD

Information Technology **No.130**

## Floor Plan of Work Flow(Before)

**Entrance**

① 現状

出入り口近くに点呼場が多いため導線が、り込んで混雑

観測分析設計適用

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## Floor Plan of Work Flow(After)

Change the work flow and alleviate Driver Briefing

② 改善

Change the work flow and alleviate Driver Briefing

観測分析設計適用

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Information Technology **No.132**

## Driver Briefing Before and After Optimizing

観測分析設計適用

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Information Technology **No.133**

## Unified Briefing System Education Video

観測分析設計適用

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## Summary

- For safety
  - Data oriented management
  - Bus management by ICT
-

# What are the difficulties in optimizing the Scheduled Bus business?

Hidden Obstacles

**Jammed or Vacant?**



**On-time Schedule?**



**Convenient for Riders?**



Once a Bus leaves the Garage, no one is able to manage it's operation.

**Efficient Operation?**

Fundamental Problems



# ANNUAL KEISEI STUDENT BUS PASS FOR ALL ROUTES CAN·BUS·LIFE

March 2014  
Keisei Bus Company

## 1. Outline of Keisei Bus company

· Name	: Keisei Bus Co., Ltd
· Commencement of bus operation	: 1 <sup>st</sup> October 2003
· Head quarter	: Ichikawa city, Chiba Prefecture
· Subscribed capital	: 2,005 million JPY
· Stock holder and Investment ratio	: 100 % Keisei Bus Co., Ltd
· Sales	: 20,861 million JPY ( As of FY 2013 )
· Total Passengers	: 93 million ( As of FY 2013 )
· Operation detail ( As of 31 March 2013 )	
① Operation Km	: 3,159,000 Km
② Number of bus	: 828
Route bus	: 83 Routes 638 buses
Highway / Airport limousine bus	: 45 routes 158 buses
Rental/ special purpose bus	: 32 buses
③ Branch	: 8 branches/ 2 satellite office
④ Employee	: 1,542

## 2 . Coverage Area

### ( 1 ) Route bus

Eastern part of Tokyo ( Edogawa ward, Katsushika ward, etc. )  
North-east part of Chiba prefecture ( Chiba city, Funabashi city, Matsudo city, Ishikawa city )



- Population of the area is 3 million.
- Among these, bus user number is 250,000 (passenger/day)
- Mainly use for travel means from home to nearest station.
- Compete with private car, bicycle, walk.

### ( 2 ) Highway bus · Airport limousine bus

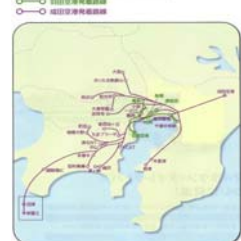
Tokyo station→Cities in Chiba Prefecture  
Tokyo Disney land→Yokohama· Shinjuku·  
Kawasaki city  
Chiba Prefecture· Tokyo→Nagoya city· West Japan.45 bus route operation in total.

Haneda Airport→Cities in Chiba Prefecture  
Narita airport→Metropolitan areas

Tokyo st / TDR routes

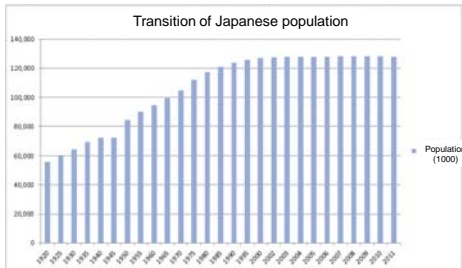


Narita Airport / TDR routes



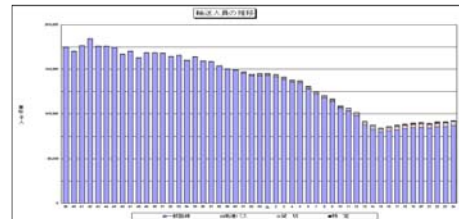
## 3 . Change of Japanese population

- Tendency of population in Japan today ( Year 2012 ) is flat. Facing turning point era of falling population. The population is expected to reach 8.6million in year 2055.
- Production age ( Year 15 - 65 ) ratio : Year 2012 : 63.8%→Year 2055 forecast : 50.9%
- Old age ratio aged ( Over 65 ) : Year 2012 : 23.0%→Year 2055 forecast : 39.9%



## 4 . Change of Keisei bus user number

- Number of bus user of Keisei Bus is decreasing.
- Decrease the number of working age population. Decrease of sub urban population. Increase the number of private car use.
- In recent years, slightly increasing the bus user number.
- Bus pass service impact, increase of population in metropolitan area, demand of bus operation who need public transportation.



### 5 . Impact of 2 days weekend holiday introduction at school ( Year 2002 - )

Bus pass for 1-3 month decrease number of bus users as time goes

Purchased bus pass in April however...

Use bicycle or walk to go to station or school--Change of travel means  
Do not use bus daily basis so that no need bus pass --Change of payment method

↓

Decrease number of bus user and bus revenue

As countermeasure of the above mentioned issues, issue annual bus pass on April to maintain bus user numbers and increase revenue.

⇒ Student bus pass for all Keisei route bus routes "CAN · BUS · LIFE" had been selling since April 2004

### 6 . Outline of CAN · BUS · LIFE ( 1 )

- Student commuting bus pass which covers all route buses of Keisei Bus company
- Fare(1 Year) : Adult:60,000 JPY Child: 30,000 JPY
- Duration of use : From 1 April to 31 March
- Duration of the sales : 18 March-31 May
- ※New user can purchase from 25 March

Install Hologram sticker

Photo of the card users

### 7 . Outline of CAN · BUS · LIFE ( 2 )

- Naming of Combine "C a m p u s" and "CAN · BUS"
- The pass holder can use all bus routes of Keisei Bus company until the card expiry date  
Expecting various purpose of bus use not only for commuting means but for shopping , going to crammer school and so on. Hoping student enjoy their school life using bus.
- Public high school attend days are around 200 days per year  
200 days×One way trip 190 JPY(Average) ×2 (Round trip) = 76,000JPY  
(Save bus fare More than 158 days use)
- Necessary items for purchase
  - Attending school certificate
  - ID Photo (45m.m×55m.m)
- Forgery prevention measures
  - ID photo (To identify the bus pass applicant)
  - laminating
  - Hologram sticker on the card

### 8 . Impact of CAN · BUS · LIFE introduction

- ① As a benefit of annual bus pass introduction
  - Obtain stable income although the discount percentage is high.
  - Improve financing of company by collecting advanced payment of bus pass on April as beginning of FY.
- ② Purpose of bus pass which covering all bus routes is
  - Habituation of bus use and monopolize bus customers.

Create future adult bus users by giving environment and opportunity to accustom to use public bus from their student age.

↓

Monopolize bus customers

### 9 . Change of CAN · BUS · LIFE sales

Year	Number of card sales			Total sales amount		
	Number of card sales	Index	Comparison of the previous year (%)	Total sales (1000JPY)	Index	Comparison of the previous year (%)
2004年度	4,120	100	-	231,630	100	-
2005年度	5,693	138	38.1	324,162	140	39.9
2006年度	6,540	159	14.9	372,003	161	14.8
2007年度	7,268	176	11.1	415,740	179	11.8
2008年度	8,003	194	10.1	457,924	198	10.1
2009年度	8,772	213	8.9	502,740	217	9.1
2010年度	9,275	225	5.7	531,246	229	5.7
2011年度	9,315	226	0.4	534,108	231	0.5
2012年度	9,653	234	3.6	554,265	239	3.8

### 10 . Promotion measures / Issues

( 1 ) Promotion measures

- Pucity through internet H P
- Install advertisement on bus/ Train
- Cooperation with schools
- Traveling sale at school enrollment day

( 2 ) Issues to be considered in future

- Explore new demand under the circumstance of decrease student number
- Consideration of new bus pass system issuance under the circumstance of production population
- FORGERY PREVENTION ( Change to I CT card, etc. )

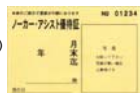


**1 1. Kinds of Bus pass except CAN BUS LIFE**

① Gold pass ( for elderly people )  
30,000 JPY ( Year ) , target on over 70 years old  
Coin less payment. It also avoid accident inside of bus



② NO car assist priority card  
To mitigate increasing traffic accident by elderly drivers, police in association with police, new bus pass was created for over 70 years old former driver who return their driving license to police. (2 years pass)



③ Child Pass  
Target on elementary school student during their summer vacation (From 1 August to 31 August) 1 month pass. The fare is extremely low in order to attract children to use bus. Limited number of sales. Adopt illustration by child to attract children.



④ One coin fare system (100 JPY)  
Passenger use bus only one coin ( by cash 100 JPY ) fare within around 1km distance zone from a main railway station. To attract short distance traveler to use bus.

**1 2. Other measures**

**( 1 ) BRT (Bus Rapid Transit) operation in Makuhari new city center (Chiba city )**

① **Makuhari new city center**

- New central city comprised of International conference complex, baseball stadium, big complex, skyscrapers, apartments
- Development had started since 1983. Around 40,000 of employees are working in Makuhari today.
- Bus have to transfer 17,000person/day 3,000 person/time ( Largest number of passenger in Japan )



② Introduce articulated bus

Introduce 10 articulated buses in December 1998 replacement of bus was done in 2010. 15 articulated buses are operating today.



**12. Other measures**

- ( 2 ) Tokyo shuttle ( Tokyo station⇒Narita international airport )**
- Start operation in 2013 targeting on LCC airlines in Narita airport
  - Operation route : Tokyo station⇒Narita international airport
  - Fare : 900JPY ( less than one-third of existing bus route fare )
  - Headway : 80bus/day ( Total of round trip )



Thank you for your attention!



# Contents

## Expectation on Urban Bus Renovation in Vientiane

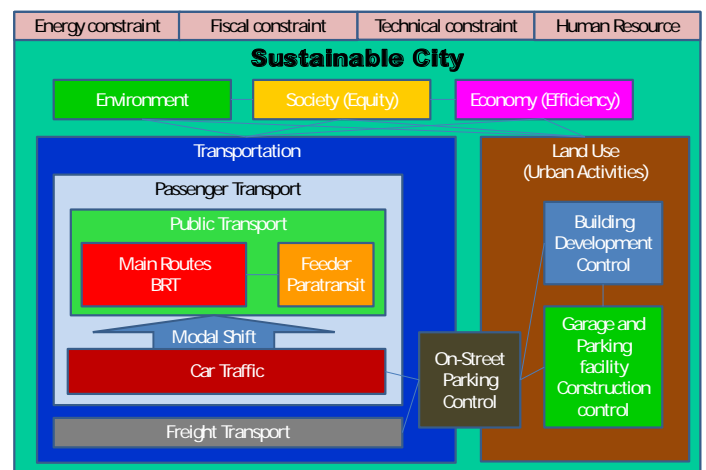
Prof. Fumihiko Nakamura  
Dean, Graduate School of Urban Innovation  
Yokohama National University  
Japan

1. Background
2. Framework and Vision in Vientiane
3. Possible Resources and Use Cases
4. Expected Strategy
5. Summary <Expectation>

## 1. Background

- Growth of Vientiane
  - More population, more activities
  - Spatial planning strategy needed
- Motorization
  - Traffic Congestion, Environment and Energy Issue, Traffic Accident
- More roads and Balanced Modal split
  - Possibility on modal shift to public transport

## 2. Framework and Vision in Vientiane

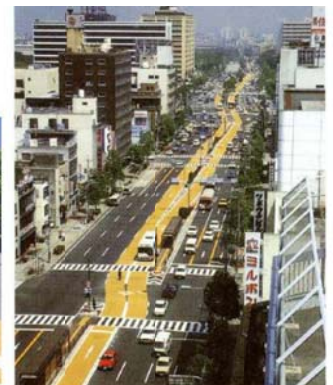


## 3. Possible Resources and Use Cases

- From Japan
  - Efficient Urban Bus Management and Operation
  - Staff education and management
  - Safe, Reliable and Environmentally Friendly Bus Fleet
  - ICT technology application for urban bus systems
- From the world
  - Experiences on BRT



### BRT (Key Route Bus) in Nagoya in JAPAN

- Key route Bus in Nagoya






No Dynamic Traffic Signal Preemption, No Articulate buses  
BUT HIGH PERFORMANCE Since 1982

## Bus system in Curitiba (Brazil) since 1974

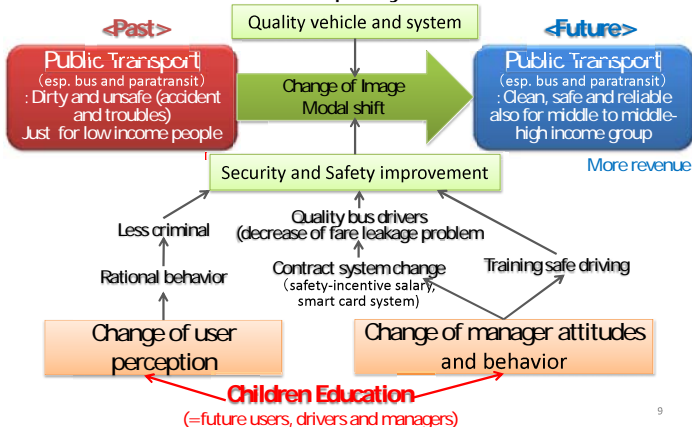
High Density along the bus exclusive ways		Car possessing and using are strongly promoted by federal government. City center parking control was expired in 2004.
Hierarchical bus network with different colored bus, and free-interchange, sometimes with public facilities near-by		Less comfort due to less disciplined drivers
Planned and managed by public & operated by private. Fare revenue is gathered to the city		Low-income people cannot live along busways due to high land price. Residents along busways do not use buses but cars.
PDCA-style revolution esp. from 1974 to 2000. Bus stop with raised platform and pre-payment gate with bi-articulate bus and so on.		Poor management and operation due to lack of ICT-aided systems
		Poor PDCA (2000 - )

## BRT in Bogota (Colombia) since 1999

Gasoline Tax Increase For BRT funding		No signal preemption sometimes cause delay
License Plate Control For traffic reduction		No land use control along the corridors makes some troubles
Highest Capacity (45,000 passenger/dlr/h)		Poor management of pavement construction often causes serious delay
High speed service by limited stop operation		
Gate control BRT and Free-ride feeder for No fare leakage		
Modal shift achieved by fast & secured service		
ICT oriented efficient management		
Human resource development for Quality staff		

## Importance of Management

- To achieve hierarchical transport system



## Lessons for quality BRT

- Strong arrangement and coordination** with
  - Existing bus operators
  - Feeder systems (bus and/or paratransit)
  - Car restriction policies
  - Traffic control system (traffic police)
  - Land use and Social welfare policies
- Clear and powerful system** on
  - Human resource development and training
  - Money flow (fare, salary, etc.) management
  - Vehicle and infrastructure maintenance
  - ICT-aided secured and rapid service monitoring
- Management renovation** should be started in advance for infrastructure planning implementation.

## 4. Expected Strategies (from Japan)

- Urban Bus Renovation
- Public Transport Management Organization System structure
- System selection for main, sub-main and feeder routes
- Parking Policy Setting
- Building Development Control Setting
- Demonstration approaches
- Clear short-term target setting
  - Example: all junior staff in government organization offices MUST commute by bus with full fare subsidies)

## Advantages of Japan's contribution

- Advantage
  - Data oriented: reliable data for effective analysis
  - Safe, Reliable, Human Resource Development, After-care (with relatively lower cost required)
- Ideally
  - Short term strategic approach
  - Framework oriented
  - Back-casting flexibility
- Expected Direction
  - Reliable higher capacity technique
    - Real time vehicle control. Smart ticketing control
  - Sustainable infrastructure with safety, security and cleanness
  - Safe and Efficient system aided by ICT
    - Monitoring, fail-safe, incident management and data analysis

# Urban Bus Renovation

- Buses for main or sub-main or some feeders routes
- Goal setting
  - User side: safe and secured, reliable travel time, cleanness
  - Operator side: efficient, transparent money flow
- Fundamental Actions
  - Drivers' salary system modernization
    - Distance-based with safe driving incentive
    - Compliance education (with motivation)
- Measures
  - Separation of Planning, Management, Operation and Control (monitoring)
  - Low cost ICT technique oriented
    - Smart phone based location system and monitoring system
    - Simple IC card payment

# Bus stop compliance experiment for VCSBE Vientiane No.29

- Planned and executed by YNU (Ms. Yurie Toyama and Prof. F. Nakamura)
  - Aided by VCSBE and JICA
- Route No.29
- All the buses on November 25-27
- Request the drivers to stop only designated bus stops around CBS and the University
  - Several special bus stops are prepared
- Check travel time of all the buses

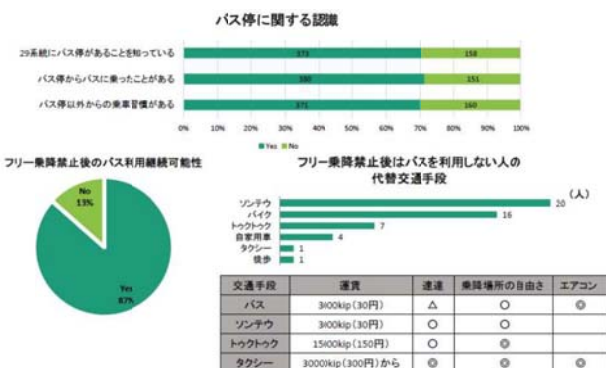
## Stopping points on normal days based on YNU survey on August 15



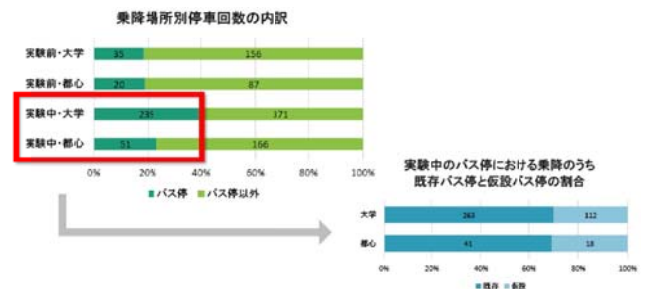
## preparation



## Passengers' perception

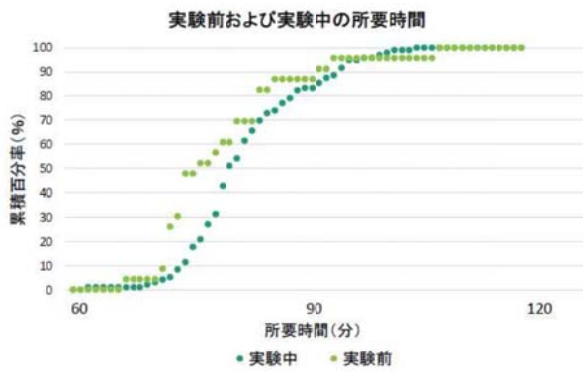


## Drivers' action





## Travel time distribution



## 5. Summary <Expectation>

- Importance of Framework
- Vision Sharing
- BRT strategy setting
- Organization modernization approach
- Utilization of Japanese Resources
  - Data-oriented management
  - ICT aided management
  - Human Resource Development
- Demonstration-based incremental approach

Photos

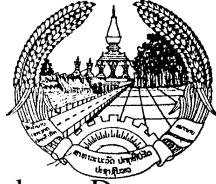
13 Mar, 2014: Bus Management and Operation Improvement in Japanese Practices and Experiences



14 Mar, 2014: Seminar for Bus Management and Operation Improvement in Japanese Practices and Experiences



## 5. バス公社の免税に係る市長への提言



Peace Independence Democracy Unity Prosperity

Lao People's Democratic Republic



Vientiane Capital

Business Promotion Office

No: /BPO.VC

Tel/Fax: +856 21 260 262

Date: 20 May 2013

### **Report to the Mayor of Vientiane Capital (Draft)**

#### **Respect To:**

- The Mayor of Vientiane Capital
- The Minister of Ministry of Public Works and Transport

- According to: The Agreement approval by the Mayor of Vientiane Capital No: 0344/MVC, Date: 19/03/2013 for Appointed the Committee to research Policy Plan of Public Transport in Vientiane Capital.
- According to: the research in the Meeting of the Committee to research Policy Plan of Public Transport in Vientiane Capital, Date: 22/03 and 29/03/2013
- Regarding to the Role, Responsibility, and Agreement among the Committee Members to research the draft of Policy Plan of Public Transport in Vientiane Capital.

The Chief of Cabinet of Business Promotion Office of Vientiane Capital would like to report and inform to you to request the instruction as below:

Regarding to implement the Mean in the Joint Coordinating Committee Meeting (JCC) date on 12/02/2013 and the Discussion Meeting of the Directors of Vientiane Capital State Bus Enterprise with the Representative of JICA Laos Office and other related Office.

The Committee to research Policy Plan of Public Transport in Vientiane Capital have been starting to research the policy since 22 March 2013 (since the Committee has been established regard to the Appointing Agreement No: 0344/Mayor of Vientiane Capital, dated on 19 March 2013), there were arranged the Discussion Meeting to research the draft of Policy Plan of Public Transport in Vientiane Capital as below:

#### **I. The Traffic & Public Transport Condition in Vientiane Capital:**

Vientiane Capital is the Capital City of Lao PDR, is the Central Political, Economic-



Social - Culture, area 3,920 M2, the Population Statistic about 850,000 People and there were still many people arrived and departure.

In recent year Vientiane Capital was also developed in many, the Economic have been Growing rapidly, the people living condition have been improving, the vehicles number have been increasing based on the Statistic 2013, there were over Six Hundred Thousand, average 1.5 Person per Car.

Regarding to the Traffics during peak hours (In-Out Working Time - Finish Time) the morning from 7:00 to 9:00 AM and the afternoon from 16:00 PM to 19:00 PM that there was a traffic congestion, traffic jam, that there were always road accident happened to make a lot of damage to the Economic, life, and health of the Citizen of the Vientiane Capital.

There were many causes to make Road Accident happened such as:

1. Some drivers did not respect to the traffic regulation, they did not respect to others, and they were parking where they would like to stop.
2. Some traffic police is still not more strictly to those who offenses and the inspection do not do in regularity, also the problem solving still delay.
3. In the urban area and where the community is congestion, there are not enough parking area, so they were parking along the road so it reduced of the traffic lane that's why the road unable to traffic along the road.
4. There are increasing of the private cars that make the volume of cars along the road increased and other causes.
5. The Urban Planning Management is still not co-ordinated with related party, to design the construction schedule, other operating businesses such as: Construction Shop retailers, Workshop, School, and other parts that related to the traffic.

## **II. The Operating Activity of Vientiane Capital State Bus Enterprise.**

Vientiane Capital State Bus Enterprise has been established since 1976 and it has been instructed by Vientiane Capital in 1984, in order to implement by the policy that has been changed by the party, so Vientiane Capital State Bus Enterprise is trended to provide from the service to be as administration to be the business operation with their own Financial Support, follow Tax Law to Tax Paid to the Government of Laos, in the recent year Vientiane Capital State Bus Enterprise has been received the Grant Aid from the Government of Japan for construction of Bus Terminal, Workshop, and the Office of Vientiane Capital State Bus Enterprise, and some Buses for Bus Operation.

Currently, there are 164 Buses in Vientiane Capital State Bus Enterprise, which is including 42 News Big Buses that received the Grant Aid from the Government of Japan in the mid of 2012.

\* Bus Operation Result in recent year:

Since 2007 -2012 the operation activities of Vientiane Capital State Bus Enterprise gained

and lost profits, which it has been shown the below table:

Item	Description	Year	Amount	Currency
1	Lost Profits	Year 2007	1,205,387,299	LAK
2	Gained Profit	Year 2008	764,798,591	LAK
3	Gained Profit	Year 2009	2,115,159,408	LAK
4	Lost Profits	Year 2010	1,846,221,342	LAK
5	Lost Profits	Year 2011	3,177,835,598	LAK
6	Lost Profits	Year 2012	3,125,529,777	LAK

(Sources: Attachment with the Annual Operation Activities)

### III. The Major issue that would like to propose to the high authority to consider.

In operating of Public Transport Activity is one of the policy to facilitate to the official employees, Soldiers, Police, and Students for travelling within the city, and it also help to reduce of traffic congestion and reduce the using of private cars is to safe the use of the State Fuel, so in other countries they also have the Public Transportation and also receive of Financial Supports and other related supports to operate the business to provide to the society, which the details Policy of Financial Support to the Public Transportation of some countries in the ASEAN Countries is attached to report to you (as per attachment).

Vientiane Capital State Bus Enterprise is State Enterprise and operating activities as role and responsibility to provide the service to the Political Party, on the other side is to implement by Enterprise Regulation such as: Performance obligations to all-round of the State Budget, in the recent years the Operating Business of Vientiane Capital State Bus Enterprise in some years gained and some years lost the Profits (as reported in Article No: II).

In order to help Vientiane Capital State Bus Enterprise to continue the Operating Activities to the Public Transportation, also to contribute to solve the traffic problem in the urban, to facilitate to the Public in suburban and rural areas for travelling, it shall to save for consumption of Petrol. That's why soon it need to be supported to the State Enterprise to be able to increase of capacity to Public Service, therefore we would like to propose to you to consider such as:

1. Propose to consider about solving the amount of money that operating lost in each year by Tax Exemption Policy. Especially, Value Added Tax of Bus Passengers (VAT 10%).
2. Propose to consider about Financial Support or other Policy to cover operating costs for the Petrol in each year, which is very high expense about 52% of the Total Expenditures.
3. Propose to consider about additional Capital Funding to purchase more Bus Vehicle (Small Size).
4. Propose to consider about Capital Funding to construct of Bus Terminal in each district, each province to expand of the Public Transportation to access to all of locally.
  - The details of each issue as below:

1. / Tax Exemption Policy to Vientiane Capital State Bus Enterprise (VCSBE)

VCSBE performed obligations to all types of Taxes in regarding as the State Enterprise as follow by the actual calculation based and performed other obligations, as below table has showed of payment types that made by Vientiane Capital State Bus Enterprise that paid in recent years:

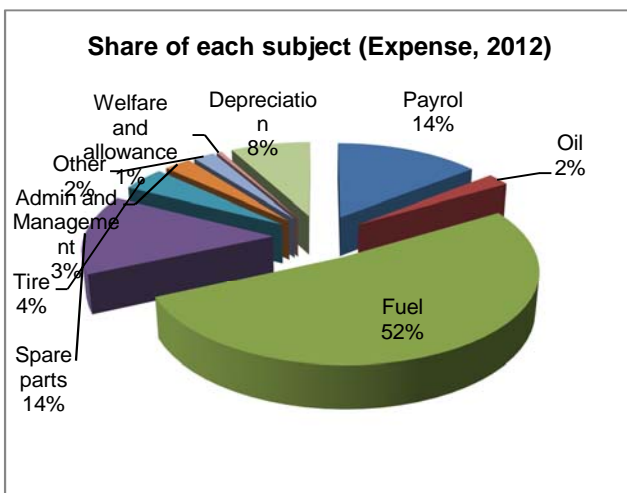
Description	2009	2010	2011	2012	Average
VAT(Sales)	1,507,429,403	2,813,188,616	3,133,804,835	3,311,720,075	2,691,535,732
VAT(Expense)	583,039,983	1,468,400,479	1,645,788,321	1516894519	1,303,530,826
VAT (Net)	924,389,420	1,344,788,137	1,488,016,514	1,794,825,556	1,388,004,907
Profit Tax	865,950,957	-	-	-	865,950,957
Minimum Profit Tax	-	263,116,979	313,384,483	331,172,007	302,557,823
Salary Tax	143,541,272	128,722,156	141,770,627	41,193,535	113,806,898
Personal Income Tax(Allc	-	4,399,282	171,840,331	63,250,000	59,872,403
Devence Tax	412,458,000	-	-	-	137,486,000
Total	2,346,339,649	1,741,026,554	2,115,011,955	2,230,441,098	2,108,204,814
Total Tax + Net profit or l	2,115,159,408	(1,589,490,692)	(3,517,602,409)	(3,125,529,777)	
↓	↓	↓	↓	↓	
Net profit or loss before T	4,461,499,057	151,535,862	(1,402,590,454)	(1,330,704,221)	
↓	↓	↓	↓	↓	
(Depreciation)	1,992,482,439	2,279,209,000	2,299,080,000	2,717,752,101	
(Interest)	69,342,045	176,722,167	94,261,748	305,703,000	
EBITDA* (nearly)	6,384,639,451	2,254,022,695	802,227,798	1,081,344,880	

\*EBITDA= Earning before Interest Tax, Depreciation and Amortization

- In order to reduce of the expenditure of the Vientiane Capital State Bus Enterprise (VCSBE) and implement the Supporting Policy to increase more efficiency to the Public Transportation so we would like to propose you to consider exempting of Value Added Tax (VAT 10%) in each year.

2. / Financial Support Policy to cover the lost.

Detailed have been shown of the breakdown of costs over recent years and the graph of share of each subject is shown as below:



Item	Description	Amount LAK
1	Payroll	4,938,568,000
2	Oil	769,674,000
3	Fuel	17,780,861,000
4	Spare parts	4,882,552,000
5	Tire	1,469,070,000
6	Admin and Management	916,753
7	Other Expenses	737,330,000
8	Welfare and allowance	170,882,000
9	Depreciation	2,717,752

We would like to propose to implement of Financial Support Policy to cover of lost or other Policy. Especially, Fuel Price Policy to purchase Fuel in original selling price.

3. / Capital Funding Policy to purchase more Bus Vehicles.

In order to facilitate to the Public Transport of Vientiane Capital and increasing of the quality is to build the trust and popularity of the people in Vientiane Capital for using of Buses, it's necessary for us to have sufficient buses to provide the service and they shall to be small buses in order to convenient through the narrow road, and economy of Fuel Consumption, and to be ensure about time in order to provide the modernize services.

We also would like to propose to the High Authority in order for us to plan to purchase of Small Size Buses (25 seats) to operate in the Urban of Vientiane Capital 150 Buses and Big Size Buses (45 seats) to operate in suburban, rural areas, inter-provinces for 100 Buses, based on the actual condition by cooperate with JICA to create the Short-term, Mid-term, and Long-term Strategies in order to propose these matters to above of High Authority to consider.

\* The Forecasting of Bus Passengers:

Vientiane Capital State Bus Enterprise (VCSBE) has been operated activities to the Public Service in each year such as:

Item	Description	No of Buses	No of Trips	Unit	No of Passengers	Unit
1	Year 2007		104,688	Trips	4,387,091	Person/Km
2	Year 2008		102,224	Trips	4,306,261	Person/Km
3	Year 2009		105,239	Trips	3,623,886	Person/Km
4	Year 2010		99,664	Trips	3,517,219	Person/Km
5	Year 2011		106,709	Trips	3,519,740	Person/Km
6	Year 2012		113,850	Trips	3,839,731	Person/Km

If we could increase the number of buses as we propose, we will able to increase the capacity of the services to the Public as the estimation will be ....%, Passengers Head Counts .....Person/Km.

4./ The Construction Plan of the State Bus Terminal.

To continue to improve and develop of the Public Transportation Network of the Vientiane Capital to access to the inter-provinces, the State need to consider about the Construction Plan of the State Bus Terminal in the far distance area to cover all of the Public Services. Therefore, it is necessary to build the Bus Terminal in each district and each province where far distance.

(Require to Vientiane Capital State Bus Enterprise (VCSBE) to make Bus Map and select the location of VCSBE's Bus Terminal to complete by their own).

In order to be instructed of the implementation of next level, we would like to report to you and would like you to consider as appropriately.

With highly respectful,

**The Representative of the Working Group Committee to research the Policy Plan of the Public Transport in Vientiane Capital**

**Chief of Cabinet of Business Promotion Office of Vientiane Capital**



## Appendix-1.1

**Income Statement**

	2009	2010	2011	2012
<b>Turn - over</b>	26,167,424,817	24,229,455,904	27,053,980,455	28,785,379,000
<b>Current consumption for the current year</b>	19,675,408,952	22,380,076,487	25,722,328,919	26,186,804,000
<b>Surplus value for operaton (I - II)</b>	6,492,015,865	1,849,379,417	1,331,651,536	2,598,575,000
<b>Expenses to personnel</b>	4,129,763,884	3,870,318,873	4,613,159,519	5,109,451,000
<b>Tax, fees and similar expenses</b>	233,341,767	121,998,500	301,239,383	251,481,000
<b>Surplus on operation</b>	2,128,910,214	Δ 2,142,937,956	Δ 3,582,747,366	Δ 2,762,357,000
<b>Other operation income</b>	3,680,484,923	3,902,436,188	4,284,067,880	4,331,822,000
<b>Other operation expenses</b>	Δ 1,771,095,335	Δ 1,503,233,119	Δ 1,506,042,600	Δ 1,463,771,000
<b>Depreciation,provision and reserves</b>	Δ 1,992,482,439	Δ 2,279,208,622	Δ 2,299,080,309	Δ 2,717,752,000
<b>Resumption on</b>				0
<b>Result of the year on operation</b>	2,045,817,363	Δ 2,022,943,509	Δ 3,103,802,395	Δ 2,612,058,000
<b>Financial income</b>	89,348,650	179,805,808	10,114,273	61,702,000
<b>Financial expenses</b>	20,006,605	3,083,641	Δ 84,147,475	Δ 244,001,000
<b>Financial income</b>				0
<b>Financial profit</b>	69,342,045	176,722,167	94,261,748	305,703,000
<b>Result before tax (V+VI)</b>	2,115,159,408	Δ 1,846,221,342	Δ 3,009,540,647	Δ 2,612,058,000
<b>Divident tax payable for the current result</b>	Δ 740,305,793	Δ 256,730,650	Δ 339,766,812	331,172,000
<b>Deferred tax ( variations )</b>				0
<b>Total income from current activities</b>	29,937,258,390	28,311,697,900	31,348,162,608	33,178,902,000
<b>Total expense from current activities</b>	27,822,098,982	30,157,919,242	34,525,998,205	35,973,260,000
<b>Net profit from current activities</b>	2,115,159,408	Δ 1,589,490,692	Δ 3,517,602,409	Δ 3,125,530,000
<b>Net profit for the year</b>	2,115,159,408	Δ 1,589,490,692	Δ 3,517,602,409	Δ 3,125,530,000

Appendix-1.1

**Balance Sheet**

Debit	2009	2010	2011	2012	Credit	2009	2010	2011	2012
<b>Non-current assets</b>	8,644,963,424	6,633,191,335	10,779,720,067	44,862,974,925	<b>Subscribed capital</b>	16,406,853,565	16,406,853,565	11,194,837,052	58,876,987,052
Difference between activities purchase	0	0	0		Surplus of share value and reserves	13,817,876	13,817,876	13,817,876	13,817,876
Intangible fixed assets	0	0	0		Surplus on revaluation of fixed assets	0	0	0	
Tangible fixed assets	8,644,963,424	6,633,191,335	10,779,720,067	44,862,974,925	Surplus from comparative revaluation	0	0	0	
Fixed asset in process of acquisition	0	0	0		Net profit (Share of groups)	329,964,868	Δ 2,102,951,992	Δ 3,517,602,409	Δ 3,125,529,777
Financial fixed assets	0	0	0		Other equity - carried forward	Δ 4,327,557,648	Δ 3,170,331,033	Δ 126,946,832	Δ 4,057,007,241
Title on equivalent valuation	0	0	0		Share of Cooperations in common(1)	0	0	0	
Investment title and accounts receivable	0	0	0		Share of minor shareholders	0	0	0	
Title of fixed assets	0	0	0		<b>I Total equity</b>	12,423,078,661	11,147,388,416	7,564,105,687	51,708,267,910
Loans and fixed financial assets	0	0	0		Non- current liabilities	0	0	0	
Other non-current assets	0	0	0		Reserves and Products certifies in advance	0	0	0	
Deferred tax	0	0	0		Borrowings and fianancial accounts payable	0	0	0	
<b>Total non-current assets(I)</b>	8,644,963,424	6,633,191,335	10,779,720,067	44,862,974,925	Deferred tax	0	0	0	
					Deferred income : Subsidies for equipment	0	1,043,800,000	777,800,000	533,200,000
<b>Current assets</b>					<b>Total non current liabilities II</b>	0	1,043,800,000	777,800,000	533,200,000
Inventories	1,283,489,575	1,035,363,018	846,477,491	4,940,759,642	Current liabilities	0	0	0	
Accounts receivable	2,058,847,523	2,205,148,023	2,075,578,785	2,494,745,675	Short term accounts payable	0	0		
Cash and cash Equivalents	3,596,356,321	2,706,854,216	1,492,625,290	1,446,392,455	Suppliers and related accounts	1,611,318,941	59,095,970	15,788,950	938,436,950
<b>Total current assets</b>	6,938,693,419	5,947,365,257	4,414,681,566	8,881,897,771	Reserves and receipt in advance	0			
					Other accounts payable	1,549,259,241	330,272,206	391,097,955	564,967,837
<b>Total assets ( I + II )</b>	15,583,656,843	12,580,556,592	15,194,401,633	53,744,872,696	General cash (Overdrawn)	0			
					<b>Total current liabilities III</b>	3,160,578,182	389,368,176	406,886,905	1,503,404,787
					<b>Total equity and Liabilities (I+II+ III)</b>	15,583,656,843	12,580,556,592	8,748,792,592	53,744,872,696

Appendix-1.2

Subject	Unit	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
1 Payrol	K Kip	2,929,729	3,376,953	3,968,133	4,032,976	4,137,143	4,559,104	3,964,697	3,738,297	4,437,179	4,938,568
2 Oil	K Kip	422,720	491,736	633,017	760,815	945,377	855,204	864,295	859,861	808,280	769,674
3 Fuel	K Kip	9,976,836	12,731,222	16,574,803	17,618,128	17,275,505	18,858,085	11,252,114	13,530,555	16,127,108	17,780,861
4 Spare parts	K Kip	3,729,049	3,839,100	4,312,257	3,703,757	3,969,796	4,060,719	5,071,181	4,893,097	6,319,222	4,882,552
5 Tire	K Kip	1,533,621	1,449,998	1,084,199	1,181,591	1,439,160	1,295,576	1,431,120	1,464,891	1,382,129	1,469,070
6 Admin and Management	K Kip	775,386	807,889	800,619	741,630	664,650	672,013	740,324	1,728,208	880,514	916,753
7 Other	K Kip	403,771	999,958	1,239,769	1,265,318	1,646,152	2,199,904	2,340,817	1,531,779	2,096,505	737,330
8 Welfare and allowance	K Kip	92,842	141,667	126,903	142,008	187,665	203,917	165,067	132,022	175,981	170,882
9 Depreciation	K Kip	1,417,063	1,448,690	1,473,123	1,493,468	1,436,108	1,401,338	1,992,482	2,279,209	2,299,080	2,717,752
Total		21,281,017	25,287,211	30,212,822	30,939,691	31,701,557	34,105,861	27,822,099	30,157,919	34,525,998	34,383,442

Appendix-2

		Indonesia	Thailand	Philippine	Singapore	Malaysia	Vietnam
The name of Public Bus (Transportation) company		TransJakarta, bus rapid transit (BRT)	Bangkok Mass Transit Authority (BMTA)	N/A	N/A	•Rapid KL •Rapid Penang	•Ho Chi Minh–Ho Chi Minh Transport Management and Operation Center •Hanoi–Hanoi Transport Management and Operation Center
Remarks regarding the situation of management			Revenue was 7,902Mil Baht, Cost was 10,593, and Net loss was 5,125Mil Baht in2010, Carry forwarded loss is 77Bil Baht.	N/A	N/A	(Rapid KL) • This company operates 167 routes with 1400 buses covering 980 residential areas with a ridership of about 400,000 per day. • Operate not only bus, but also operateLRT and Monorel.	N/A
Subsidy for	Operation	Since its first year of operation until 2012, it is estimated that the city has invested over 5 trillion Indonesian rupiah (\$450 million USD) for busway infrastructure and to cover the TransJakarta operation. Now, nearly 4 trillion Indonesian rupiah (\$436 million USD) is currently allocated for ground transportation each year.	6.9% of Revenue (7.9Bil Baht) (2010) 7.3% of Revenue (8Bil Baht) (2009)	N/A	N/A	N/A	•Ho Chi Minh–VND1.27 trillion (US\$60.4 million; 2011), VND574Mil (2008) •Hanoi–VND1.1 trillion (USD52.7 million; 2011)
	Vehicle		Thailand	N/A	Bus interchanges are funded entirely by the Government. In addition, public buses are also exempted from COE (Certificate of Entitlement) payments. The Government also pays for the development and software cost of the contactless smartcard system. Therefore, bus and train operators are only responsible for operations, maintenance costs and investments in service improvements.	N/A	N/A
	Fuel (whole country)		Though government had provided subsidy for diesel or other oil, cut it in this year.	Provide subsidy for diesel	Provide subsidy for diesel	N/A	Provide RM 10,000 Mil (25,000 Bil Lip) subsidy for liquefied petroleum gas (LNG), diesel and petrol, and retail price of diesel is RM1.75 (4476 Kip, 2010)
The Private Bus (Transportation) companies		In more remote areas, and between smaller towns, most services are provided with minibuses or minivans.	Many private busses in various sizes, types, and prices, from half size, full size, double length, open window, fan, and air conditioned	•All bus companies are private •Many private busses in various sizes, types, and prices, from half size, full size, double length, open window, fan, and air conditioned	All bus companies are private	(KL) Other rail–based services, such as KTM Komuter, KLIA Ekspres and KLIA Transit are operated by other companies. There are also many other bus operators such as Metrobus, Len Seng Omnibus Co. Ltd., and Selangor Omnibus Co. Ltd.	•Ho Chi Minh–15 businesses operating in the public transport sector
Related Data source and related information			Income Statement of Bangkok Mass Transit Authority (BMTA), HP( <a href="http://www.bmta.co.th/th/about_profit.php">http://www.bmta.co.th/th/about_profit.php</a> )	N/A	Gov HP( <a href="http://www.ptc.gov.sg/regulation/fareRegulation.htm">http://www.ptc.gov.sg/regulation/fareRegulation.htm</a> )	Export fuel to other countries	



## 6. 新 CBS 建設計画についてのコメント

*ອົງການຮ່ວມມືສາກົນຍີ່ປຸ່ນ (ໄຈກາ) ໂຄງການປັບປຸງການຂົນສົ່ງສາທາລະນະໃນນະຄອນຫຼວງວຽງຈັນ  
(JICA PEC-VCSBE)*

JICA Expert comments in the meeting for “Basic Planning of Bus Terminal Area in Morning Market’s Public Transportation Center” held on 9:00 6<sup>th</sup> February at DPWT are as follows;

We could not attend the 1<sup>st</sup> meeting. Subsequently, we received a plan of presentation for the 2<sup>nd</sup> meeting from Mr.Monzen from NSC. So far, we had held a lot of arguments with NSC by e-mail, etc. as an adviser of JICA experts.

We submitted our concerns and queries as for the 2-layers plan to NSC. We would like NSC to explain why the 1-layer plan was selected by sharing our concerns of 2-layers plan with attendees.

Regarding 2-layers plan, we were informed from NSC that gradient of slopes between 2 floors are steeper than that of Bus terminals in Japan. We are concerned that bus can’t restart when loaded bus stops in the steep slope. In this case, the bus-berths on the 2<sup>nd</sup> /Basement floor cannot be used.

Passengers who come from the market have large baggage and are using a cart to carry the baggage. It seems difficult to access the cart to the bus-berths on the 2<sup>nd</sup> /Basement floor. From the viewpoint of these concerns, 1-layer plan is recommended as the most practical plan though a number of bus-berths become less than that of 2-layers plan.

Ventilation is very serious problem for new CBS because of exhaust gas and exhaust heat from bus. 1-layer plan is also recommended as the desirable plan to be able to enforce the natural ventilation.

1 layer-plan which NSC is proposing has a problem. Although NSC expressed that reduced number of bus-berths of 14 was accepted, it was agreed with condition of increasing of the bus waiting capacity. According to NSC’s proposal, number of bus bays and waiting capacity are 14 and 3 respectively, and are reduced from these of existing CBS of 17 and 12 or more. Since bus can’t operate if the waiting-capacity is only 3 buses, additional waiting capacity is vital for bus operation. If a suitable waiting capacity is not provided, buses will wait on the road side and will give negative impact to road traffic. This waiting-capacity is necessary for bus operation and is used for a short time parking of bus between arrival and next departure. Bus parking for long time parking is being planned in another place.

International bus from Thailand has a door in opposite side of the bus of Lao, and size seems bigger than bus of Lao. We would like NSC to reflect the actual situation of CBS

ອົງການຮ່ວມມືສາກົນຍີ່ປຸ່ນ (ໄຈກາ) ໂຄງການປັບປຸງການຂົນສົ່ງສາທາລະນະໃນນະຄອນຫຼວງວຽງຈັນ  
(JICA PEC-VCSBE)

in a design.

CBS has a function of bus operation center. A plan of VCSBE office as an operating center and passengers' waiting room which we requested to consider at kick-off meeting is not included in the proposal of this meeting. We would like NSC to show a great number of these plans to carry out the evaluation in the next proposal.

What kind of compensation to Bus Company will be provided becomes a condition to agree by 1 layer plan which reduce the bus terminal area. We would like to have such discussions with developer.

Vice mayor once said that this parking would like to be used for Park-and-Ride. We would like NSC to take into account this comment.

We, JICA experts have a philosophy to make new-CBS as an adviser. The most important matter is safety and health of user, passenger and bus. And making a comfortable bus-terminal because this facility becomes a large landmark in Vientiane. As a whole, this facility plan is considered as part of EST which is being advanced in Laos.

Reason why we request to add the carriageway connect to Nongbone road is to ensure the emergency exit and rescue vehicle entrance in case of accident in CBS.

We would like to propose to chairman of establishment of a Working group to discuss details prior to the 3<sup>rd</sup> presentation.

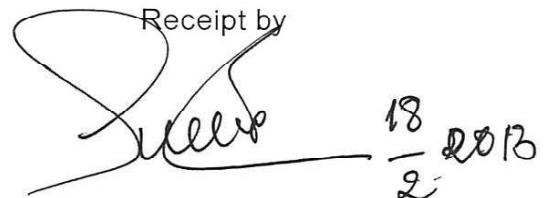
Vientiane Capital, 14 February 2013

Prepared by



JICA Study Team

Receipt by



Mr.Thavone(VC DPWT)



**ຄວາມຄິດເຫັນຂອງຊ່ຽວຊານຂອງອົງການຮ່ວມມືສາກົນຍີ່ປຸ່ນ JICA ໃນກອງປະຊຸມສຳລັບ  
"ການວາງແຜນພື້ນຖານຂອງພື້ນທີ່ສະຖານລົດເມທີ່ສູນກາງການຂົນສົ່ງສາທາລະນະຢູ່ຕະຫຼາດ  
ເຊົ້າ" ທີ່ຈັດຂຶ້ນໃນວັນທີ 6 ເດືອນກຸມພາ ປີ 2013 ໃນເວລາ 9:00 ເຊົ້າ ຢູ່ທີ່ຫ້ອງປະຊຸມຂອງພະ  
ແນກໂຍທາທິການ ແລະ ຂົນສົ່ງນະຄອນຫຼວງວຽງຈັນ DPWT ມີດັ່ງນີ້:**

ເນື່ອງຈາກພວກຂ້າພະເຈົ້າບໍ່ໄດ້ເຂົ້າຮ່ວມກອງປະຊຸມໃນຄັ້ງທີ 1. ຕໍ່ຈາກນັ້ນ, ພວກຂ້າພະເຈົ້າໄດ້ຮັບເອກະສານ  
ແຜນການທີ່ຈະນຳສະເໜີໃນກອງປະຊຸມຄັ້ງທີ 2 ຈາກ ທ່ານ Mr.Monzen ຈາກທາງ ບໍລິສັດທີ່ປຶກສາ Nikken  
Sekkei Civil Engineering Ltd ຫຼື NSC. ຈົນເຖິງໃນຄະນະນີ້, ພວກຂ້າພະເຈົ້າກໍຍັງໄດ້ມີການໂຕ້ຖຽງກັນ  
ທາງອີເມລ E-mail ຫຼາຍຕໍ່ຫຼາຍຄັ້ງກັບທາງ ບໍລິສັດທີ່ປຶກສາ Nikken Sekkei Civil Engineering Ltd ຫຼື  
NSC, ໃນຖານະທີ່ເປັນຊ່ຽວຊານທີ່ປຶກສາຂອງອົງການຮ່ວມມືສາກົນຍີ່ປຸ່ນ JICA.

ພວກຂ້າພະເຈົ້າໄດ້ຍິນຂໍ້ຂ້ອງໃຈ ແລະ ສອບຖາມ ເລື່ອງການວາງແຜນສະຖານລົດເມ 2 ຊັ້ນ (2-layers or  
2F (B1F,1F);(1F,2F)) ໄປຫາທາງ ບໍລິສັດທີ່ປຶກສາ Nikken Sekkei Civil Engineering Ltd ຫຼື  
NSC. ພວກຂ້າພະເຈົ້າຢາກໃຫ້ທາງ ບໍລິສັດທີ່ປຶກສາ Nikken Sekkei Civil Engineering Ltd ຫຼື NSC  
ອະທິບາຍວ່າເປັນຫຍັງການວາງແຜນສະຖານລົດເມຊັ້ນດຽວ (1-layer or 1F) ຈຶ່ງໄດ້ຖືກເລືອກ ໂດຍການຍິນຂໍ້  
ຂ້ອງໃຈຂອງພວກຂ້າພະເຈົ້າ ແລະ ຮ່ວມທັງຂອງບັນດາຜູ້ເຂົ້າຮ່ວມກອງປະຊຸມກ່ຽວກັບ ການວາງແຜນສະຖານ  
ລົດເມ 2 ຊັ້ນ (2-layers or 2F (B1F,1F);(1F,2F)) ນຳ.

ອີງໃສ່ການວາງແຜນສະຖານລົດເມ 2 ຊັ້ນ (2-layers or 2F (B1F,1F);(1F,2F)), ພວກຂ້າພະເຈົ້າໄດ້  
ຮັບແຈ້ງຈາກທາງບໍລິສັດທີ່ປຶກສາ Nikken Sekkei Civil Engineering Ltd ຫຼື NSC ວ່າການຄິດໄລ່ລະດັບ  
ຄວາມຊັນ (Slope) ໄປຫາລະຫວ່າງຊັ້ນທີ 2 ແມ່ນມີຄວາມສູງຊັນກວ່າສະຖານລົດເມໂດຍສານຢູ່ປະເທດຍີ່ປຸ່ນ.  
ພວກຂ້າພະເຈົ້າ ຈຶ່ງມີຄວາມເປັນຫ່ວງ ແລະ ກັງວົນໃນເວລາທີ່ລົດເມບັນທຸກຜູ້ໂດຍສານມາຈອດຢູ່ທາງຂຶ້ນທີ່ມີ  
ຄວາມສູງຊັນ ບໍ່ສາມາດຕິດຈັກເຄື່ອງຍົນຂຶ້ນໄດ້. ໃນກໍລະນີນີ້, ບ່ອນຈອດລົດເມເອົາຜູ້ໂດຍສານລົງແມ່ນຢູ່ຊັ້ນທີ 2/  
ເຊິ່ງບ່ອນຈອດລົດເມຢູ່ຊັ້ນໃຕ້ດິນບໍ່ສາມາດນຳໃຊ້ໄດ້.

ສຳລັບຜູ້ໂດຍສານທີ່ມາຈາກຕະຫຼາດມີເຄື່ອງຈຳນວນຫຼາຍ ແລະ ຈຳເປັນຈະຕ້ອງນຳໃຊ້ລີ້ໃນການລາກແກ່ເຄື່ອງ.  
ເຊິ່ງມັນໄດ້ສ້າງຄວາມຫຍຸ້ງຍາກໃນການທີ່ຈະນຳໃຊ້ລີ້ເພື່ອເຂົ້າໄປຫາບ່ອນຈອດລົດເມສຳລັບຜູ້ໂດຍສານຂຶ້ນ-ລົງຢູ່ທີ່  
ຊັ້ນທີ 2 /ຫຼືຊັ້ນໃຕ້ດິນ. ຈາກມຸມມອງຂອງຄວາມກັງວົນໃນຈຸດນີ້ການວາງແຜນສະຖານລົດເມຊັ້ນດຽວ (1-  
layer or 1F) ຈຶ່ງໄດ້ຖືກສະເໜີແນະນຳວ່າມີຄວາມເໝາະສົມຕາມສະພາບແຜນການຕົວຈິງຫຼາຍທີ່ສຸດ ເຖິງແມ່ນວ່າຈຳນວນ  
ບ່ອນສຳລັບນຳໃຊ້ເພື່ອຈອດລົດເມຈະໜ້ອຍກວ່າການວາງແຜນສະຖານລົດເມ 2 ຊັ້ນ (2-layers or 2F  
(B1F,1F);(1F,2F)) ກໍ່ຕາມ.

ການລະບາຍອາກາດເປັນບັນຫາທີ່ຮ້າຍແຮງທີ່ສຸດສຳລັບສະຖານລົດເມໃໝ່ (new CBS) ເນື່ອງຈາກວ່າຄວາມ  
ຮ້ອນອາຍເສຍ ແລະ ອາຍແກັດອາຍເສຍຈາກລົດເມ. ການວາງແຜນສະຖານລົດເມຊັ້ນດຽວ (1-  
layer or 1F) ຈຶ່ງໄດ້ຖືກສະເໜີແນະນຳວ່າເໝາະສົມຫຼາຍທີ່ສຸດກໍ່ຄືມັນຈະເປັນໄປຕາມແຜນຄວາມຕ້ອງການໃນການທີ່ຈະສາມາດ  
ບັງຄັບ ໃຊ້ການລະບາຍອາກາດແບບທຳມະຊາດໄດ້.

ແນວໃດກໍ່ຕາມ, ການວາງແຜນສະຖານລົດເມຊັ້ນດຽວ (1- layer or 1F) ທີ່ທາງ ບໍລິສັດທີ່ປຶກສາ Nikken  
Sekkei Civil Engineering Ltd ຫຼື NSC ໄດ້ສະເໜີຜ່ານກໍ່ຍັງມີບັນຫາຄົງຄ້າງຢູ່. ບໍລິສັດທີ່ປຶກສາ Nikken  
Sekkei Civil Engineering Ltd ຫຼື NSC ໄດ້ກ່າວວ່າມີການເຫັນດີ ແລະ ຍອມຮັບ ທີ່ຈະຫຼຸດຈຳນວນບ່ອນ  
ເວັ້ງຈອດລົດເມເພື່ອໃຫ້ຜູ້ໂດຍສານຂຶ້ນ-ລົງເຫຼືອພຽງ 14 ບ່ອນ, ເຊິ່ງມັນຈະຖືກຍອມຮັບເງື່ອນໄຂກໍ່ຕໍ່ເມື່ອ ມີການເພີ່ມ  
ຄວາມສາມາດສຳລັບບ່ອນລໍຖ້າເຂົ້າຈອດລົດເມເພີ່ມຂຶ້ນ. ເຊິ່ງຕາມການສະເໜີຂອງບໍລິສັດທີ່ປຶກສາ Nikken Sekkei  
Civil Engineering Ltd ຫຼື NSC ກ່ຽວກັບຂະໜາດຄວາມສາມາດຂອງບ່ອນເວັ້ງຈອດລົດເມເພື່ອໃຫ້ຜູ້ໂດຍສານ



ອົງການຮ່ວມມືສາກົນຍີ່ປຸ່ນ (ໄຈກາ) ໂຄງການປັບປຸງການຂົນສົ່ງສາທາລະນະໃນນະຄອນຫຼວງວຽງຈັນ  
(JICA PEC-VCSBE)

ຂຶ້ນ-ລົງແມ່ນ 14 ບ່ອນ ແລະ ບ່ອນລໍຖ້າລົດເຂົ້າຈອດລົດພຽງແຕ່ 3 ບ່ອນ ພ້ອມນີ້ມັນໄດ້ຫຼຸດລົງຈຳນວນລົງຈາກ ຈຳນວນເດີມຢູ່ສະຖານີລົດເມເກົ່າ 17 ບ່ອນ ເຫຼືອ 12 ຫຼື ຫຼາຍກວ່າເກົ່າ. ເນື່ອງຈາກວ່າລົດເມຈະບໍ່ສາມາດປະຕິບັດ ງານໄດ້ຢ່າງເຕັມທີ່ຖ້າຫາກວ່າຂະໜາດຈຳນວນຂອງບ່ອນລໍຖ້າເຂົ້າຈອດແມ່ນມີພຽງແຕ່ສຳລັບລົດເມຈຳນວນ 3 ຄັນ ເທົ່ານັ້ນ, ເຊິ່ງການເພີ່ມເຕີມຂະໜາດຈຳນວນຂອງບ່ອນລໍຖ້າ ແມ່ນສິ່ງສຳຄັນ ແລະ ຈຳເປັນສຳລັບການປະຕິບັດງານ ຂອງລົດເມທີ່ສຸດ. ຖ້າຫາກວ່າບໍ່ສາມາດຕອບສະໜອງຂະໜາດຈຳນວນຂອງບ່ອນລໍຖ້າທີ່ເໝາະສົມໄດ້, ລົດເມໂດຍ ສານກໍຈຳເປັນຈະຕ້ອງໄດ້ລໍຖ້າຢູ່ຂ້າງທົນທາງ ແລະ ເຊິ່ງຈະສົ່ງຜົນສະທ້ອນທາງລົບໃຫ້ກັບການຈະລາຈອນອີກຕື່ມ.

ຂະໜາດຈຳນວນຂອງບ່ອນລໍຖ້ານີ້ ແມ່ນມີຄວາມຈຳເປັນທີ່ສຸດສຳລັບການປະຕິບັດງານຂອງລົດເມ ທີ່ຈະນຳໃຊ້ ຊ່ວງເວລາສັ້ນໆ ໃນການລໍຖ້າເຂົ້າຈອດຂອງລົດເມ ລະຫວ່າງການມາຮອດເພື່ອເຂົ້າຈອດຮັບຜູ້ໂດຍສານ ແລະ ຈະ ເດີນທາງອອກຈາກສະຖານີ. ເຊິ່ງບ່ອນຈອດສຳລັບໄວ້ຈອດລົດເມທີ່ໃຊ້ເວລາດົນນັ້ນແມ່ນໄດ້ມີການວາງແຜນທີ່ຈະ ຈອດຢູ່ໃນສະຖານທີ່ອື່ນກ່ອນ.

ສຳລັບລົດເມສາຍຕ່າງປະເທດທີ່ເດີນທາງມາຈາກປະເທດໄທ ແມ່ນມີປະຕູຂຶ້ນລົງທີ່ກົງກັນຂ້າມກັບລົດເມພາຍ ໃນປະເທດຂອງ ສ.ປ.ປ.ລາວ, ແລະ ມີຂະໜາດທີ່ໃຫຍ່ກວ່າລົດເມພາຍໃນປະເທດຂອງ ສ.ປ.ປ.ລາວ. ດັ່ງນັ້ນພວກ ຂ້າພະເຈົ້າຈຶ່ງມີຄວາມຕ້ອງການໃຫ້ທາງບໍລິສັດທີ່ປຶກສາ Nikken Sekkei Civil Engineering Ltd ຫຼື NSC ໃນການອອກແບບທີ່ສ່ອງແສງເຖິງສະພາບຕົວຈິງຂອງສະຖານີລົດເມ (CBS).

ເນື່ອງຈາກສະຖານີລົດເມ (CBS) ມີໜ້າທີ່ເປັນສູນກາງປະຕິບັດງານ ສຳລັບລົດເມໂດຍສານ. ການວາງ ແຜນການຂອງຫ້ອງການຂອງລັດວິສາຫະກິດລົດເມນະຄອນຫຼວງວຽງຈັນ (VCSBE) ເພື່ອເປັນໃຈກາງໃນການ ດຳເນີນງານ ແລະ ເປັນຫ້ອງສຳລັບລໍຖ້າຂອງຜູ້ໂດຍສານ ຕາມທີ່ພວກຂ້າພະເຈົ້າໄດ້ຂໍຮ້ອງໃຫ້ມີການພິຈາລະນາ ໃນ ກອງປະຊຸມຂອງໂຄງການໃນເບື້ອງຕົ້ນນີ້ ກໍ່ແມ່ນຍັງບໍ່ທັນໄດ້ລວມໃສ່ໃນການນຳສະເໜີຢູ່ໃນກອງປະຊຸມຄັ້ງນີ້ເທື່ອ. ດັ່ງນັ້ນ, ພວກຂ້າພະເຈົ້າຈຶ່ງມີຄວາມຕ້ອງການໃຫ້ທາງບໍລິສັດທີ່ປຶກສາ Nikken Sekkei Civil Engineering Ltd ຫຼື NSC ສະແດງຈຳນວນຂອງແຜນການເຫຼົ່ານີ້ນຳ ເພື່ອທີ່ຈະໄດ້ດຳເນີນການຕີລາຄາໃນການນຳສະເໜີໃນທີ່ ປະຊຸມໃນຄັ້ງຕໍ່ໄປ.

ການຊົດເຊີຍປະເພດໃດທີ່ຈະຕອບສະໜອງໃຫ້ແກ່ທາງລັດວິສາຫະກິດລົດເມ ໃນການຕົກລົງເຫັນດີກັບຂໍ້ກຳ ນົດຂອງການວາງແຜນສະຖານີລົດເມຊັ້ນດຽວ (1- layer or 1F) ເຊິ່ງໄດ້ເຮັດໃຫ້ພື້ນທີ່ຂອງສະຖານີໂດຍສານຫຼຸດ ລົງ. ເຊິ່ງພວກຂ້າພະເຈົ້າຈຳເປັນຈະຕ້ອງໄດ້ມີການປຶກສາຫາລືກັບທາງເຈົ້າຂອງໂຄງການຜູ້ພັດທະນາດັ່ງກ່າວນຳ ດ້ວຍ.

ທ່ານຮອງເຈົ້າຄອງນະຄອນຫຼວງວຽງຈັນ ເຄີຍກ່າວໄວ້ວ່າບ່ອນຈອດລົດນີ້ ຢາກໃຫ້ຖືກນຳໃຊ້ເປັນແບບລະບົບ (Park-and-Ride) ກໍ່ຄືລະບົບອຸປະກອນອຍຄວາມສະດວກໃຫ້ກັບຜູ້ທີ່ຕ້ອງເດີນທາງເຂົ້າມາເຮັດວຽກ ຫຼືທຸລະກິດ ຕ່າງໆໃນຕົວເມືອງ ກໍ່ຄືການຂັບລົດເຂົ້າມາຈອດທີ່ບ່ອນຈອດລົດທີ່ຈັດສັນໄວ້ໃຫ້ ແລ້ວນຳໃຊ້ລະບົບຂົນສົ່ງສາທາລະ ນະເພື່ອໄປເຮັດວຽກ ແລ້ວເມື່ອເຖິງເວລາກັບຕອນແລງກໍ່ນຳໃຊ້ລະບົບຂົນສົ່ງສາທາລະນະເພື່ອກັບມາເອົາລົດຢູ່ອາ ຄານບ່ອນຈອດລົດ ເພື່ອເດີນທາງກັບບ້ານ.

ດັ່ງນັ້ນ, ພວກຂ້າພະເຈົ້າຈຶ່ງມີຄວາມຕ້ອງການໃຫ້ທາງບໍລິສັດທີ່ປຶກສາ Nikken Sekkei Civil Engineering Ltd ຫຼື NSC ຈະຕ້ອງໄດ້ຄຳນຶງເຖິງຈຸດນີ້ເຊັ່ນດຽວກັນ.

ພວກຂ້າພະເຈົ້າ, ເປັນຊ່ຽວຊານຂອງອົງການຮ່ວມມືສາກົນຍີ່ປຸ່ນ JICA ທີ່ມີປັດສະຍາຄືເປັນຜູ້ທີ່ໃຫ້ຄຳປຶກສາ ໃນການກໍ່ສ້າງສະຖານີລົດເມໃໝ່ (new CBS). ເລື່ອງທີ່ສຳຄັນທີ່ສຸດນັ້ນແມ່ນຄວາມປອດໄພ ແລະ ສຸຂະພາບ ຂອງຜູ້ນຳໃຊ້ຄື: ຜູ້ໂດຍສານລົດເມ ແລະ ພະນັກງານ. ແລະ ເພື່ອການສ້າງສະຖານີລົດເມທີ່ສະດວກສະບາຍ ເນື່ອງ ຈາກວ່າ ສິ່ງອຳນວຍຄວາມສະດວກນີ້ກາຍເປັນສະຖານທີ່ ທີ່ໃຫຍ່ ແລະ ສຳຄັນຂອງນະຄອນຫຼວງວຽງຈັນ. ໂດຍລວມ, ແມ່ນຈຳເປັນຈະຕ້ອງໄດ້ພິຈາລະນາ ການວາງແຜນສິ່ງອຳນວຍຄວາມສະດວກນີ້ ເພື່ອເປັນສ່ວນໜຶ່ງຂອງ

ອົງການຮ່ວມມືສາກົນຍີ່ປຸ່ນ (ໄຈກາ) ໂຄງການປັບປຸງການຂົນສົ່ງສາທາລະນະໃນນະຄອນຫຼວງວຽງຈັນ  
(JICA PEC-VCSBE)

ການຂົນສົ່ງແບບຍືນຍົງດ້ານສິ່ງແວດລ້ອມ (EST) ເຊິ່ງຈະສ້າງຜົນປະໂຫຍດໃຫ້ກັບ ສ.ປ.ປ.ລາວ.

ເຫດຜົນທີ່ວ່າເປັນຫຍັງພວກຂ້າພະເຈົ້າຂໍຮ້ອງໃຫ້ມີການເພີ່ມຫົນທາງລົດ (carriageway) ທີ່ເຊື່ອມຕໍ່ກັບຖະໜົນເສັ້ນທາງໜອງບອນ (Nongbone) ແມ່ນເພື່ອຮັບປະກັນການອອກສຸກເສີນ ແລະ ເພື່ອຮັບປະກັນຄວາມປອດໄພຂອງທາງເຂົ້າສະເພາະຂອງຍານພາຫະນະໃນກໍລະນີທີ່ເກີດອຸປະຕິເຫດຢູ່ດ້ານໃນຂອງສະຖານີລົດເມ (CBS).

ດັ່ງນັ້ນ, ພວກຂ້າພະເຈົ້າຈຶ່ງຂໍຮຽນສະເໜີມາຍັງທ່ານປະທານ ເພື່ອພິຈາລະນາໃນການຈັດຕັ້ງກຸ່ມເຮັດວຽກສະເພາະໃນການປຶກສາຫາລືເລື່ອງຂອງລາຍລະອຽດຕ່າງໆ ລວງໜ້າ ກ່ອນຈະມີການປະຊຸມເພື່ອນຳສະເໜີຜ່ານແຜນ ໃນຄັ້ງທີ່ 3 ນີ້ດ້ວຍ.

ນະຄອນຫຼວງວຽງຈັນ, ວັນທີ 14 ກຸມພາ 2013

ຜູ້ກະກຽມ

ທິມສິກສາໄຈກາ

ລາຍເຊັນຜູ້ຮັບ

ທ່ານ ຖາວອນ (ພະແນກ ຍທຂ ນະຄອນຫຼວງ)