

**Republic of Turkey**  
**Traffic Demand Management of**  
**Historical Area in Istanbul**  
**(İSTDM)**

**Final Report**  
**Vol.1**

July, 2014

**JAPAN INTERNATIONAL COOPERATION AGENCY(JICA)**

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**ALMEC Corporation**  
**PADECO Co., Ltd.**

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<b>14-139</b>

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## List of Abbreviations

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Bimtař	Bosphorus Construction Consulting Company
CP	Counterpart
İDO	Istanbul Sea Bus Company
İETT	IETT General Directorate Istanbul Electric, Tram and Tunnel Authority
İMM	Istanbul Metropolitan Municipality
İMP	Metropolitan Planning and Urban Design Center
İSBAK	Istanbul Transportation Maintenance Company
İSPARK	Istanbul Parking Trade company
Istanbul Ulařım	Istanbul Transportation Company
İSTDM	Istanbul TDM Management Project
IUAP	Istanbul Ulařım Ana Planı Istanbul Transport Master Plan
JCC	Joint Coordination Committee
JICA	Japan International Cooperation Agency
Otobüs	Public Bus
PDM	Project Design Matrix
PO	Plan of Operation
TDM	Traffic Demand Management
UKOME	Coordination of Transportation Department
UNESCO	United Nations Educational, Scientific and Cultural Organization
UTK	Transportation Traffic Management Board



## 1. INTRODUCTION

### 1.1 Background

Istanbul is accommodating the largest industrial facilities in Turkey. Some major production manufacturers are in the electronics, automotive, construction, vehicle, textiles, oil products, and white goods markets. In addition to that, the City generates 55% of Turkey's trade and 22% of Turkey's Gross National Product. 33% of Turkey's commercial enterprises are located in Istanbul.

Population of Istanbul city is expanding rapidly in terms of its economic development. Its population of 6.15 million in 1980 doubled to over 12 million after a quarter of a century. The city's registered automobiles increased 7.5 times over the same period and now are approaching two million vehicles. The rapid pace of urbanization and motorization has far outpaced the development of transport infrastructures, and the ill effects of motorization such as traffic congestion, accidents and the problem of exhaust emissions are becoming worse.

Therefore, the Government of Turkey requested the cooperation of the Government of Japan in the formulation of a comprehensive urban transport master plan in Istanbul. And Japan International Cooperation Agency (JICA) dispatched a Study Team to Turkey on July 2007, and formulated the Istanbul Transport Master Plan. In the Master Plan, a series of TDM measures for the historical area in Istanbul including the world heritage was proposed to reduce congestion as an urgent task in terms of historical and cultural heritage preservation.

Considering these pressing circumstances, the Government of Turkey requested the cooperation of the Government of Japan to strengthen Transport Department's implementation capacity of TDM measures for the Istanbul historical area. The Government of Japan sent the Detailed Planning Survey Team in November 2010 to discuss and consult with representatives of the Government of Turkey over the scope and the basic policy of the a technical corporation. The present project was agreed upon in the ensuing bilateral deliberations.

The Japan International Cooperation Agency (JICA) dispatched a Project Team to Turkey on July 2011 and the Istanbul TDM Project (iSTDM) started as a joint work of the JICA Project Team and the Turkish Counterpart Team from the Istanbul Metropolitan Municipality (IMM). The study, which will take 30 months, is scheduled to be completed by December 2013.

IMM requested to extend the duration of this project for survey and analysis about "Yenikapı Station and Around Area Development for Transfer Center" at JICA Evaluation Committee Meeting on September, 2013. And this project has been extended until July 2014.

### 1.2 Objective

The objective of the present project is to strengthen Transport Department's implementation capacities of TDM measures for the Istanbul historical area consisting of 3 following outputs.

- (1) Traffic characteristics of the Istanbul historical area are clarified and issues on transportation planning are identified.
- (2) Transport department's capacities are strengthened through planning, implementing, evaluating, and analyzing social experiments of TDM measures.
- (3) Experience of the social experiments is summarized as guidelines and shared among relevant departments of IMM.

**Table 1.1 Summary of the Project**

<b>Objective/Achievement</b>		<b>Contents/Activities</b>
Overall Goal	Appropriate Traffic Demand Management (TDM) measures will be implemented in the Istanbul historical area to create comfortable city environment.	
Objective	Transport Department's implementation capacities of TDM measures for the Istanbul historical area are strengthened.	
Outputs	1. Traffic characteristics of the Istanbul historical area are clarified and concerns on transportation planning are identified.	<ol style="list-style-type: none"> <li>1. Review outline of relevant entities, organizations and stakeholders that are involved in transportation planning in the Istanbul historical area.</li> <li>2. Confirm implementation status of activities proposed in the JICA master plan study as well as relevant laws and regulations that have relations with traffic management plans, public transportation development plans, urban conservation plans, and transportation plans.</li> <li>3. Conduct a traffic survey, traffic facilities survey, questionnaire survey, etc.</li> <li>4. Analyze the survey results.</li> </ol>
	2. Transport department's capacities are strengthened through planning, implementing, evaluating, and analyzing Social Experiments of TDM measures.	<ol style="list-style-type: none"> <li>1. Introduce information sharing tool among relevant agencies of IMM in order to review the progress of measures related to the Project.</li> <li>2. Review and implement already planned TDM measures to be done urgently in the Istanbul historical area.</li> <li>3. Organize seminars and training courses on TDM measures for staff from the relevant departments of IMM</li> <li>4. Formulate an implementation plan of the TDM social experiments.</li> <li>5. Perform required permission and authorization procedure to implement the TDM social experiments.</li> <li>6. Implement the TDM social experiments in the Istanbul historical area.</li> <li>7. Monitor and evaluate the TDM social experiments.</li> </ol>
	3. Experience of the Social Experiments is summarized as guidelines and shared among relevant departments of IMM.	<ol style="list-style-type: none"> <li>1. Review results and clarify lessons learned from the social experiments for implementing TDM measures.</li> <li>2. Prepare the guidelines describing implementation procedures and activities of the TDM measures.</li> <li>3. Share the guidelines among entities and organizations of the relevant departments of IMM.</li> </ol>

### 1.3 Project Organization

#### (1) Structure of Counterpart Team

This project is conducted by the Working Group composed of Transport Planning Directorate, Coordination Directorate, Traffic Directorate, Public Transport Directorate, Road Maintenance Department and Fatih Municipality as shown in the tables below.

And Transport Planning Directorate of Transport Department is the specific composition of the counterpart to the JICA Project Team. And this Working Group will be composed of Project and Study Department, İETT, Otobus, İstanbul Ulaşım, İSPARK, İSBAK and other related agencies as necessary. The counterpart and working group, whose members as listed in Table 1.1.

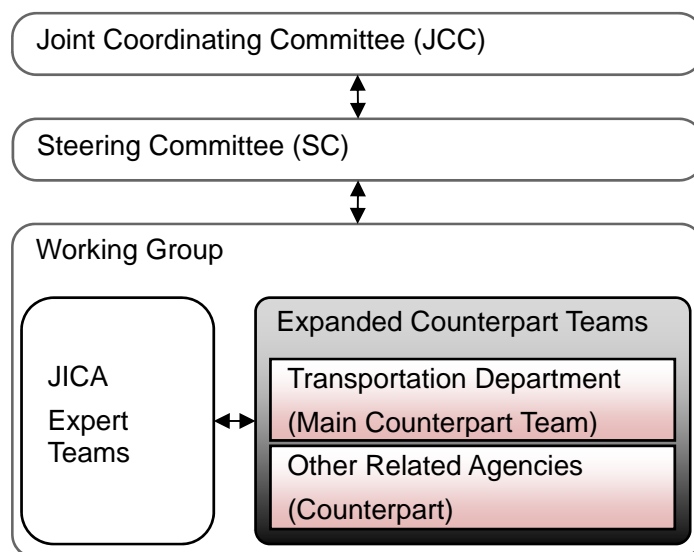
Weekly Friday Meeting (WFM) consisting of the Working Group has been held 42 times every Friday since April 2012.

#### (2) Structure of JCC and SC

In accordance with the Record of Discussions dated 20<sup>th</sup> April, 2011, an administrative structure for management of the Project has been organized with two levels of committees to assure effective and successful implementation of the technical cooperation for the Project, namely, 1) Steering Committee where technical issues are discussed and oriented for their solutions in the course of the Project; and 2) Joint Coordination Committee, the highest decision-making venue for the Project, whose functions are to approve the Project basic framework, to formulate annual work plans, review the progress and direct major issues that may arise during the implementation of the Project.

The Steering Committee, whose members are as listed in Table 1.2 and 1.3, is chaired by Director of Transport Planning Directorate, IMM, and the meetings of the Steering Committee are occasionally held on technical issue-basis and it will be arranged every week regularly.

Whilst the Joint Coordination Committee, chaired by Head of Transport Department, IMM, is held at least once a year. Joint Coordination Committee can be thought as a part of UTK. Meeting can be held within the compass of UTK program and when necessary situations arise. Additive members can join the meeting according to the subjects discussed in the meeting. Members of the Joint Coordination Committee are responsible representatives from Fatih Municipality as well as from transport policy-related departments.



**Figure 1.1 Project Organization**

**Table 1.2 Member of SC and JCC**

Steering Committee (SC)

Roles	Position	Name
Project Manager	Director of Transport Planning Directorate of Transport Department of IMM	Ahmet Hamdi GÜNER
Members	Officer of Transport Planning Directorate	İhsan Hadi KARADENİZ
	Officer of Transport Planning Directorate	Nesligül ÜNAL
	Officer of Transport Planning Directorate	Neriman ŞAHİN
	Officer of Transport Planning Directorate	Dilek ÇOL
	Officer of Transport Planning Directorate	Emel GÜNAY
	Officer of Transport Planning Directorate	Mehmet ÇAKIR
	Officer of Transport Planning Directorate	Nilüfer DÜNYA
	Officer of Transport Planning Directorate	Berna ÇALIŞKAN
	Officer of Transport Planning Directorate	Serap ÇETİNKAYA
	Officer of Transport Planning Directorate	Serkan ŞİMŞEK
	Officer of Transport Planning Directorate	Filiz YILDIRIM
	Officer of Transport Coordination Directorate	İsa CERRAH
	Officer of Traffic Directorate	Hasan Kahraman ÇAVUŞ
	Officer of Mass Transport Services Directorate	Osman KILIÇASLAN
	Officer of Road Maintenance and Repair Directorate	Işıl ÇETİN
	Officer of Fatih Municipality	Seda ÇALIŞKAN

Joint Coordination Committee (JCC)

Roles	Organization	Name
Chairperson	Transport Department	Yakup Demirhan
Turkish Member	Transport Planning Directorate	Ahmet Hamdi GÜNER
	Transport Coordination Directorate	Adil KARAIŞMAİLOĞLU
	Traffic Directorate	M. Necip ERTAŞ
	Mass Transport Services Directorate	Burhan KALE
	Road Maintenance and Repair Directorate	Mehmet ÖZÇELİK
JICA	Fatih Municipality	Adnan GÜLER
	Chief Representative of JICA Turkey Office	Akio SAITO
	JICA Experts	Katsuhide NAGAYAMA

**Table 1.3 Structures of CP, Working Group, SC and JCC**

	Main CP	WG	SC	JCC
+ Mayor				
- İETT General Directorate				
- Transport Coordination Directorate (UKOME)				
+ Secretary General				
+ Deputy Secretary General - Administrative				
+ Deputy Secretary General - Project				
+ Deputy Secretary General - Development				
+ Deputy Secretary General (Transport)				
- Transport Traffic Management Board (UTK)				
+ Department of Science Affairs				
+ Department of Survey and Projects				
- Directorate of Historical Sites Protection		△		
- Directorate of Projects		△		
- Directorate of Urban Design		△		
+ Department of Transport				⊙
- Directorate of Transport Planning	○	⊙	⊙	○
- Directorate of Transport Coordination		○	○	○
- Directorate of Traffic		○	○	○
- Directorate of Public Transportation Services		○	○	○
+ Department of Road Maintenance and Infrastructure Coordination				○
- Directorate of Infrastructure Coordination		○	○	
- Directorate of Disaster Coordination Centre				
- Directorate of European Side Road Maintenance and Restoration		○	○	
- Directorate of Anatolian Side Road Maintenance and Restoration				
- Directorate of Machine Supply				
+ Department of Railway System				
- Directorate of European Side Railway System		△		
- Directorate of Anatolian Side Railway System				
+ Directorate of Affiliates Coordination				
- İSTANBUL OTOBÜS Co.		△		
- İSBAK Co.		△		
- BİMTAŞ		△		
- İSPARK Co.		△		
- İSTANBUL ULAŞIM Co.		△		
+ Fatih Municipality		○	○	○

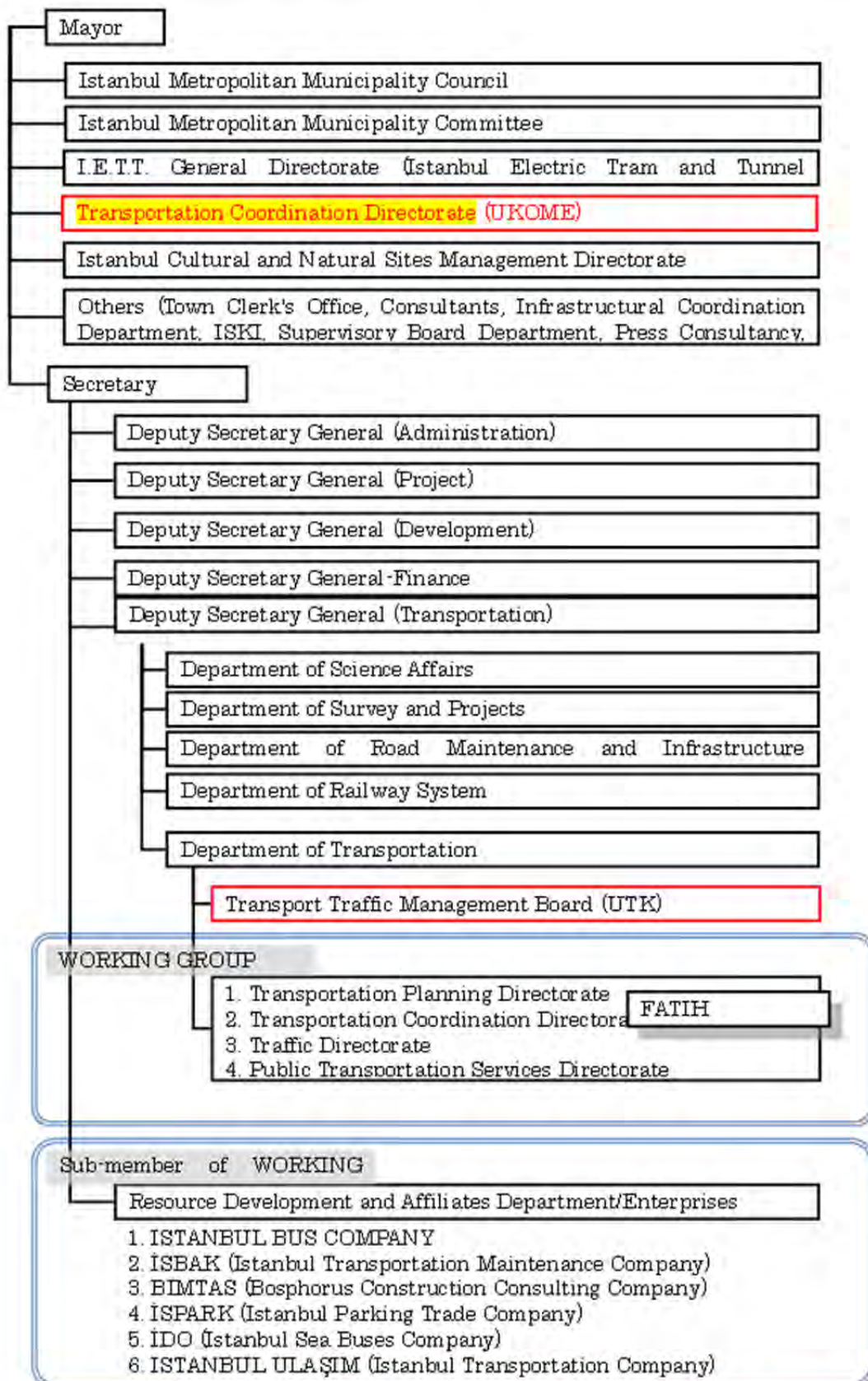
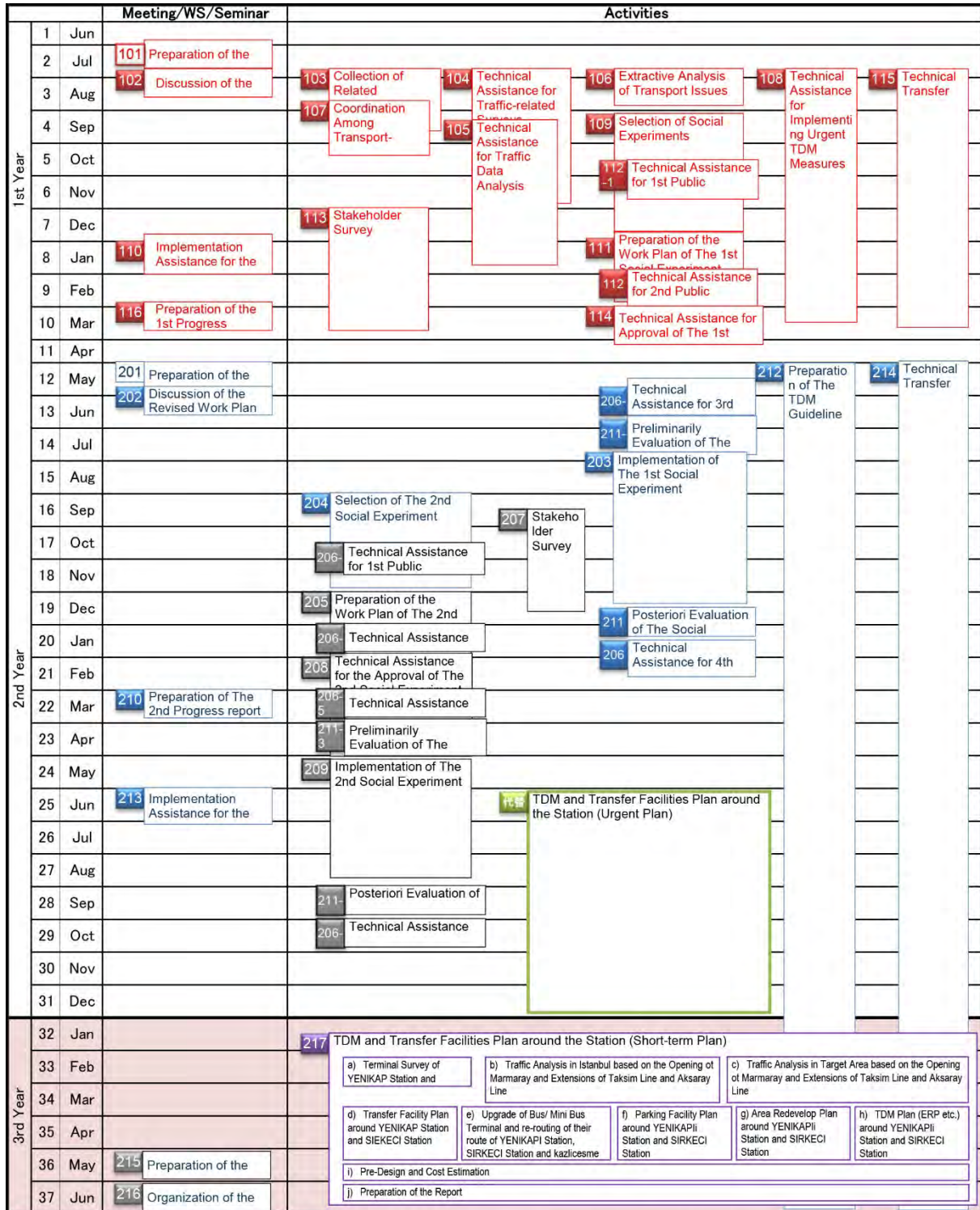


Figure 1.2 Structure of UKOME, UTK and Working Group



2. Overall of the Project  
2.1 Overall of the Project

In this project, two Social Experiments would be implemented, but 2<sup>nd</sup> Social Experiment has been extended after March 2014 because of nationwide local elections. So IMM requested to study and analyse “Yenikapi Station and Around Area Development for Transfer Center” as alternated.



Deleted Items    Alternative Items    Extension Term    Additional Items

Figure 2.1 Project Flow

## 2.2 Revising and Updating of PO

There has been no problem which required change in the overall goal, project purpose, output and other items in PDM. but PO has been revised and updated two times as follows.

### (1) The 1<sup>st</sup> Revision and Update of PO

Original PO has been revised and updated about the flowing issue at the 2<sup>nd</sup> JCC meeting held on May 9, 2012.

A series of transport surveys, including traffic counting surveys at cordon line and major intersections, bus passenger survey, road speed survey, parking survey and interview surveys to residents and tourist in the historical peninsular area were delayed because of winter vacation of schools and delay in contract processing.

And in JCC meeting, these traffic-related surveys will be prepared to conduct as soon as possible by the IMM counterpart team jointly with technical support by the JICA expert team

### (2) The 2<sup>nd</sup> Revision and Update of PO

The 1<sup>st</sup> revised PO has been revised and updated about the three issues at the 3<sup>rd</sup> JCC meeting held on September 12, 2013.

#### 1) Slippage in the implementation of 1<sup>st</sup> Social Experiment

At the beginning, İSPARK, implementation unit of 1<sup>st</sup> Social Experiment planed to incur cost of social experiment including information boards. But total project cost was more than 4 million Japanese Yen, and İSPARK could not manage the project cost. So IMM needed to incur project cost expeditiously.

And the procedure was that if IMM constructs any infrastructure, IMM needs to take bidding processes. And it took long period of time. So preparation of the social experiment was delayed.

#### 2) Revise of PO

In accordance with the delay preparation of the 1<sup>st</sup> Social Experiment, implementation and evaluation of the 1<sup>st</sup> Social Experiment and preparation of the 2<sup>nd</sup> Social Experiment have been delayed. These issues have been shared among working groups and informed to managing director.

**Table 2.1 Revising and Updating of PO**

Item	Before	After
Conduct a traffic surveys and analyze the survey results	Aug.2011 to Jan. 2012	Aug. 2011 to Jun. 2012
Implementation of the second social experiment	Aug. 2013	Canceled
Planning the station plaza and transfer facility of Yenikapi station	Nothing	Added
Project period	Jul. 2011 to Dec. 2013	Jul. 2011 to Jul. 2014



## 2.3 Activities

### (1) Review outline of relevant entities, organizations and stakeholders (Activity 1-1)

The transportation agencies operating within the Istanbul municipal area and historical area can be grouped under three major stakeholders.

1. Istanbul Metropolitan Municipality and Fatih Municipality
2. Transport-related companies under IMM and other related agencies
3. Interagency Coordination Units

The responsibilities and authority of all are regulated, but when these regulations are examined it can be seen that some of the laws relative to the various agencies overlap or even conflict. In some instances, the responsible authority has not been clearly defined or designated. So in some cases, lack of decision leads to the non-implementation of investments.

Table 2.1 demonstrates how responsibilities are distributed among various agencies. Accordingly, the major agencies involved in implementing the planning and planning implementation activities relative to transportation include IMM, İETT and Dept. of Resource Development and Affiliates, resulting in an overlapping and conflicting authority structure. In addition, the internal structure of the Metropolitan Municipality and the relationships between the Metropolitan and District Municipalities demonstrate greater harmony in coordination, even though conflicts may arise at times.

This project is conducted by the Working Group composed of Transport Planning Directorate, Coordination Directorate, Traffic Directorate, Public Transport Directorate, Road Maintenance Department and Fatih Municipality since July of 2011. And this Working Group had a meeting every Friday and held wide-ranging discussions on issues related project.



(2) Confirm implementation status of activities proposed in MP (Activity 1-2)

Implementation status of activities proposed in the JICA master plan study as well as relevant laws and regulations that have relations with traffic management plans, public transportation development plans, urban conservation plans, and transportation plans has been confirmed by research and discussion with related agencies.

But there are projects and plans not described in the master plan, Bus Priority Line and Bus Terminal Relocation in historical area, so new transport plans and projects needs to be checked and monitored in the future also.

**Table 2.3 Urban Railway Project in Istanbul**

TABLE OF RAIL SYSTEM FOR THE CITY OF ISTANBUL

EXISTING RAIL SYSTEMS 190.8 KM		
EXISTING RAIL SYSTEMS BEFORE 2004		
NO	ROUTE NAME	LENGTH (km)
1	TAKSİM - 4. LEVENT METRO	8.5
2	AKSARAY - AIRPORT LRT	20.3
3	EMİNÖNE - ZEYTİNBURNU TRAM	11.2
4	İSTİKLAL CADESİ (TUNEL-TAKSİM) TRAM	1.6
5	TUNEL-KARAKÖY FUNICULAR	0.6
6	TAKSİMMAÇKA TELEFERIC	0.3
7	KADIKÖY-ARDA TRAM	2.6
8	EXISTING COMMUTER RAIL LINE	72
TOTAL		117.1
RAIL SYSTEMS COMPLETED AND BEING OPERATED AFTER 2004		
9	EMİNÖNE-KARAKÖY-KABAŞ TRAM	2.9
10	EYÜP-PIYER LÖTİ TELEFERIC	0.42
11	TAKSİM-KABAŞ FUNICULAR	0.64
12	ZEYTİNBURNU-GÜNGÖREN-BAĞCILAR TRAM	5.2
13	TOPKAPI-EDİRNEKAPI-SULTANÇİFTLİĞİ TRAM	15.3
14	ŞİŞANE-TAKSİM METRO	1.65
15	4. LİVANT AYAZGAĞI ATATÜRK ÖTO SANAYİ METRO	5.5
16	ATATÜRK ÖTO SANAYİ-DARUŞŞAFKA METRO	1.27
17	DARUŞŞAFKA-HACIOĞMAN METRO	1.35
18	SEYRANTEPE CONNECTION METRO	1.67
19	KADIKÖY-KARTAL METRO	21.7
20	BAĞCILAR (KIRAZLI) - BAŞAKŞEHİR-OLİMPİYAT KOYU METRO (READY FOR OPERATION)	15.8
TOTAL		73.5
RAIL SYSTEMS UNDER CONSTRUCTION		
NO	ROUTE NAME	LENGTH (km)
1	ŞİŞANE - YENİKAPI METRO	3.55
2	AKSARAY - YENİKAPI METRO	0.7
3	OTOĞAR- BAĞCILAR (KIRAZLI) METRO	5.8
4	KARTAL - KAYNARCA METRO HATTI (STATION AND ELECTRIFICATION WORKS REMAINING)	4.5
5	ÜSKÜDAR - ÜMRANİYE-ÇEKMECE- SANCaktepe METROSU	20.0
6	LEVENT-RUMELİ HISARUSTU MINI METRO + SEYRANTEPE CONNECTION (NOI)	3.3
TOTAL		37.85
RAIL SYSTEMS IN BIDDING STAGE		
NO	ROUTE NAME	LENGTH (km)
1	MECİDEKÖY - MAHİMUTBEY METRO	18
2	YENİKAPI-İNGİRLİ METRO (BAKIRKÖY-BEYLÜKÜZÜ EXTENSION)	7.0
3	BAKIRKÖY-BEYLÜKÜZÜ METRO (WILL BE TRANSFERRED TO M07)	25.0
4	B. KÖY (İDO) - KIRAZLI METRO (WILL BE TRANSFERRED TO M07)	9.0
5	SABİHA GÖKÇEN HAVAI İMAMI - PENDİK MARMARAY CONNECTION (M07)	9.0
6	ATAKÖY (MARMARAY) - ATATÜRK AIRPORT - MARMARAY CONNECTION (M07)	3.5
TOTAL		71.5
RAIL SYSTEMS WITH COMPLETED IMPLEMENTATION PROJECTS		
NO	ROUTE NAME	LENGTH (km)
1	YENİBOSNA - İKİTELLİ GÜNEY SANAYİ LRT	13.0
2	KABAŞ-MECİDEKÖY METRO	6.5
3	EDİRNEKAPI-YEZNEÇLER TRAM	3.5
TOTAL		23.0
RAIL SYSTEMS WITH ONGOING IMPLEMENTATION PROJECT PREPARATION		
NO	ROUTE NAME	LENGTH (km)
1	DÜDÜLLÜ - BOSTANCI RAIL SYSTEM LINE	13.4
2	GOZTEPE-FİNANSKENT ÜMRANİYE METRO	9
TOTAL		22.4

METRO LINES UNDER PRELIMINARY STUDY		
NO	ROUTE NAME	LENGTH (km)
1	MAHİMUTBEY-K.ÇEKMECE-BAĞÇEŞEHİR METRO	12.5
2	BAŞAKŞEHİR-KAYABAŞI MERKEZ METRO	3
3	ÇEKMEKÖY-TAŞDELEN METRO	5.2
4	ÇEKMEKÖY-SANCaktepe-SULTANBEYLÜ - SİH METRO	14
5	KADIKÖY - ATAŞEHİR - ÜMRANİYE-SANCaktepe-SULTANBEYLÜ METRO	17
6	ZEYTİNBURNU - BAYRAMPAŞA - EYÜP - KAĞITHANE - BEŞİKTAŞ - ÜSKÜDAR - ÜMRANİYE - ATAŞEHİR - KADIKÖY METRO (LARGE RING)	46.3
7	BAĞCILAR (KIRAZLI) - KÜÇÜKÇEKMECE (HALKALI) LRT	9.4
8	SÖĞÜTLÜÇEŞME- AKSARAY METRO (SMALL RING)	22
9	SABİHA GÖKÇEN AIRPORT - TUZLA (INDUSTRIAL AREA) METRO	6.8
10	ŞİŞANE-KABAŞ METRO	1.7
11	ESENYURT - BEYLÜKÜZÜ - AVCILAR METRO	17
12	BUYUKÇEKMECE-ESENYURT METRO	10.6
13	BUYUKÇEKMECE (TUYAP) - SİLİVRİ METRO	32.6
14	HALKALI - OLİMPİYAT - 3RD AIRPORT METRO	33
15	HACIOĞMAN - ÇAYIRBAŞI METRO	2.7
16	ÜSKÜDAR-BEYKÖZ RAIL SYSTEM	15
17	BEŞİKTAŞ - SARIYER RAIL SYSTEM	14.6
TOTAL		257.2
TRAM LINES UNDER PRELIMINARY STUDY		
NO	ROUTE NAME	LENGTH (km)
1	BAŞAKŞEHİR - KAYABAŞI - OLİMPİYAT KOYU TRAM	15
2	HALIÇ ÇEVRESEL TRAM	9.6
3	SİRİNEYLER-MAHİMUTBEY TRAM (LARGE RING)	7.8
4	SULTANGAZİ (SULTANÇİFTLİĞİ) - ARNAVITKÖY TRAM	11.5
TOTAL		43.9
TELEFERIC LINES UNDER PRELIMINARY STUDY		
NO	ROUTE NAME	LENGTH (km)
1	ZİNCİRLİKUYU - ÇAMLIÇA TELEFERIC	6
2	RUMELİHISARUSTU - OĞAZTEPE TELEFERIC	2
3	EYÜP-SUTLUCE TELEFERIC	3
TOTAL		13.0
MONORAIL LINES UNDER PRELIMINARY STUDY		
NO	ROUTE NAME	LENGTH (km)
1	ATAŞEHİR-ÜMRANİYE	11.1
2	BEYOĞLU - SİSLİ	5.8
3	KARTAL-D100 HIGHWAY	3.0
4	SABİHA GÖKÇEN AIRPORT-FORMULA	7.7
5	MALTEPE BAŞIBÜYÜK	3.8
6	4.LEVENT-GÖZTEPE-ÇELİKTEPE-LEVENT	5.5
7	SEFAKÖY-KUYUMCUREN-AIRPORT	7.2
TOTAL		43.9
GRAND TOTAL		358.0
TARGET RAIL SYSTEM LENGTH FOR 2023 AND BEYOND		708.35



Table 2.4 Urban Railway and Road Development Plan in Istanbul

HIGHWAY INVESTMENT PLAN						Short term																			Medium term				Long term						
Project code	PROJECTS	SYSTEM	LENGTH (km)	CONSTRUCTION PERIOD (year)	PROJECT COST (Million USD)	2010		2011		2012		2013		2014		2015		2016		2017		2018		2019		2020		2021		2022		2023		2024...	
						PKT-1	Project Package 1	Highway	199	4	540																								
PKT-2	Project Package 2	Highway, Tunnel	196	4	646																														
PKT-3	Project Package 3	Highway	171.6	5	1,056																														
PKT-01	Armutluali-Poligon	Tunnel	2.3	2.5	240																														
PKT-02	Ayazağa-Armutluali	Tunnel	2.3	3	240																														
PKT-03	Beylerbeyi-Hekimbaşı	Tunnel	3.7	2.5	454																														
PKT-04	Çayırbaşı-Derbent	Tunnel	2.7	2.5	308																														
PKT-05	Dolmabahçe-Fulya	Tunnel	1.1	3	211																														
PKT-06	Fulya-Levazım	Tunnel	2.3	2.5	279																														
PKT-07	Harem-Beylerbeyi	Tunnel	4.3	2.5	240																														
PKT-08	Levazım-Armutluali	Tunnel	3.4	2.5	419																														
PKT-09	Zincirlidere-Levazım	Tunnel	1.4	2.5	201																														
UBAK-01	MoT (3rd Bridge and connection road)	Highway, Bridge, Viaduct and Tunnel	589.8	4																															
UBAK-02	MoT (Sile Highway)	Highway	67.4	4																															
UBAK-T1	MoT (Highway Tunnel)	Highway, Tunnel	33.5	4																															
UBAK-C1	MoT (Istanbul-Çanakkale Highway)	Highway	12.0	-																															
Investment Cost per year (Million USD) (excluding MoT)					2,593	119	119	119	119	142	142	247	400	560	646	569	657	560	416																
Investment Cost per period (Million USD) (excluding MoT)					4,634	617				1,399				2,848																					

RAIL SYSTEM INVESTMENT PLAN						Short term																			Medium term				Long term						
Project code	PROJECTS	SYSTEM	LENGTH (km)	CONSTRUCTION PERIOD (year)	PROJECT COST (Million USD)	2010		2011		2012		2013		2014		2015		2016		2017		2018		2019		2020		2021		2022		2023		2024...	
						C-1	Şişhane-Yenikapı	Metro	3.6	4	22																								
C-2	Kadıköy-Kartal-Kaynarca	Metro	26.5	2	521																														
C-3	Ötögar-Bağcılar(Kirazlı)	LRT	5.6	2.2	336																														
C-4	Bağcılar-İkitelli-Olimpiyat Köyü	Metro	15.9	2.5	870																														
C-5	Marmaray	Commuter	78.5	4	4,344																														
C-6	Aksaray-Yenikapı	LRT	0.7	4	35																														
T-1	Üsküdar-Çekmeköy	Metro	20	3	1,283																														
D-2	Kabataş-Beşiktaş-Şişli-Giyimkent-Bağcılar	Metro	24.5	3	1,743																														
D-1	Bakırköy-Bahçelievler-Bağcılar	Metro	9	2	655																														
D-3	Yenikapı-Bakırköy	Metro	7	2	518																														
PBH-5	Ünalan-Mecidiyeköy	Metro	11.8	2	914																														
PP-1	Ataşehir Monoray	Havaray	11	2	215																														
T-2	Bakırköy-Beylikdüzü	LRT	25	2	1,399																														
P1-2	Tekstilent-İstoc-Olimpiyatköyü-Ispartakule	Metro	12.5	2	914																														
PP-3	Kadıköy-Sultanbeyli	Metro	21.5	2.5	1,576																														
PP-4	İkitelli-Habipler	Metro	2	1	210																														
PBH-4A	Bostancı-Kazlıçeşme (1.Etap)	Metro	22.9	2.5	1,702																														
PBH-4B	Bostancı-Kazlıçeşme (2.Etap)	Metro	19.1	2.5	1,438																														
P1-1	Bağcılar-Halkalı	LRT	7.5	2	429																														
D-4	Haliç Çevresi	Tram	9.6	2	125																														
P2-10	Ataköy-Atatürk Havaalanı	Commuter	2.5	1	170																														
P1-3	Pendik-S Gökpen-Havaalanı	Commuter	8.2	1.5	403																														
D-5	Yenibosna-İkitelli	Metro	12.2	2	886																														
P2-11	Çekmeköy-Taşdelen-Tuzla	Metro	24	2.5	1,719																														
PP-8	Tuzla Tramvay Sistemi	Monorail	30.6	1.5	324																														
PP-11	Hisarüstü Raylı Sistemi	Metro	4	1	348																														
PP-7	Sultangözü-Arnavutköy	Tram	11.6	2.5	239																														
D-6	Şişhane-Kulaksız-Cemalcamacı	Monorail	5.8	2	145																														
PP-6	Silivri-Gümüşyaka	Commuter	44.7	3	1,956																														
PP-10	Halkalı-Çatalca	Commuter	46.8	3	2,147																														
P2-7	Ispartakule-Kıraç-B Çekmece-Silivri	Commuter	13.8	3	636																														
P2-2	S.Gökçen Havalimanı-Formula1	Monorail	7.7																																
P2-4	4.Levent-Güllepe-Çekirge	Monorail	8.6																																
P2-1	Kartal D100-Kartal-IDO	Monorail	3																																
PP-9	Maltepe Havaray	Monorail	3.5																																
PP-12	Silivri-Selimpaşa Havaray	Monorail	69.3																																
P2-5	Beşiktaş-Sarıyer	LİM	14.5																																
P2-8	Üsküdar-Beykoz	LİM	17.5																																
P2-6	Ispartakule-Beylikdüzü-Avcılar	Commuter	10.5																																
Investment Cost per year (Million USD) (excluding MoT)					18,195	1079	732	620	1,015	1,047	1,808	1,693	1,717	1,871	1,619	1,966	1,279	1,017	711																
Investment Cost per period (Million USD) (excluding MoT)					18,195	4,492				7,090				6,613																					

## İSTANBUL ULAŞIM ANA PLANI AĞ GELİŞİM VE YATIRIM PLANI

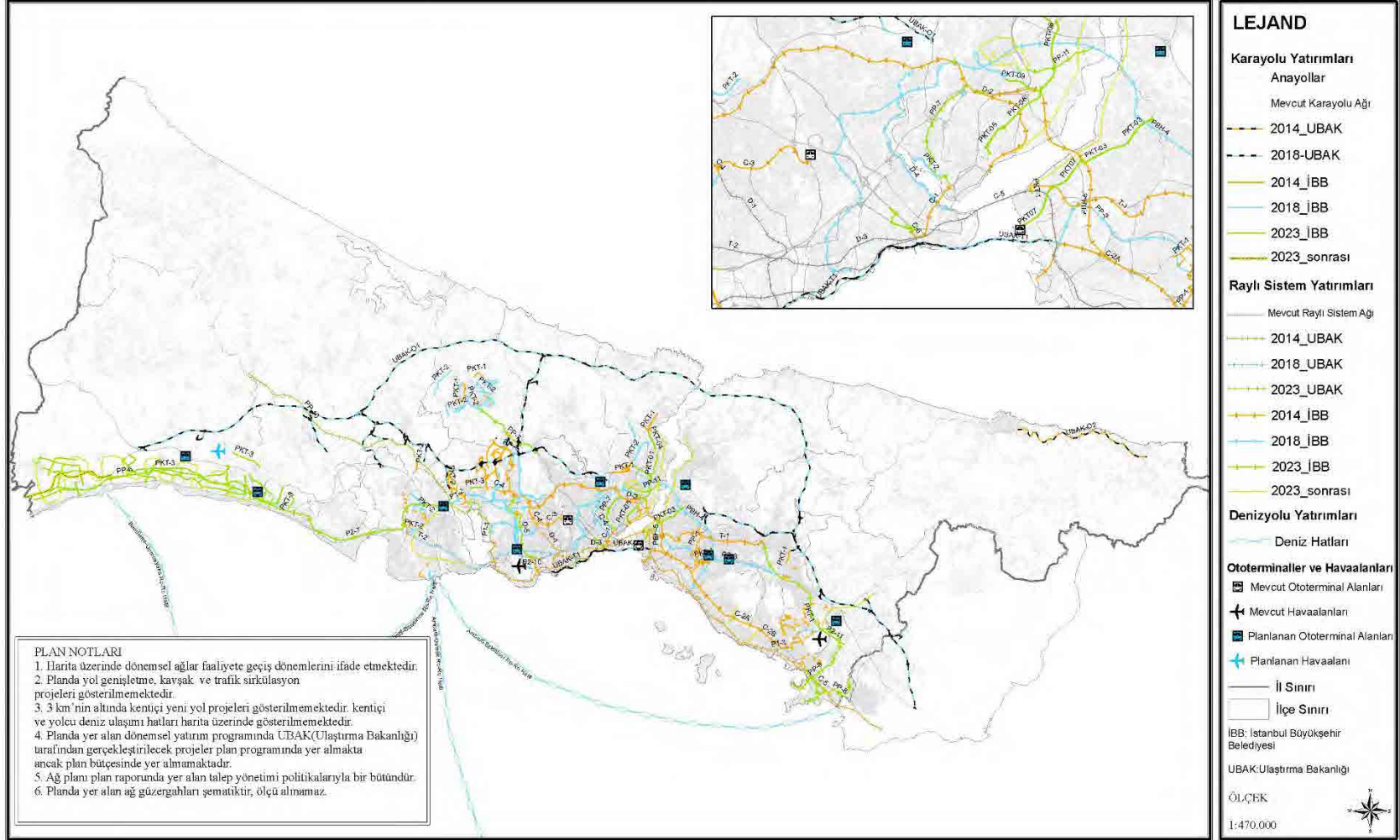


Figure 2.2 Project Location Map of Urban Railway and Road Development Plan

(3) Traffic Survey, Traffic Facility Survey and Social Survey (Activity 1-3)

This section shows the outline and progress of traffic and social surveys which were to be implemented at the beginning of the Traffic Demand Management Project of Historical Area in Istanbul. They are (i) cordon line survey, (ii) traffic count survey at major intersections, (iii) bus transport survey, (iv) travel speed survey, (v) car park survey, (vi) social survey and (vii) taxi probe survey

1) Outline of Cordon Line Survey

The cordon line survey was conducted to obtain incoming and outgoing traffic volume of the Historical Area and understand traffic characteristics such as origin and destination, and purpose. The trip information, origin and destination, purpose, freight information, perception on existing transportation service, etc., were recorded by interview survey for sampled vehicle driver/passengers. Trip purpose had several categories such as to/from work, to/from school, on business, shopping and leisure, and others. Sample rates depend on the traffic volume; 5% as a target rate of passing vehicles and passengers as long as interview survey does not interrupt smooth traffic flow. Vehicle traffic was counted by vehicle type by direction and by 30 minutes period. Vehicle type included car, truck, route bus, tourism coach, motorbike and other service vehicles. For accurate boundary traffic counting, bicycles and pedestrians were included. In addition, passenger traffic was also counted at the gates of rail and sea transport stations.

The road cordon was set on the boundary of the Historical Area at 5 locations. The station cordon was set at 22 rail stations, 3 'dolmus' stops, 1 minibus stop and 4 seabus, ferry and motorboat piers as follows:

- Road cordon: Ayvansaray, Karaköy, Millet Caddesi, Vatan Caddesi, Yedikule
- Tram Line 1: Eminönü, Sirkeci, Gülhane, Sultanahmet, Çemberitas, Beyazıt, Laleli, Aksaray, Yusuf Paşa, Haseki, Fındıkzade, Çapa, Sehremeni, Pazartekke;
- Airport Light Metro Line: Aksaray, Emniyet, Ulubatlı;
- State Line: Yedikule, Koca Mustafa Paşa, Yenikapı, Kumkapı, Cankurtaran, Sirkeci;
- Dolmus stops: Yusufpaşa, Kocamustafapasa, Eminönü;
- Minibus stop: Aksaray;
- Sea Piers located in: Ayvansaray, Eminönü, Sirkeci, Yenikapı.

2) Outline of Traffic Count Survey at Major Intersections

The traffic count survey was conducted at major intersections in the Historical Area for further analyzing vehicular traffic movement in addition to the road cordon line survey. The survey was conducted to get the traffic volume by vehicle type; car, taxi, bus, minibus, light truck, truck, intercity bus, motorbike and service bus, by direction and by 15 minutes period.

Five sites were selected for the traffic count survey. They are Sirkeci, Unikapi, Saraçhane, Aksaray and Yenikapı.





**Figure 2.3 Survey Intersections of Road Traffic Count**

3) Outline of Bus Transport Survey

The bus transport survey was conducted at bus, 'dolmus' and minibus terminals in the Historical Area to collect bus service data and perceptions of present bus passengers on existing services. The survey had 3 activities, i.e., (i) operation data collection, (ii) bus passenger count at terminals and (iii) bus passenger interview at terminals.

- Operation data collection: route, fleet, frequency, average occupancy from bus / 'dolmus' / minibus operators serving in the Historical Area
- Bus passenger count: The number of riding/aligning passengers by fleet type, by terminal and by 30 minutes period
- Bus passenger interview: origin and destination, trip purpose, access to/from bus terminal, perceptions on the existing bus services

4) Outline of Travel Speed Survey

The travel speed survey provided estimates of the average speed of road traffic and of congestion levels in the Historical Area under different time zones and days. The survey was conducted by the floating car method which requires the survey vehicle to keep the same position and attitude in the traffic flow. Data to be collected were time of departure and arrival (start and end point of a route), time of passing intersections, and time of stop and restart with stopping reason.

The following 9 routes were selected for the travel speed survey:

- Ayvansaray – Fener – Unikapı – Eminönü
- Eminönü– Yenikapı (through Kennedy Road)
- Yenikapı – Yedikule
- Unikapı – Aksaray – Yenikapı
- Büyük Resitpaşa –Şehzadebası – Fevzi Paşa – Edirnekapı
- Aksaray – Ulubatlı
- Beyazıt - Aksaray – Topkapı
- Sirkeci – Sultanahmet – Beyazıt
- Yedikule – Silivrikapı – Topkapı – Edirnekapı – Ayvansaray



**Figure 2.4** Surveyed Routes of Travel Speed Survey

5) Outline of Taxi Probe Survey

The taxi probe survey was conducted to obtain rough characteristics of taxi behavior in Historical Area including Operation Route, Operation Distance, Coverage Area, and Travel speed. The taxi behaviors were recorded by GPS loggers which were put on the dashboard of taxis in Historical Area.

6) Outline of Car Park Survey

The car park survey generated multi-dimensional database of all car parks in the Historical Area in order to form a basis for car park policy setting. For analyzing all operational car parks in the Historical Area, three survey activities were conducted, i.e., i) inventory survey, ii) entry/exit survey, and iii) user interview survey.

- i) Inventory survey: It encompassed operator's name, capacity, car park shape particularly entry/exit, tariff, other statistical data such as the number of users and revenue for a certain period. The inventory was made by means of ocular survey and operator's interview is conducted.
- ii) Entry/exit survey: All the parked vehicles were recorded in terms of plate number and vehicle type by every hour.
- iii) User interview survey: It was done with a questionnaire which includes personal and vehicle profile, purpose and frequency of car park use, perception of the existing car park service, etc.

7) Outline of Social Survey

The social survey is to understand existing traffic and transportation problems and needs and the perception and acceptability on TDM measures among various stakeholders of the Historical Area. The collected data must be useful for the disaggregate demand model to predict individual modal choice under improved transport situations in the future. The survey was conducted by direct interview with the following stakeholders:

- Residents within the Historical Area
- Shops within the Historical Area



- Offices within the Historical Area
- Hotels and restaurants within the Historical Area
- Travel agents in Istanbul

8) Utilization of Traffic Survey Data

Traffic survey data of the below-mentioned seven kinds of traffic survey has been used for making future OD tables, analyzing existing traffic situation of historical peninsula and preparing future TDM plans as shown in the following table.

**Table 2.5 Utilization of Traffic Survey Data**

Survey Name	Manners of Utilization
1. Cordon Line Survey	<ul style="list-style-type: none"> <li>· OD Matrix development in historical peninsula</li> <li>· Basic TDM measures planning at Aksaray Area</li> <li>· Bus route planning in historical peninsula</li> <li>· Impact Analysis of through traffic control</li> <li>· Impact Analysis of area pricing in historical peninsula</li> </ul>
2. Traffic Count Survey at Major Intersections	<ul style="list-style-type: none"> <li>· Basic TDM measures planning at Aksaray Area</li> <li>· Bus route planning in historical peninsula</li> <li>· Impact Analysis of through traffic control</li> <li>· Impact Analysis of area pricing in historical peninsula</li> </ul>
3. Bus Transport Survey	<ul style="list-style-type: none"> <li>· Bus route planning in historical peninsula</li> </ul>
4. Travel Speed survey	<ul style="list-style-type: none"> <li>· Basic TDM measures planning at Aksaray Area</li> <li>· Bus route planning in historical peninsula</li> <li>· Impact Analysis of through traffic control</li> <li>· Impact Analysis of area pricing in historical peninsula</li> </ul>
5. Taxi Probe Survey	<ul style="list-style-type: none"> <li>· Suggestion of new traffic information system</li> </ul>
6. Car Park Survey	<ul style="list-style-type: none"> <li>· Parking-related TDM measures planning in historical peninsula</li> </ul>
7. Social survey	<ul style="list-style-type: none"> <li>· Understanding of traffic issues in historical peninsula</li> </ul>

(4) Clarify and Understand existing transport problems in Istanbul and Historical Heritage Area (Activity 1-4)

In April 2012, traffic related surveys had not been finished. So major existing transport problems to be clarified and understood in the historical peninsula are marshaled as follows. And more detailed information about existing transport problems and issues are shown in the appendix.

1) Preparation of Current Transport Problem Map and Traffic Circulation Map

Counterparts prepared “The Current Transport Problems Map in Historical Area” which marked traffic jam points, illegal parking points and other traffic problems, and “The Traffic Circulation Map in Historical Area”.



Figure 2.5 Transport Problem Map

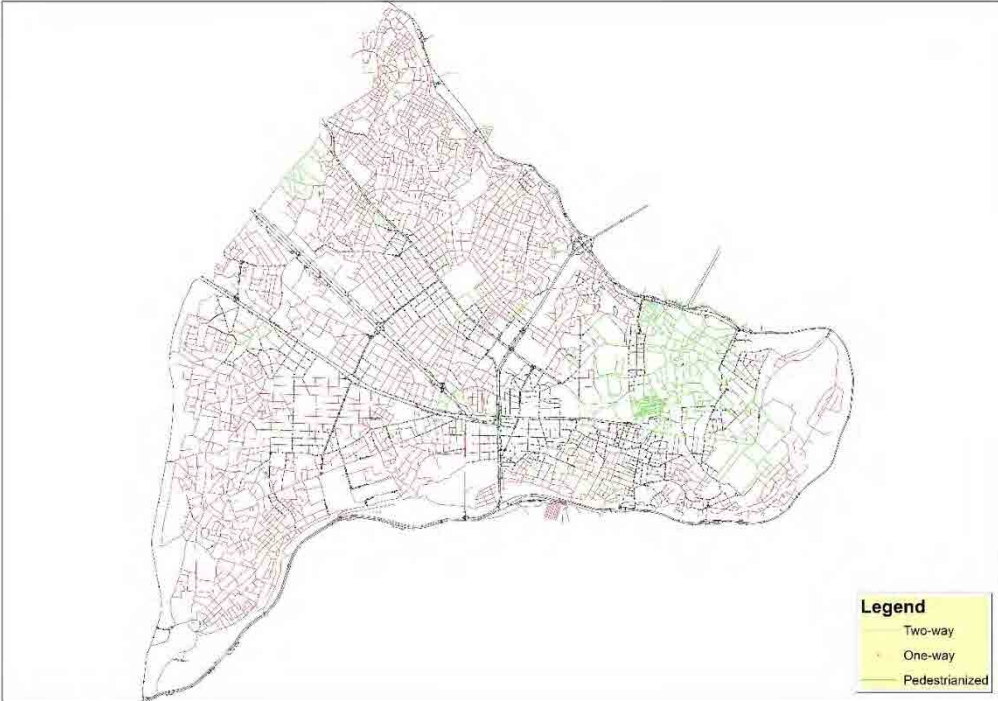


Figure 2.6 Traffic Circulation Map

2) Opinion survey for Traffic Issues in Historical Peninsula

This opinion survey is to understand existing traffic issues in the historical peninsula among various stakeholders, residents, shops, hotels and restaurants, and travel agents. And results of this survey are as follows:

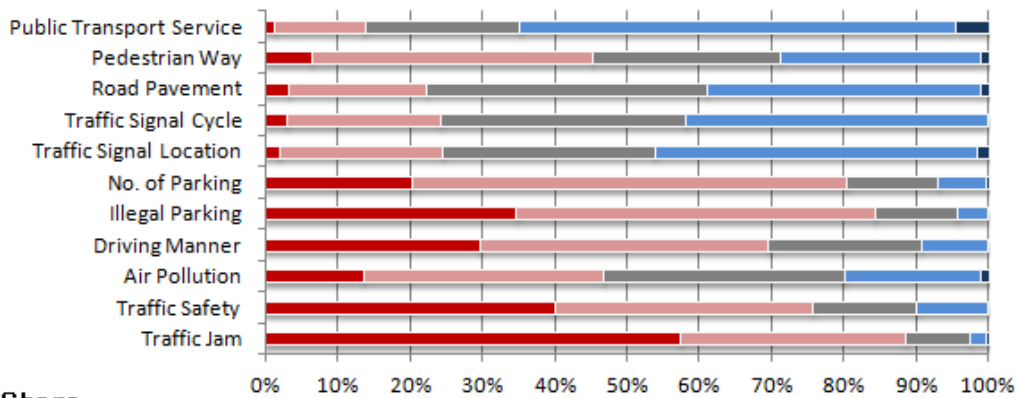
- Lots of people believe traffic issues are “shortage of parking space”, “many illegal parking”, “bad driving manner”, “traffic safety”, and “traffic jams”.
- Service business such as hotel and restaurant believes traffic issues are “lack of pedestrian ways” and low-level road pavement” in addition to the traffic issues above,
- And travel agents believe that the traffic issue is “air pollution”.
- From this opinion survey, lots of people believe main traffic issues in historical peninsula are “traffic jam”, “illegal parking” and “parking issues”.

3) Opinion Survey for TDM Measures in Historical Peninsula

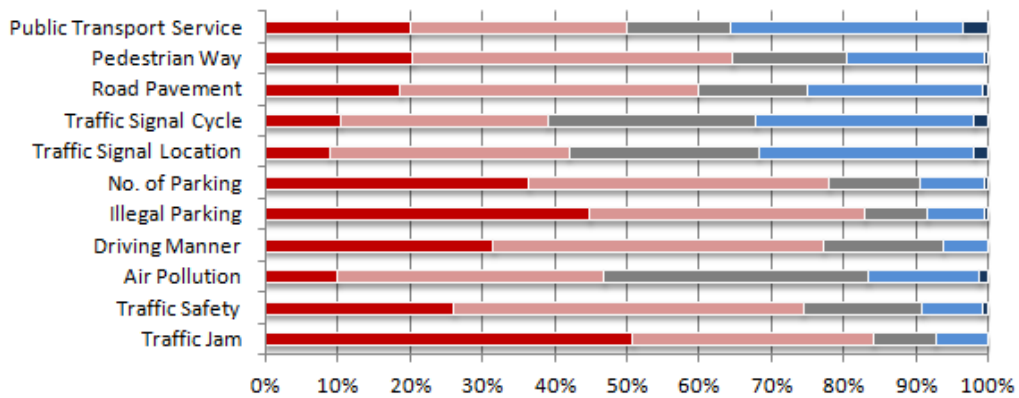
This opinion survey is to understand perceptions and acceptability on TDM measures among various stakeholders, residents, shops, hotels and restaurants, and travel agents. And results of this survey are as follows:

- Lots of people oppose “road pricing” regardless of charges and “increasing of parking fee”.
- Lots of people agree with “enforcement to illegal parking” and “truck access control”.
- Service business such as hotel and restaurant opposes “tourist bus access control”.
- Only hotels and restaurants oppose “vehicle free area”, but other stakeholders agree on this TDM measure.

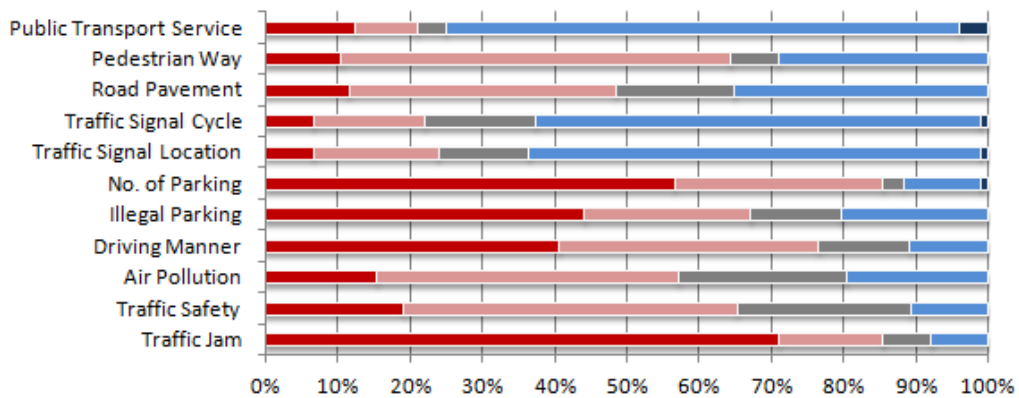
**Residence**



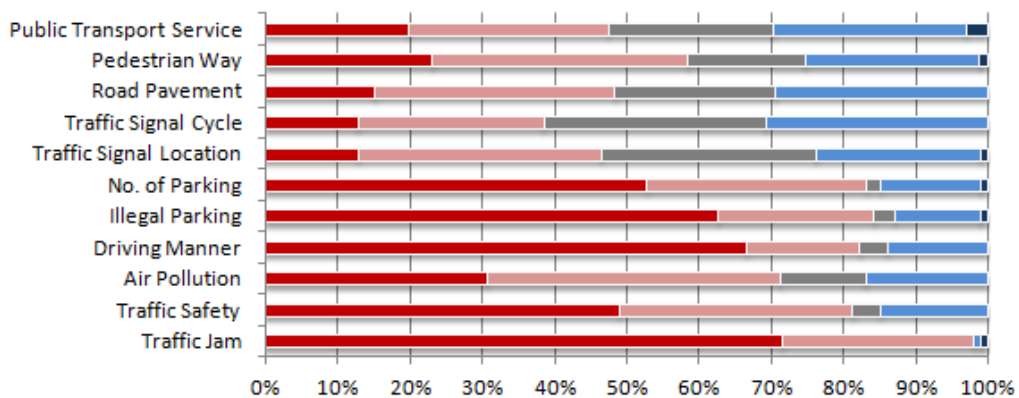
**Shops**



**Hotel and Restaurant**



**Travel Agent**



**Figure 2.7 Traffic Issues in historical peninsula**

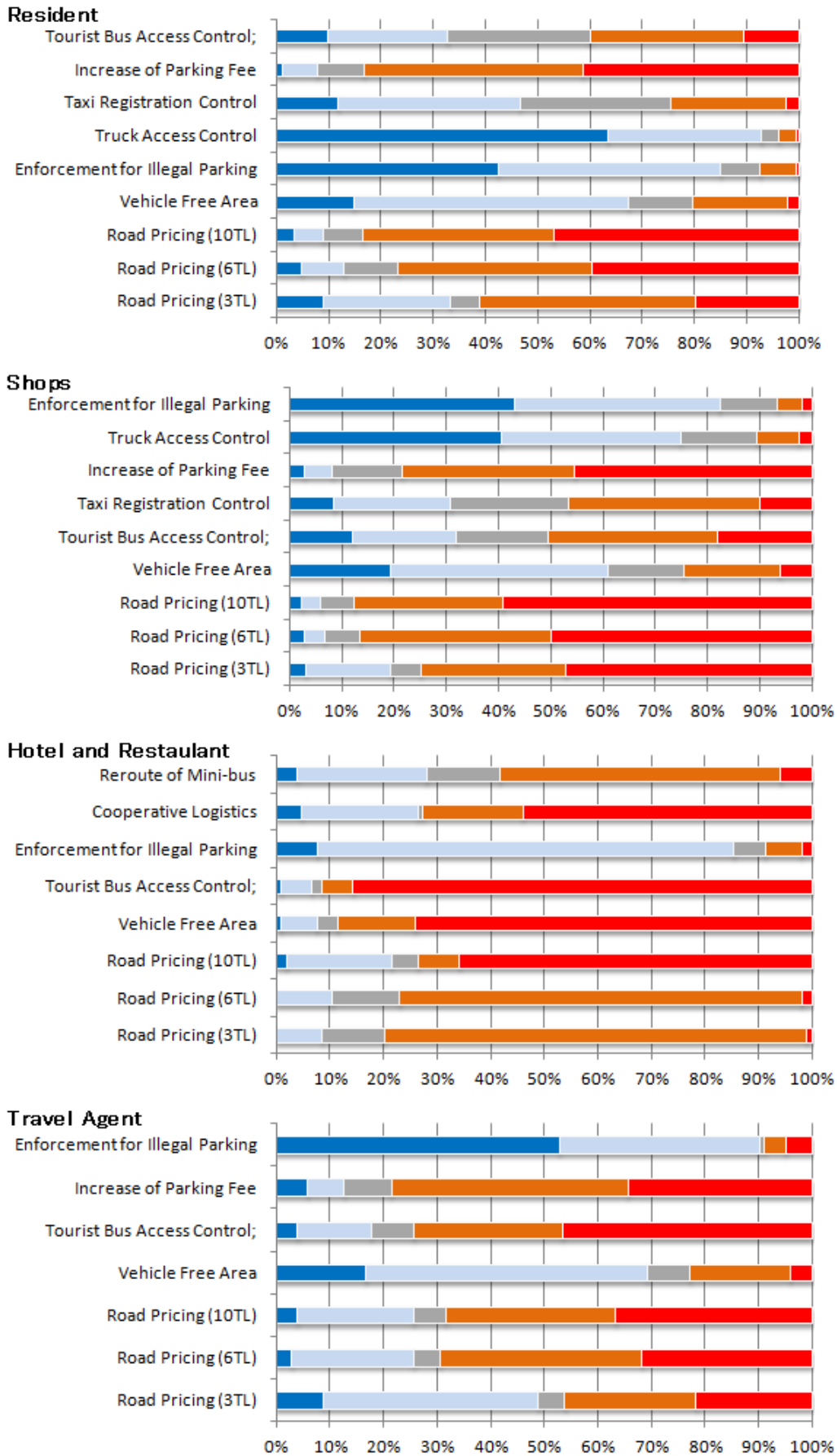


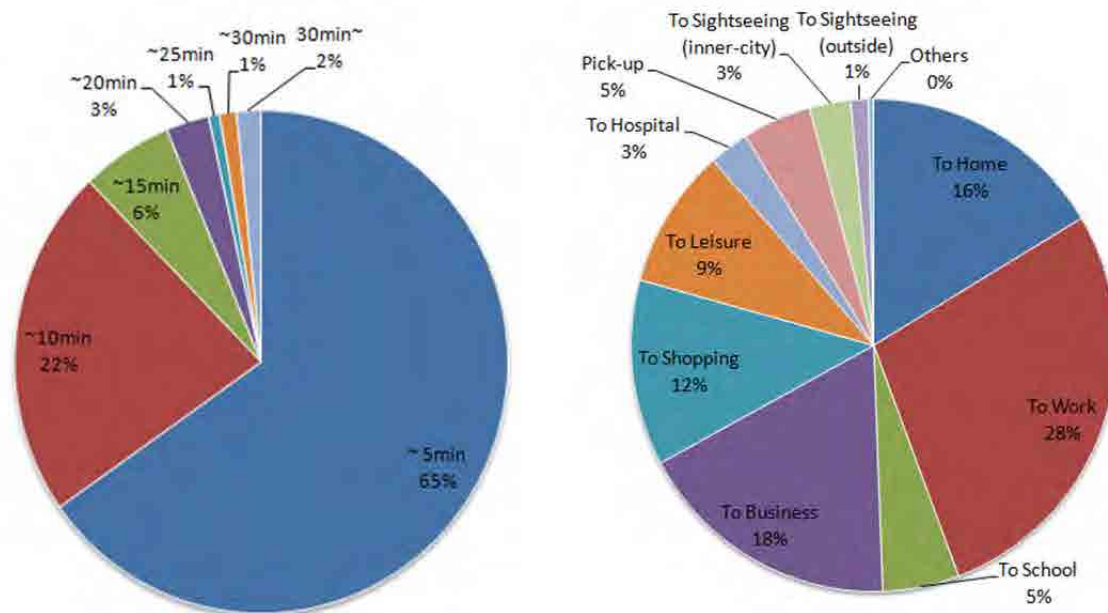
Figure 2.8 Awareness of TDM measures



#### 4) Car park Survey

By car park survey done for the evaluation of parking policy in the historical peninsula, the following characteristics of car park uses were made clear.

- More the 65% of car park users are willing to park near the destination within 5 minutes, and more than 90% of car park users are willing to park within 10 minutes from destination.
- Main utilization purpose of car park is “to work”. And other common utilization purposes are “to home” and “to business”.
- Many car park users park less than 6 hours. These percentages of short term parking are almost same with percentage of “to shopping” and “to leisure” utilization purpose. And percentage of long term car park users is almost same with percentage of “to work” utilization purpose.
- High-priority reasons to correct a car park are “close to destination” and “security”, and next priorities are “easy to park”, and “waiting time”.



Necessary Time from Parking to Destination

Utilization Purpose

Figure 2.9 Characteristics of Car Park Users

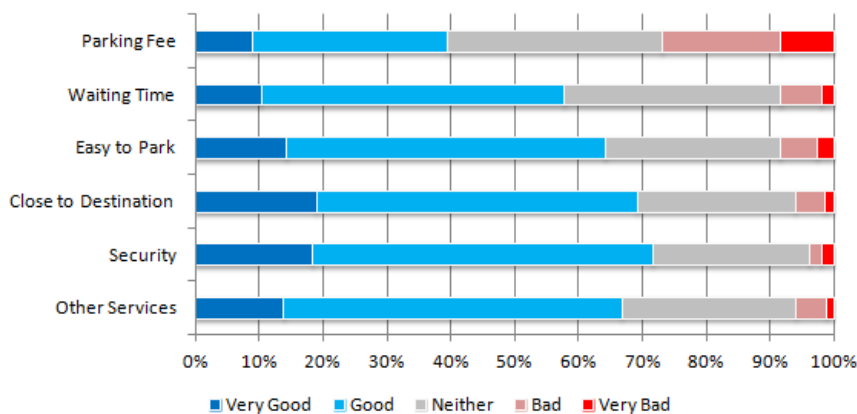


Figure 2.10 Reasons for Car Park Selection

By the result of car park survey, characteristics of public car park and private car park were cleared as follows:

- Parking fee of private car parks differs from 3 Turkish Liras to 15 Turkish Liras, depending on the area in the historical peninsula. And parking fee system is fixed of many private car parks and parking fee of public car parks is dependent on parking time.
- Many users of private car parks have a long-term contract. On the other hand, many users of public car parks park hourly and long term contracts are very few.

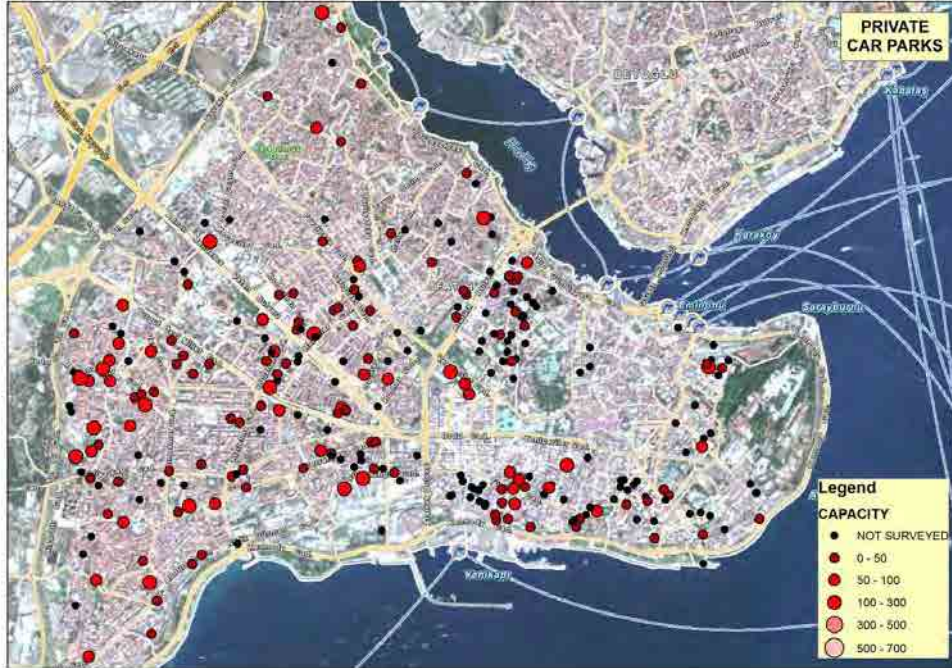


Figure 2.11 Location and Scale of Private Car Parks



Figure 2.12 Location and Scale of Public Car Parks

5) Preparation of Counterparts' Report

Counterparts and JICA Project Team prepared the current transport issues in Istanbul and Fatih "General Characteristics of Transportation and Transport Demand Management in Istanbul and Fatih" based on the above-mentioned activities 1) to 4) . Table of contents are as follows.

**Table 2.6 Table of Contents**

1 GENERAL CHARACTERISTICS OF TRANSPORTATION IN ISTANBUL
1.1 General
1.2 Transportation Characteristics Obtained by Household Survey Results
1.3 Socioeconomic Variables Affecting Transportation
2 TRAFFIC DEMAND MANAGEMENT IN ISTANBUL
2.1 Determination of the Districts in Istanbul having traffic congestion
2.2 Transportation Demand Management Methods Used around the World
2.3 Demand Management Measures Implemented and Planned to be
3 TRAFFIC CIRCULATION AND TRAFFIC DEMAND MANAGEMENT PROBLEMS OF HISTORICAL PENINSULA
3.1 Parking Problem
3.2 Road Geometry and Standardization Problem
3.3 Traffic Integration-Circulation Problem

(5) Introduce information sharing tool among relevant agencies of IMM (Activity 2-1)

This project is conducted by the Working Group composed of Transport Planning Directorate, Coordination Directorate, Traffic Directorate, Public Transport Directorate, Road Maintenance Department and Fatih Municipality since July of 2011.

And Transport Planning Directorate of Transport Department is the specific composition of the counterpart to the JICA Project Team. And this Working Group will be composed of Project and Study Department, İETT, Otobüs, İstanbul Ulaşım, İSPARK, İSBK and other related agencies as necessary.



**Figure 2.13 Weekly Friday Meeting**



(6) Seminar and Counterpart Training in Japan (Activity 2-3)

In this project, counterpart training in Japan will be implemented three times, and overall goals and objectives of these training are as follows.

1) The 1<sup>st</sup> Counterpart Training in Japan

The objective of the 1<sup>st</sup> counterpart training in Japan is to promote the understanding about effectiveness and meaning of a social experiment by the counterparts of Transport Department of IMM who do not have enough experience to implement social experiments of TDM measures.

**Overall**

The following three staff joined this training program in Japan on February, 2012.

**Table 2.7 Training Participants**

Ahmet Hamdi Güner	Director of Transport Planning Directorate, Department of Transport, IMM
Onursal Baş	Deputy Director of Transport Planning Directorate, Department of Transport, IMM
Mehmet Çakır	Researcher of Transport Planning Directorate, Department of Transport, IMM

**Training Purpose**

The purpose of training program in Japan is;

- To learn about the specific implementation flow and method of TDM measures through the good practices of TDM measures in Japan
- To learn about the specific public involvement method and significance through the good practices of TDM measures in Japan
- To learn about task flows to implement projects. Those are proposed in MP.
- To learn about the tasks and activities of government to implement TDM measures.

**Schedule of Training Program**

The schedule of the training program in Japan is below;

**Table 2.8 Schedule of Training Program**

Date and Time		Program	in charge
1	11-Feb Sat	Travel Day	
2	12-Feb Sun		
3	13-Feb Mon AM	Recreation and Opening Ceremony	JICA TIC
	PM	Courtesy Call	JICA HQ
4	14-Feb Tue AM	Lecture	TDM and Social Experiments in Hiroshima
	PM	Travel Day (Tokyo to Kyoto)	
5	15-Feb Wed AM	Lecture	Kyoto Municipality
	PM	Lecture	Dr. Suzuki, Yamaguchi University
6	16-Feb Thu AM	City Tour in Kyoto	
	PM	Travel Day (Kyoto to Hiroshima)	
7	17-Feb Fri	Lecture and City Tour	TDM and Social Experiments in Hiroshima Prof. Dr. Fujiwara, Hiroshima University
8	18-Feb Sat	Travel Day (Hiroshima to Tokyo)	
9	19-Feb Sun	Holiday	
10	20-Feb Mon AM	Lecture	Social Experiments in Japan ALMEC Corporation
	PM	Lecture	Disaster Reduction and Management in Urban Area Pasoco Corporation
11	21-Feb Tue AM	Lecture and Courtesy Call	Tokyo TDM Plan City Development Bureau, Tokyo Metropolitan Municipality
	PM	Lecture	Intelligent Transport System in Japan Dr. Kamijo, Tokyo University
12	22-Feb Wed AM	Lecture and Courtesy Call	Master Plan and Action Plan of Urban Transport in Japan City Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism
	PM	Lecture	TDM and Social Experiments in Japan
13	23-Feb Thu	Evaluation and Closing Ceremony JICA TIC	
14	24-Feb Fri	Travel Day (Tokyo, Japan - Istanbul, Turkey)	

2) The 2<sup>nd</sup> Counterpart Training in Japan

The 2<sup>nd</sup> counterpart training has been implemented to understand about specific activities and evaluation methods of social experiments and work flow of full-scale TDM measures for the working level of transport department of IMM. And the other objectives are to learn about road/area pricing and large-scale transfer center development like Shinjuku station and Shibuya station. And further details of the objective are as follows:

- To improve the abilities of counterparts by learning work experiences about TDM measures of Tokyo and Kyoto from working-level staff of Tokyo Metropolitan and Kyoto City.
- To understand technical and administration issues to implement area pricing by

lectures of Tokyo Metropolitan.

- Site visit of ITS technologies for TDM measures
- site visit of Re-development Project of Shinjuku Station South Area and Shibuya Station

**Period and Participants**

The 2<sup>nd</sup> counterpart training has been implemented from October 30, 2012 until November 13, 2012.

**Table 2.9 Participants of the 2nd Counterpart Training**

1	DİLEK ÇOL	TRANSPORT PLANNING DIRECTORATE
2	EMEL GÜNAY	TRANSPORT PLANNING DIRECTORATE
3	NİLÜFER DÜNYA	TRANSPORT PLANNING DIRECTORATE
4	SERAP ÇETİNKAYA	TRANSPORT PLANNING DIRECTORATE
5	SERKAN ŞİMŞEK	TRANSPORT PLANNING DIRECTORATE
6	KEVSER USUL	TRANSPORT PLANNING DIRECTORATE
7	FATMA BETÜL AKBIYIK	TRANSPORT COORDINATION DIRECTORATE
8	İSA CERRAH	TRANSPORT COORDINATION DIRECTORATE
9	HAMİT POLAT	TRAFFIC DIRECTORATE
10	ESMA DİLEK	TRAFFIC DIRECTORATE

### **Objective**

The 2<sup>nd</sup> counterpart training has been implemented to understand about specific activities and evaluation methods of social experiments and work flow of full-scale TDM measures for the working level of transport department of IMM. And the other objectives are to learn about road/area pricing and large-scale transfer center development like Shinjuku station and Shibuya station.

### **Schedule and Contents**

Schedule and contents of the 2<sup>nd</sup> counterpart training are as follows:

**Table 2.10 Schedule and Contents of the 2<sup>nd</sup> Counterpart Training**

Date	Time	Contents	Person in-charge	Venues
10/30 (Tue)	~	Leave from Istanbul		
10/31(Wed)	~	Arrive at Tokyo		
11/1(Thu)	9:00 ~ 14:00	Basic Briefing and Orientation	JICA Tokyo	JICA Tokyo
	15:00 ~ 16:00	Courtesy Call to JICA HQ		JICA HQ
11/2(Fri)	10:00 ~ 12:00	TDM measures of Tokyo	Environment Department	Tokyo Metropolitan Government
	14:00 ~ 16:00	ITS of TDM Measures	Dr. Kamijo and others	Tokyo University
11/3(Sat)	~	Travel Day		
11/4(Sun)	~	Site Visit of Project Area in Kyoto		
11/5(Mon)	10:00 ~ 12:00	TDM measures of Kyoto	Urban Planning Department	Kyoto City
	~	Travel Day		
11/6(Tue)	~	TDM measures of ITS and Hiroshima	Prof. Fujiwara	Hiroshima University.
	~	Site Visit of Project Area in Hiroshima		
11/7(Wed)	~	Travel Day		
11/8(Thu)	10:00 ~ 12:00	Area Pricing System in Singapore	Mitsubishi Heavy Industry	
	13:20 ~ 16:00	ITS Technology of TDM	Hitachi Corporation	
11/9(Fri)	10:00 ~ 18:00	Re-development Projects in Shinjuku Station and Shibuya Station	Ministry of Land, Infrastructure, Transport and Tourism	
11/10(Sat)		Project Site Visit		
11/11(Sun)		Project Site Visit		
11/12(Mon)	~	Preparation of Evaluation Meeting		JICA Tokyo
	~	Evaluation Meeting		JICA Tokyo
11/13(Tue)	~	Leave from Tokyo Arrive at Istanbul		

### **Achievement of Counterpart Training**

At the 2<sup>nd</sup> counterpart training, the counterparts have been inspired and remarkably vigorous questions and answers were collected and time fell short. Especially owing to the lecture about specific TDM measures from work-level staff of Tokyo Metropolitan Government and Kyoto City, the counterparts could understand deeply about TDM measures.

And owing to lectures from Hitachi Corporation and Mitsubishi Heavy Industry Ltd., the counterparts could study Japanese ITS technologies for TDM measures and it is very useful and effective training.

Site visits and lectures of re-development project of Shinjuku Station and Shibuya Station by the cooperation of Ministry of Land, Infrastructure, Transport and Tourism of Japan were very useful and effective for the Yenikapi Station Project in Istanbul.

In Japan, the number of daily passengers of Shinjuku Station is around 4.4 million and the number of daily passengers of Shibuya Station is 2.4 million. So in this counterpart training, site visiting and lectures about these big terminal situations would be useful and beneficial training for counterparts.

And after coming back to Istanbul, debrief session about the 2<sup>nd</sup> counterpart training has been held and the experiences have been shared experiments with the other counterparts.



**Figure 2.14 Pictures of Debrief Session**

### 3) The 1<sup>st</sup> TDM Seminar

Transport Planning Directorate of Transport Department led 1<sup>st</sup> TDM seminar on March 6, 2012. At the 1<sup>st</sup> session of this seminar, IMM presented about the existing problems and TDM measures in Istanbul, and the necessity of the social experiment implementation at the 1<sup>st</sup> session. And at the 2<sup>nd</sup> session, Professor Fujiwara presented about the necessity of TDM packages and meaning of social experiments,

and Mr. Yamada presented about the case project of social experiment in Kamakura city, and associate professor Kamijo presented about ITS technology and ITS measure for traffic safety.

4) The 2<sup>nd</sup> TDM Seminar

**Overall**

The 2<sup>nd</sup> TDM seminar has been held on March 19, 2013 at the Fatih Culture Center, chaired by Transport Department of Istanbul Metropolitan Municipality.

Number of participants of this seminar is around 44 from Transport Planning Directorate, Traffic Directorate, Coordination Directorate, İSPARK, TAV-G and other relevant agencies including universities.

At question and answer of the 1<sup>st</sup> session, the following issues were discussed, (i) methodology and required results of social experiment, and (ii) useful and effective TDM measures against increasing traffic demand. Counterparts of this project answered these questions and gave the example of traffic congestion charge system in Singapore and USA. And at question and answer of the 2<sup>nd</sup> session, the following issues were discussed (i) intersection control management system and (ii) basic concept of TDM measures.

Through the 2<sup>nd</sup> seminar, necessity and methodology of social experiments of TDM measures would be understood by the transport relevant agencies of IMM.

**Minutes of Meeting**

Opening statements are made by keynote speakers: Mehmet Necip ERTAŞ (IMM-Manager of Traffic) and Neriman ŞAHİN as representatives of Istanbul Metropolitan Municipality (IMM); Prof. Dr. Mustafa ILICALI from Bahçeşehir University; Koji KOMURA (JICA Turkish Office) as JICA representative.

Seminar Program is indicated below:

- i. Evaluation of Social Experiment (Smart Parking System) and Next Steps (Mehmet Çakır)
- ii. Outline of 2nd Social Experiment (Traffic Cell System in Aksaray Zone) (Serap Çetinkaya)
- iii. Progress of JICA Project (Katsuhide Nagayama)

**Photos**



Mr. Mehmet Necip Ertaş  
Director of Traffic Directorate



Dr. Prof. Mustafa ILICALI  
Bahçeşehir University



Mr. Koji KOMURA  
Representative of JICA Turkish Office



Mr. Mehmet Çakır, IMM



Ms. Serap Çetinkaya, IMM



Dr. Katsuhide Nagayama,  
Project Manager of JICA Project



## 5) ITS Seminar

ITS Seminar was organized on 23 December, 2014 at Taitanic hotel, Bayrampasa. Number of participants of the seminar was 88 people from IMM, IETT, TCDD, İDO, İSPARK, İSBAK, ULAŞIM A.Ş, Bahçeşehir University, Japanese companies and so on. Prof. Fujiwara from Hiroshima University, Assoc. Prof. Kamijo from Tokyo University and Mr. Hirose from MLIT presented about TDM and ITS at the beginning of the seminar. Then JICA study team reported the transportation problems in İstanbul and progress of project. After that İSBAK, ITS Japan and Japanese companies introduced ITS for İstanbul. The detail of seminar is shown below.

### Contents

- Opening Remarks (Onursal BAŞ, Deputy Director of IMM Transport Planning Directorate as IMM representative and Yoshihiro Kakishita as JICA representative)
- Traffic Demand Management Measures (TDM) and Social Experiment (Prof. Akimasa Fujiwara)



- ITS Application to Traffic Management and Control (Assoc. Prof. Dr. Shunsuke Kamijo)
- Vehicle-Infrastructure Cooperative System in Japan (Kenjiro Hirose)
- Traffic Problems in Istanbul and TDM Measures (Nesligül Ünal and Dr. Katsuhide Nagayama)



Opening Remarks



Presentation by Dr. Fujiwara



Presentation by Dr. Kamijo



Presentation by Ms. Nesligül



Presentations by Japanese ITS  
Companies



Presentations by Japanese ITS  
Companies





Seminar



Seminar



Exhibition Space for Japanese ITS  
Companies



Exhibition Space for Japanese ITS  
Companies

(7) Preparation, Implementation and Evaluation of Social Experiment

These topics are mentioned at Chapter 3 and Chapter 4.

(8) Traffic Demand Management Guidelines

The Project Team and C/Ps were formulated the guidelines by compiling implementation procedures and results as well as achievements and lessons learned from the two social experiments conducted/to be conducted in the Project. Appendix shows the guidelines

### 3. Conduct of the 1<sup>st</sup> Social Experiment

#### 3.1 Overview of the Smart Parking System (SPS) Social Experiment

##### (1) Outline of the SPS Social Experiment

Table 3.1 briefly summarizes the Smart Parking System (SPS) Social Experiment conducted as the 1<sup>st</sup> Social Experiment for 1.5 months between mid-January and February 2013.

**Table 3.1 Outline of the Smart Parking System (SPS) Social Experiment**

Target Area	Fatih Municipality in Istanbul
Situation and Challenges in the Area	<ul style="list-style-type: none"> <li>• The former Eminönü district in Fatih Municipality has world cultural heritage sites and roads in the district which are always congested because of high-density areas of wholesale shops of leather and clothes as well as many tourism-related facilities such as hotels, restaurants, and souvenir shops.</li> <li>• IMM closed some roads to vehicle traffic in order to pedestrianize the area for protecting historical architecture and improve traffic environment.</li> </ul>
Experiment Objectives	“Reducing traffic congestion in the former Eminönü district” through increasing parking utilization around the area and enhancing access to the parking lots
Activities/ Target Parking Lots	<ul style="list-style-type: none"> <li>• Introduction of parking information service by a website, cellular phones, and parking information boards (Five parking lots were targeted around the Vatan Street crossing the central area of Fatih Municipality, see Figure 3.1)</li> <li>• Operation of shuttle buses</li> </ul>
Experiment Period	<ul style="list-style-type: none"> <li>• January 15 – January 31, 2013 (17 days): Preliminary implementation</li> <li>• February 1 – February 28, 2013 (28 days): Full-scale implementation</li> </ul>
Responsible Organizations	<ul style="list-style-type: none"> <li>• Transport Planning Directorate, Transport Department, IMM</li> <li>• Relevant departments and directorates such as the Traffic Directorate and Coordination Directorate of the Transport Department, IMM</li> <li>• Municipal parking management company (İSPARK), and private parking management company (TAVG)</li> <li>• Fatih Municipal Government</li> </ul>
Public Relations	<ul style="list-style-type: none"> <li>• Announcement on the IMM website</li> <li>• Posting a leaflet on the IMM website</li> <li>• News by TVs and newspapers</li> </ul>
Principal Tasks	<ul style="list-style-type: none"> <li>• Preparatory meetings (Discussions with relevant organizations, drafting a brief implementation plan)</li> <li>• Social experiment committee meetings (2 times, before developing a detailed implementation plan and after evaluating the experiment)</li> <li>• Detailed implementation plan development and approval procedures</li> <li>• Preparation to undertake the experiment (coordination/discussions with the relevant organizations, information boards setup, information service application development)</li> <li>• Conduct of campaigns and the experiment</li> <li>• Monitoring and evaluation (conduct of evaluation surveys before and during the experiment)</li> <li>• Implementation report formulation</li> </ul>

Continue

<p>Experiment Results</p>	<ul style="list-style-type: none"> <li>• Low recognition degree of the SPS no more than about 30% (Could not distribute leaflets and put up posters because final approval was not obtained within IMM).</li> <li>• Regardless of limited Influence of the SPS to choice behavior of parking lots, confirmed some impact by SPS utilization such as shortening of travel time and reduction in illegal parking of private vehicles at final destinations.</li> <li>• Regardless whether users actually utilized the SPS or not, confirmed high evaluations and expectations for the SPS by parking users such as intention of SPS's utilization if the SPS expands to other areas of Fatih/Istanbul.</li> <li>• Confirmed high level of interest in the SPS by illegal parking users though the SPS did not sufficiently lead to their behavior modifications.</li> </ul>
<p>Future Activities</p>	<p>Under discussions with the relevant organizations toward continuation and expansion of the SPS</p>



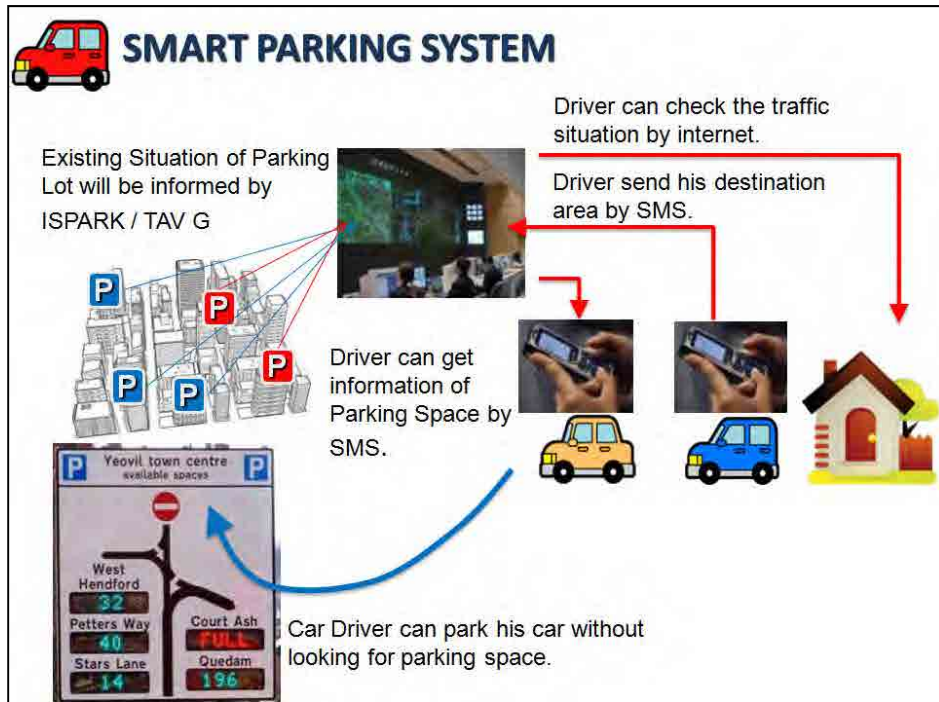
**Figure 3.1 Target Parking Lots of the Smart parking System (SPS) Social Experiment**

(2) Concept of the Smart Parking System (SPS)

As drivers tend to choose nearby parking lots of their final destinations, parking lots are congested in high-density areas of offices and commercial facilities. Traffic congestion is also caused by waiting vehicles for parking, including illegal parking, and other vehicles looking around for parking lots and spaces.

The SPS introduced by the 1<sup>st</sup> Social Experiment is one of services that provide parking information through the Internet and cellular phones, and also operate shuttle buses for legal parking users. The SPS aims the following effects through the parking information service that provides information about locations, availabilities, and parking fees of parking lots outside the most congested area:

- Reduce vehicles looking around for parking lots;
- Motivate drivers to use parking lots outside the most congested area by utilizing shuttle bus service; and
- Ease traffic congestion in the central area.



**Figure 3.2 Basic Concept of the Smart Parking System (SPS)**

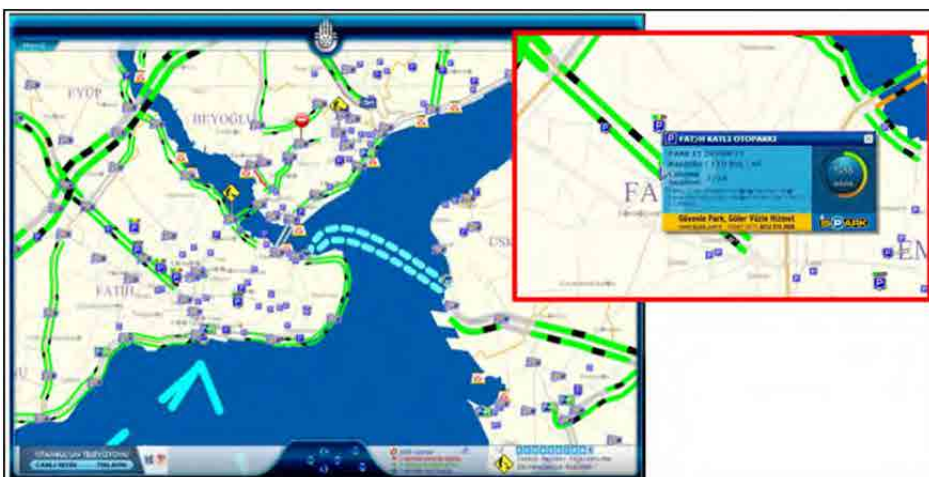
(3) Parking Information Service

In the SPS Social Experiment, parking information was provided through the following tools:

- Website;
- Cellular phones; and
- Parking information boards.

1) Parking Information Service by the Website

The Traffic Information Website, owned by the IMM Transport Department, provided information about the target parking lots such as their locations and capacity (see Figure 3.3).



**Figure 3.3 Parking Information Service by the Website**



2) Parking Information Service by Cellular Phones

Regarding an information service by cellular phones, two applications were developed for iPhone and universal phones (see Figure 3.4 and Figure 3.5). The iPhone application provided information about the parking locations, parking fees, capacity, congestion situations (occupancy rates), and access to the parking lots. Drivers came to be able to receive parking information by cellular phones through the free service.



Figure 3.4 Parking Information Service by Cellular Phones (iPhone Application)

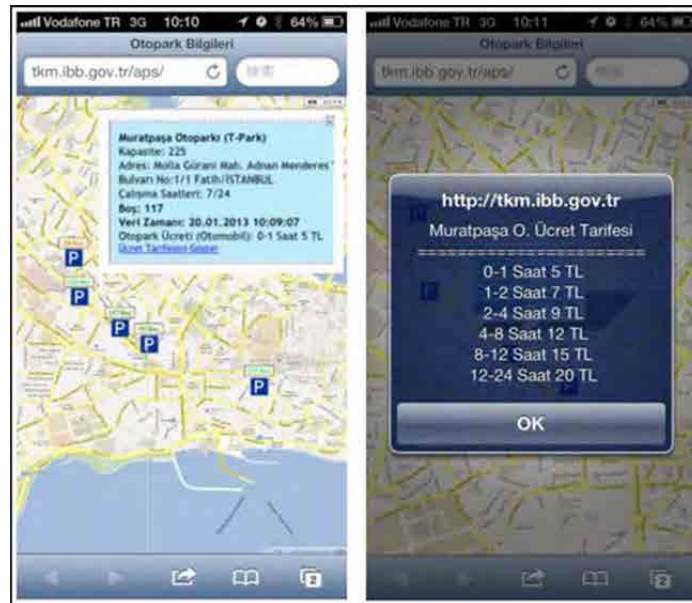


Figure 3.5 Parking Information Service by Cellular Phones (Universal Application)

3) Parking Information Service by Information Boards

In addition to the information services by the website and cellular phones, the parking information boards were introduced. The information boards were set up at four access points to the target area and provided information about the parking locations and real-time free spaces every five minutes.



**Figure 3.6** Parking Information Service by Information Boards

(4) Shuttle Bus Service

The SPS Social Experiment introduced shuttle buses for parking users. A circular route on a main street (Vatan Street), crossing the central area of Fatih Municipality, links five target parking lots. Six buses were operated every 15 minutes and 20 minutes during peak hours and off-peak hours respectively.



**Figure 3.7** Shuttle Buses



**Figure 3.8** Guide Sign of the Shuttle Bus Service





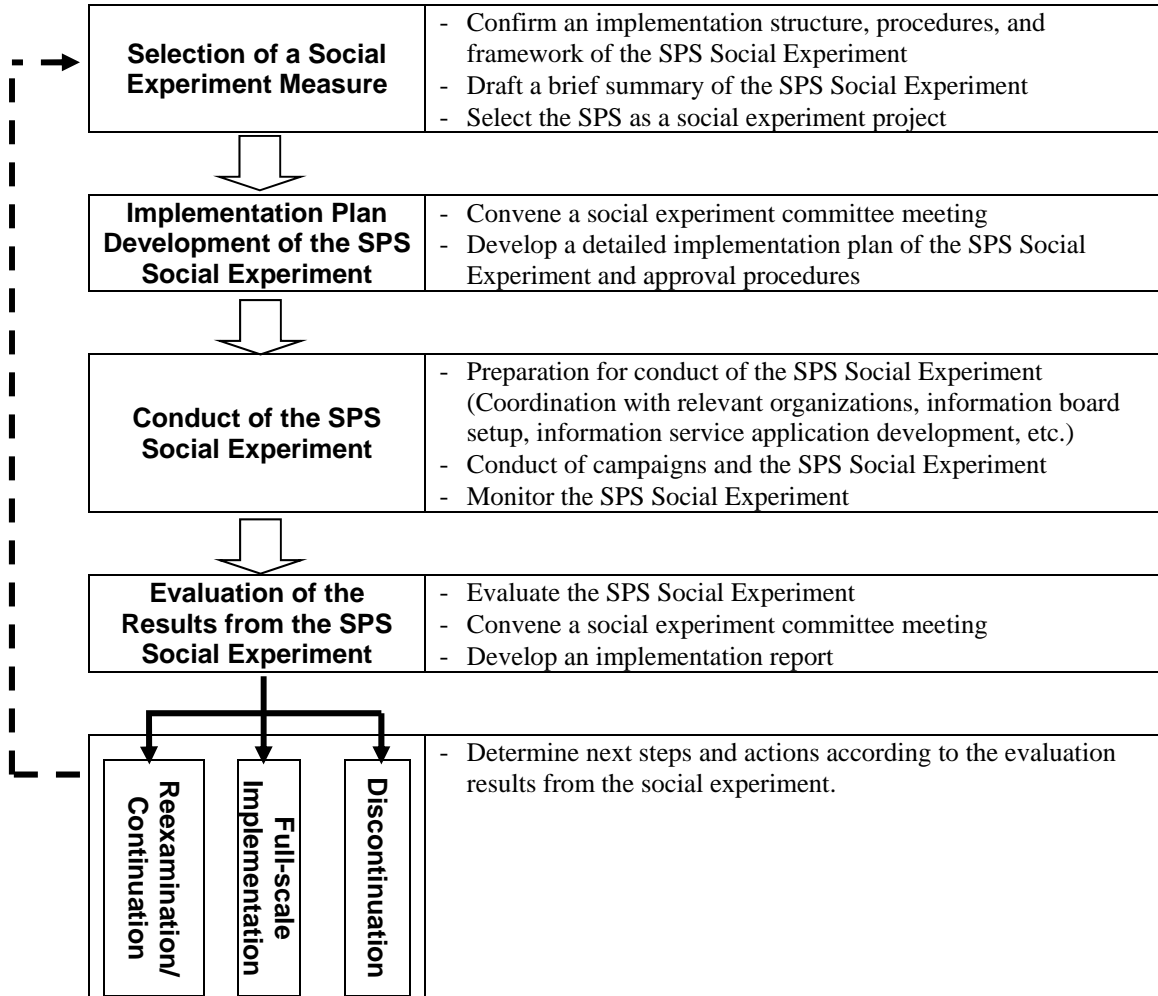


**Figure 3.11 TV Broadcasts**

3.2 Implementation Procedures and Schedule of the Smart Parking System (SPS) Social Experiment

(1) Implementation Procedures of the SPS Social Experiment

Figure 3.12 shows a basic concept of Implementation procedures for the experiment.



**Figure 3.12 Basic Concept of the Implementation Procedures for the Smart Parking System (SPS) Social Experiment**

(2) Tasks and Schedule for the SPS Social Experiment

Table 3.2 shows tasks and actual activities of the SPS Social Experiment and Figure 3.13 also describes a planned schedule as of February 2012 and actual schedule.



**Table 3.2 Tasks and Actual Activities  
of the Smart Parking System (SPS) Social Experiment**

Tasks	Actual Activities
<p>1 Preparatory Meetings</p> <ul style="list-style-type: none"> <li>• Meetings with relevant organizations (Confirmation of Implementation structure, procedures and framework)</li> <li>• Drafting a brief implementation plan</li> </ul>	<ul style="list-style-type: none"> <li>• Discussed with relevant organizations and entities through weekly meetings and a series of other meetings on the initiative of the Transport Planning Directorate.</li> <li>• Drafted the brief implementation plan of the SPS Social Experiment after confirming the framework, implementation structure, and procedures of the experiment.</li> </ul>
<p>2 1<sup>st</sup> Social Experiment Committee Meeting</p> <ul style="list-style-type: none"> <li>• Selection of committee members and coordination</li> <li>• Preparation and convening the meeting</li> </ul>	<ul style="list-style-type: none"> <li>• Discussed the objectives of establishing the committee and its main activities.</li> <li>• Decided to convene two meetings, before drafting the brief implementation plan and after evaluating the experiment results.</li> <li>• Organized 1<sup>st</sup> meeting on April 6, 2012 to receive comments and ideas on the experiment.</li> </ul>
<p>3 Approval Procedures for Conduct of the Experiment</p> <ul style="list-style-type: none"> <li>• Detailed implementation plan development</li> <li>• Submission and approval of the detailed implementation plan</li> </ul>	<ul style="list-style-type: none"> <li>• Discussed and coordinated with the relevant organizations, and subsequently developed the detailed implementation plan.</li> <li>• Approved the plan by the Transport Planning Directorate and Traffic Directorate as it became clear that approval from UKOME/UTK was not necessary this time.</li> <li>• Required long period for coordination with the relevant organizations on the parking information boards and cellular phone application development, which was completed three or four months behind the schedule.</li> </ul>
<p>4 Preparation for implementing the Social Experiment</p> <ul style="list-style-type: none"> <li>• Development/setup of systems and coordination with relevant organizations</li> <li>• Data and information collection</li> </ul>	<ul style="list-style-type: none"> <li>• Continued discussions with the relevant organizations and started preparation for the information boards, cellular phone applications, and shuttle bus service.</li> <li>• Set up the information boards about a half year behind the schedule due to bidding procedures and delay in procuring materials (The bidding was not supposed to be necessary at the beginning).</li> <li>• Coordination and development of the cellular applications and discussions on shuttle bus service were delayed.</li> <li>• Conducted a pre-opinion survey in early January 2013.</li> </ul>
<p>5 Conduct of Campaigns and the Experiment</p> <ul style="list-style-type: none"> <li>• Conduct of campaigns</li> <li>• Implementation of the SPS Social Experiment</li> </ul>	<ul style="list-style-type: none"> <li>• Had a series of discussions on implementation methods and campaign programs, and then announced on the IMM website.</li> <li>• Could not obtain final approval inside IMM and canceled leaflet distribution and poster advertising.</li> <li>• Conducted the experiment for 45 days between January 15, 2013 and February 28, 2013 (first 17 days were a preliminary implementation).</li> </ul>
<p>6 Monitoring and Evaluation</p> <ul style="list-style-type: none"> <li>• Data and information collection</li> <li>• Evaluation of the SPS Social Experiment</li> </ul>	<ul style="list-style-type: none"> <li>• Conducted an illegal parking actual situation survey around the target parking lot and interview surveys for legal and illegal parking users.</li> <li>• Evaluated the SPS Social Experiment based on the results from monitoring activities and evaluation surveys.</li> </ul>

Tasks	Actual Activities
7 2 <sup>nd</sup> Social Experiment Committee Meeting <ul style="list-style-type: none"> <li>Preparation and convening the meeting</li> </ul>	<ul style="list-style-type: none"> <li>Had a meeting on March 19, 2013. Incorporated the meeting in a seminar organized around the same time, considering participants and programs.</li> </ul>
8 Implementation Plan Formulation <ul style="list-style-type: none"> <li>Announcement of the experiment results</li> <li>Implementation report formulation</li> </ul>	<ul style="list-style-type: none"> <li>Under discussion on future activities and expansion of the SPS.</li> <li>Preparing the implementation report, compiling the results and lessons learned from the experiment as well as future activities and expansion.</li> </ul>

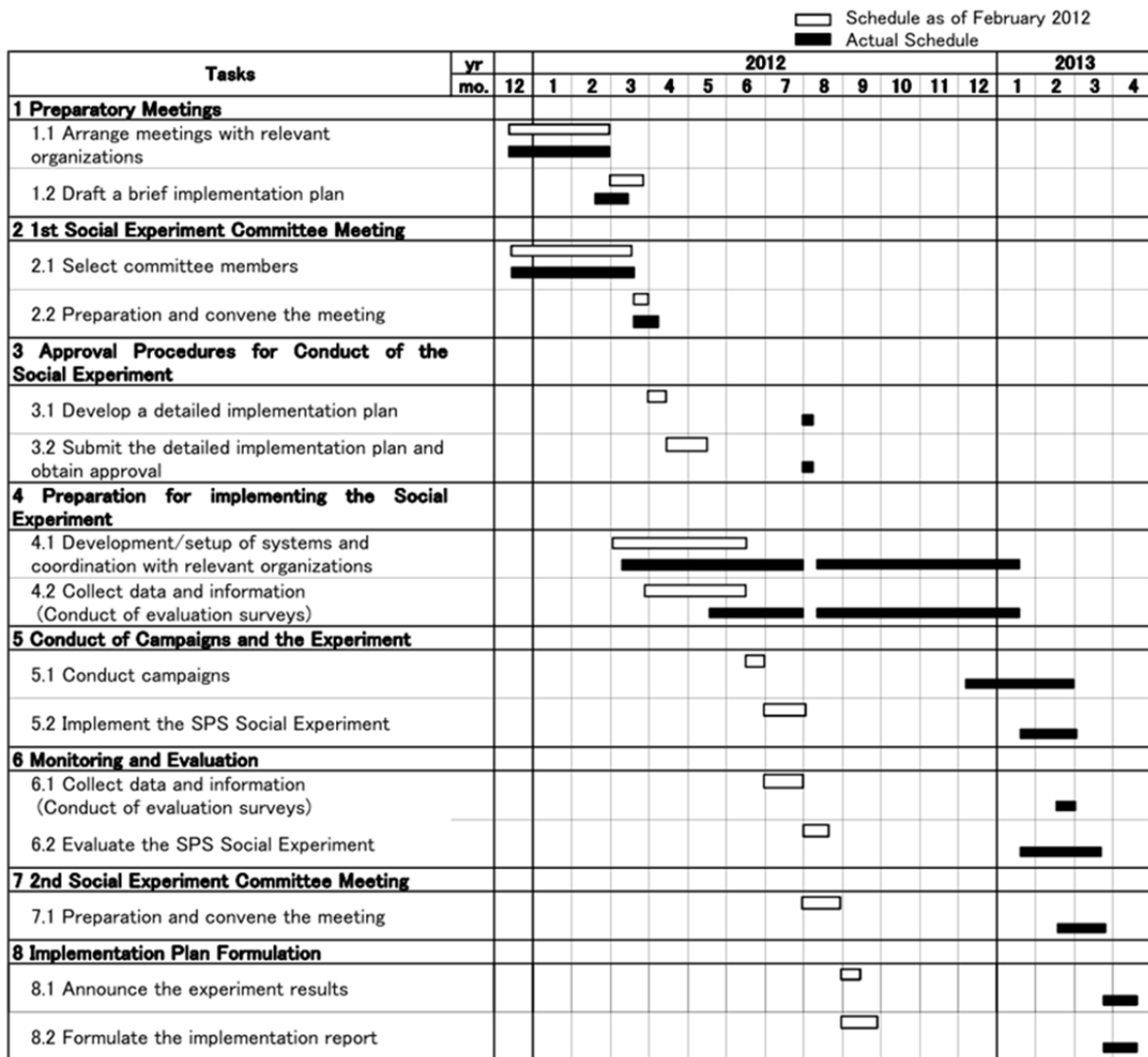


Figure 3.13 Planned and Actual Schedules for the Smart Parking System (SPS) Social Experiment

(3) SPS Social Experiment Committee Meetings

Table 3.3 summarizes the Social Experiment Committee meetings organized two times, before drafting the brief implementation plan and after evaluating the experiment results. Both the meetings were convened with the participation of implementation organizations

such as relevant departments and agencies of IMM, Fatih Municipal Government, İSPARK and TAVG as well as public transportation operators in Istanbul and university professors. The 2<sup>nd</sup> meeting, convened after evaluating the experiment results, was incorporated in the seminar that was organized around the same time, considering participants and programs.

**Table 3.3 Summary of the Social Experiment Committee Meetings**

Meeting	Date/Participants	Topics
1 <sup>st</sup> Meeting	<ul style="list-style-type: none"> <li>April 6, 2012 (Before developing the detailed implementation plan)</li> <li>24 participants</li> </ul>	<ul style="list-style-type: none"> <li>Share common understanding or reconfirm concepts on TDM and social experiment.</li> <li>Explain the drafted implementation plan of the SPS Social Experiment.</li> <li>Receive comments and ideas for finalizing the implementation plan.</li> </ul>
2 <sup>nd</sup> Meeting	<ul style="list-style-type: none"> <li>March 19, 2013 (After evaluating the experiment results)</li> <li>44 participants</li> </ul>	<ul style="list-style-type: none"> <li>Report on the evaluation results and lessons learned from the social experiment.</li> <li>Opinion exchange for future activities and expansion.</li> </ul>

The participants in the 2<sup>nd</sup> meeting shared the results and outcomes from the SPS Social Experiment as well as lessons learned from the first implementation of a social experiment in Istanbul.

### 3.3 Evaluation Surveys of the Smart Parking System (SPS) Social Experiment

#### (1) Outline of the Evaluation Surveys of the SPS Social Experiment

The following three surveys were conducted before and during the experiment to evaluate the SPS Social Experiment.

**Table 3.4 Evaluation Surveys for the Smart parking System (SPS) Social Experiment**

Surveys	Summaries																
1 Pre-opinion Survey (Before the experiment)	<p>Targets: Users of a parking lot and illegal parking around the parking lot Survey items: Usage situation, interest in the social experiment, etc. Respondents (persons):</p> <table border="1"> <thead> <tr> <th></th> <th>Weekday (Monday)</th> <th>Weekend (Saturday)</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Parking Users</td> <td>194</td> <td>201</td> <td>395</td> </tr> <tr> <td>Illegal Parking users</td> <td>99</td> <td>68</td> <td>167</td> </tr> <tr> <td>Total</td> <td>293</td> <td>269</td> <td>562</td> </tr> </tbody> </table>		Weekday (Monday)	Weekend (Saturday)	Total	Parking Users	194	201	395	Illegal Parking users	99	68	167	Total	293	269	562
	Weekday (Monday)	Weekend (Saturday)	Total														
Parking Users	194	201	395														
Illegal Parking users	99	68	167														
Total	293	269	562														
2 Illegal Parking Actual Situation Survey (During the Experiment)	<p>Survey items: The number illegal parking and parking duration Days of the survey(days):</p> <table border="1"> <thead> <tr> <th></th> <th>Weekday (Monday)</th> <th>Weekend (Saturday)</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Before the Experiment</td> <td>2 days</td> <td>2 days</td> <td>4 days</td> </tr> <tr> <td>During the Experiment</td> <td>2 days</td> <td>2 days</td> <td>4 days</td> </tr> <tr> <td>Total</td> <td>4 days</td> <td>4 days</td> <td>8 days</td> </tr> </tbody> </table>		Weekday (Monday)	Weekend (Saturday)	Total	Before the Experiment	2 days	2 days	4 days	During the Experiment	2 days	2 days	4 days	Total	4 days	4 days	8 days
	Weekday (Monday)	Weekend (Saturday)	Total														
Before the Experiment	2 days	2 days	4 days														
During the Experiment	2 days	2 days	4 days														
Total	4 days	4 days	8 days														
3 Interview Survey (During the Experiment)	<p>Targets: Users of a parking lot and illegal parking around the parking lot Survey items: Usage situation, evaluation of the social experiment, etc. Respondents (persons):</p> <table border="1"> <thead> <tr> <th></th> <th>Weekday (Monday)</th> <th>Weekend (Saturday)</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Parking Users</td> <td>449</td> <td>428</td> <td>877</td> </tr> <tr> <td>Illegal Parking users</td> <td>123</td> <td>94</td> <td>217</td> </tr> <tr> <td>Total</td> <td>572</td> <td>522</td> <td>1,094</td> </tr> </tbody> </table>		Weekday (Monday)	Weekend (Saturday)	Total	Parking Users	449	428	877	Illegal Parking users	123	94	217	Total	572	522	1,094
	Weekday (Monday)	Weekend (Saturday)	Total														
Parking Users	449	428	877														
Illegal Parking users	123	94	217														
Total	572	522	1,094														

(2) Evaluation Survey Results from the SPS Social Experiment

The following sections summarize principal results from the evaluation surveys.

1) Evaluation of the Smart Parking System (SPS)

Table 3.5 summarizes evaluation of the SPS by parking users who knew the SPS at the interview survey conducted during the experiment. This question employed a five-grade evaluation scale, setting scores from 5 to 1, with 5 being the highest/most positive score and 1 the lowest/most negative. Scores in the table are calculated by a weighted average of the numbers of answers and the scores of the five-grade evaluation.

The Evaluation of the SPS was generally positive. For a question “Would you use the SPS if the SPS expands to other areas in Fatih/Istanbul? (Question 1)”, more than 70% of the respondents answered “Strongly Agree”. Combined with the second positive answer “Agree”, positive answers reached 89.0%

**Table 3.5 Evaluation of the Smart Parking System (SPS)**

Questions	←—————→					Valid Responses	Scores
	Strongly Agree				Strongly Disagree		
1 Use the SPS if the SPS expands to other areas?	202 (71.9%)	48 (17.1%)	16 (5.7%)	5 (1.8%)	10 (3.6%)	281	4.5
2 The SPS is easily understandable.	143 (51.4%)	60 (21.6%)	33 (11.9%)	34 (12.2%)	8 (2.9%)	278	4.1
3 Information provided by the SPS was correct.	98 (36.4%)	72 (26.8%)	81 (30.1%)	5 (1.9%)	13 (4.8%)	269	3.9
4 Updating frequency of parking information was satisfactory.	47 (17.0%)	62 (22.5%)	126 (45.7%)	15 (5.4%)	26 (9.4%)	276	3.3
5 Parking lots in the SPS were enough.	69 (24.7%)	92 (33.0%)	36 (12.9%)	21 (7.5%)	61 (21.9%)	279	3.3
6 Parking information boards were satisfactory.	69 (24.8%)	71 (25.5%)	55 (19.8%)	42 (15.1%)	41 (14.7%)	278	3.3
7 Travel time was shortened.	62 (22.6%)	34 (12.4%)	55 (20.1%)	79 (28.8%)	44 (16.1%)	274	3.0
8 Shuttle bus service was satisfactory.	40 (16.5%)	25 (10.3%)	96 (39.7%)	40 (16.5%)	41 (16.9%)	242	2.9
9 Use public transportation instead of shuttle buses if convenience is enhanced?	60 (22.0%)	34 (12.5%)	49 (17.9%)	38 (13.9%)	92 (33.7%)	273	2.8
10 Use the SPS even if cellular information service is charged?	46 (16.5%)	55 (19.7%)	46 (16.5%)	32 (11.5%)	100 (35.8%)	279	2.7
11 Use shuttle buses even if the service is charged?	29 (10.5%)	42 (15.3%)	51 (18.5%)	46 (16.7%)	107 (38.9%)	275	2.4
12 Campaigns affected parking usage.	18 (6.6%)	17 (6.2%)	21 (7.7%)	83 (30.4%)	134 (49.1%)	273	1.9

Scores represent the weighted average of the numbers of answers and the five-grade evaluation score.

Positive evaluation for “Accuracy of the parking information provided (Question 3)” and “Satisfaction with the parking information boards (Question 5)” were 63.2% and 50.3% respectively, provided “Strongly Agree” and “Agree” are regarded as positive evaluation. Only 26.8% of the respondents, however, positively answered for a question “Satisfaction with the shuttle bus service (Question 8)”, which shows relative low evaluation for the shuttle bus service.

Although negative evaluations for “Travel time was shortened (Question 7)” and “Would you use the SPS even if cellular phones information service is charged (Question 11)” were 44.9% and 47.3% and reached about five out of ten respondents, more than three out of ten respondents also answered that travel time

was shortened (35.0%) and that they would use the SPS even if the service is charged (36.2%).

Table 3.6 indicates one of the results from the pre-opinion survey for illegal parking users: Answers to a question “Would you use the SPS?” asked after explaining the SPS. The percentage of positive opinions was 80.2%, which indicates that interest in the SPS itself was high despite being illegal parking users.

**Table 3.6 Interest in Smart Parking System (SPS) by Illegal Parking Users**

Question	Definitely ←————→ Definitely Not					Valid Responses
	44 (26.3%)	90 (53.9%)	6 (3.6%)	22 (13.2%)	5 (3.0%)	
Would you use the SPS?						167

2) Recognition Degree of the Smart Parking System (SPS)

Table 3.7 shows the recognition degree of the SPS during the experiment. Although it was indispensable to sufficiently announce the experiment to potential parking users, the SPS Social Experiment was undertaken without leaflet distribution and poster advertising because the final approval inside IMM was not obtained. The recognition degree of the SPS Social Experiment was actually low and only about three out of ten users knew about the SPS, regardless of whether they are legal parking users or illegal parking users.

The most influential medium by which users received the information was the parking information boards (72.9% of the parking users who knew the SPS), and second and third media were TV (8.9%) and website (6.1%) respectively (valid responses were 280). Interview results from illegal parking users show similar tendency though percentages are different.

**Table 3.7 Recognition Degree of the Smart Parking System (SPS)**

	Informed	Not Informed	Valid Responses
Legal parking users	288 (32.8%)	589 (67.2%)	877
Illegal parking users	55 (25.3%)	162 (74.7%)	217

3) SPS Utilization

Only 15 respondents (5.3%) answered that they used the parking lot because of the SPS. Among the 15 users, three users parked at roadside before and four users used another parking lot before.

**Table 3.8 Smart Parking System (SPS) as a Deciding Factor in Parking Utilization**

Answers		Answers (Percentage)	
Utilized this parking lot regardless of the SPS.		270 (94.7%)	270 (94.7%)
Utilized this parking lot because of the SPS.	Parked at roadside before.	3 (1.1%)	15 (5.3%)
	Used another parking lot before.	4 (1.4%)	
	Often use this parking lot.	8 (2.8%)	
Total		285	285

Answers to questions “Trip purpose of parking users”, “Usage frequency of the parking lots”, and “Reasons for choosing the parking lot” were described in Table 3.9 to Table 3.11. Regarding the trip purpose, commuting was the most common trip purpose for both the legal and illegal parking users, and these percentages were 73.8% and 51.3 respectively. Users who utilized the parking lots 1 day a week or more were 56.3% and 58.1% for weekdays and weekends, which indicates that more than half of the respondents used the parking lots on a routine basis. 28.8% of weekday users and 38.7% of weekend users chose “There is always parking space” as a reason for choosing the parking lots.

**Table 3.9 Trip Purpose of Parking Users**

Weekday (Mon.)		Weekend (Sat.)	
Purposes	Answers (Percentage)	Purposes	Answers (Percentage)
1 Commuting	330 (73.8%)	1 Commuting	219 (51.3%)
2 Hospital	42 (9.4%)	2 Shopping	118 (27.6%)
3 Shopping	30 (6.7%)	3 Private Business	31 (7.3%)
4 Work	18 (4.0%)	4 Hospital	21 (4.9%)
5 Others	27 (6.1%)	5 Others	38 (8.9%)
Total	447	Total	427

Items: 1) Home, 2) Commuting, 3) School, 4) Work, 5) Shopping, 6) Private business (sport, entertainment), 7) hospital, 8) Sightseeing, 9) Visiting outside the city, 10) Others

**Table 3.10 Usage Frequency of the Parking Lots**

Weekday (Mon.)		Weekend (Sat.)	
Usage Frequency	Answers (Percentage)	Usage Frequency	Answers (Percentage)
5-7 days a week	136 (30.4%)	5-7 days a week	114 (26.6%)
3-4 days a week	54 (12.1%)	3-4 days a week	48 (11.2%)
1-2 day(s) a week	62 (13.8%)	1-2 day(s) a week	87 (20.3%)
1-2 day(s) a month	59 (13.2%)	1-2 day(s) a month	44 (10.3%)
Occasional usage	54 (12.1%)	Occasional usage	51 (11.9%)
First-time usage	83 (18.5%)	First-time usage	84 (19.6%)
Total	448	Total	428

**Table 3.11 Reasons for Choosing the Parking Lot**

(Three answers allowed)

Weekday (Mon.)		Weekend (Sat.)	
Reasons	Answers (Percentage)	Reasons	Answers (Percentage)
1 Near the destination	408(95.6%)	1 Near the destination	377(93.5%)
2 Security	313(73.3%)	2 Security	297(73.3%)
3 Easy access	237(55.5%)	3 Easy access	238(59.1%)
4 Usually available	123(28.8%)	4 Usually available	156(38.7%)
5 Affordable price	100(23.4%)	5 Affordable price	54(13.4%)
6 Near a station/shop	10 (2.3%)	6 Near a station/shop	19(4.7%)
7 Shuttle bus service	0 (0.0%)	7 Shuttle bus service	0 (0.0%)
8 SPS	0 (0.0%)	8 SPS	0 (0.0%)
Respondents	443	Respondents	421

These results indicate that users of targeted parking lots in the SPS Social Experiment utilize the parking lot for commuting, and tend to use on a routine basis because they know that the parking lots have always enough parking spaces. It is difficult to specify whether they actually used the SPS or not from the survey results;

these may be one of reasons that existence or nonexistence of the SPS was not a deciding factor in their utilization of the parking lots as shown in Table 3.8. Even for the first-time users of the parking lots, the SPS was not a large factor in choosing the parking lot (4 out of 167 first-time users of the parking lots utilized because of the SPS, 2.4%).

4) Effect of Utilizing the Smart Parking System (SPS)

Table 3.12 shows changes in utilizing the SPS. Although only 15 parking users utilized the parking lots because of the SPS as shown in Table 3.8, all of seven users who used a private vehicle/taxi before changed their behavior and walked to their final destinations by utilizing the SPS and parking lots. Some users' travel time was also shortened for 20 to 30 minutes by utilizing the SPS though there were users whose travel time was lengthened or kept almost the same. As the evaluation of the SPS was described in Table 3.5, there is another survey result according to which 35.0% of the respondents answered that their travel time was shortened (274 valid respondents).

**Table 3.12 Effects from Utilization of the Smart Parking System (SPS)**

Users	Transportation mode between the parking lot and final destination		Travel time to the final destination from the origin (min)		
	w/o SPS	w/ SPS	w/o SPS	w/ SPS	Difference
1	Taxi	Walk only	20	6	-14
2	Service bus	Walk only	—	11	—
3	Service bus	Walk only	—	3	—
4	Private vehicle	Walk only	—	25	—
5	Private vehicle	Walk only	30	33	+3
6	Taxi	Walk only	45	50	+5
7	Service bus	Walk only	40	40	±0
8	Service bus	Walk only	60	30	-30
9	Service bus	Walk only	10	22	+12
10	Service bus	Walk only	—	92	—
11	Private vehicle	Walk only	25	21	-4
12	Taxi	Walk only	30	31	+1
13	Service bus	Walk only	70	47	-23
14	Taxi	Walk only	—	31	—
15	Service bus	Walk only	7	16	+9

- Service bus: minivan, microbus, and bus for commuting
- Non response or obviously incorrect data are described by “—“

The number of daily shuttle bus users was no more than about 30 at most and 16 on average. Travel time from the parking lots to the final destinations for 89.7% of parking users was not more than 10 minutes and users who can walk to their destinations were more than nine out of ten users (94.9%).

Reasons that shuttle bus users were not many were not only insufficient campaigns, shuttle bus information boards, and so on, but also presence of many parking users who did not need to use shuttle buses as they could park at the parking lots near their destinations. Although there was positive evaluation of the shuttle bus service, particularly from women, such as safety and security, there was also complain that distance between bus stops was too long.

5) Reasons for Illegal Parking

Table 3.13 shows reasons for choosing illegal parking. 89.3% of weekday users and 94.7% weekend users chose “Near the destination” as the first reason, which indicate that illegal parking users could illegally park near their destinations. Even from the illegal parking actual situation survey, we could not confirm major change between before and during the experiment.

More than three out of ten weekday users answered that legal parking fees are expensive and about two out of ten users chose “Legal parking lots are full” (22.8% weekday users and 18.1% illegal parking users). However, the neighboring legal parking lot was not actually full and the following measures might be necessary at a time to promote behavior modification from illegal parking to legal parking:

- Strengthen regulations and penalties for illegal parking users;
- Increase/introduce on-street parking fees;
- Provide accurate information such as legal parking locations and free spaces; and
- Encourage actual experience of utilizing legal parking lots.

**Table 3.13 Reasons for Choosing Illegal Parking**

(Three answers allowed)

Weekday (Mon.)		Weekend (Sat.)	
Reasons	Answers (Percentage)	Reasons	Answers (Percentage)
1 Near the destination	108 (89.3%)	1 Near the destination	89 (94.7%)
2 Legal parking lots are full	78 (36.3%)	2 Legal parking lots are full	17 (18.1%)
3 Legal parking fees are expensive	49 (22.8%)	3 Legal parking fees are expensive	10 (10.6%)
4 Always available	25 (11.6%)	4 Always available	5 (5.3%)
5 Near a station/shop	6 (2.8%)	5 Near a station/shop	2 (2.1%)
6 Others	11 (5.1%)	6 Others	4 (4.3%)
Respondents	121	Respondents	94

3.4 Social Experiment Results and Future Expansion of the Smart Parking System (SPS)

(1) Results from the SPS Social Experiment

The evaluation survey results indicated limited effects of introducing the SPS as only three out of ten parking users knew about the SPS even during the experiment and the SPS affected only a few respondents’ decision to use parking lots. Actual effects from SPS utilization are, however, confirmed such as shortening of travel time and behavior modification from a private vehicle and taxi to walk to the final destination. Evaluation and expectation of parking users for the SPS were also generally high such as high expectation for expanding the SPS to other areas of Fatih/Istanbul. Even illegal parking users showed positive interest in the SPS though the SPS did not actually lead to utilization of legal parking lots.

The SPS Social Experiment was undertaken about seven months behind compared to the schedule as of February 2012, because it required longer period than initially envisioned to discuss and coordinate on parking information boards, cellular phone application, and shuttle bus services, and these setup and development. In addition to these activities, there was also delay particularly in discussing and coordinating with relevant organizations and entities. Therefore, the project management structure is expected to be improved such as time management to schedule necessary duration for each task and working management.



However, sufficient period was secured for preparatory activities for the social experiment and relevant organizations and entities could repeatedly discuss the social experiment and share objectives and procedures of the experiment. Though it was the first experience for IMM Transport Department to implement the social experiment, they could enhance their understanding and consciousness by actual experience in a series of activities of a social experiment and achievements from training programs implemented in Japan.

(2) Future Expansion of the Smart Parking System (SPS)

The Transport Planning Directorate and other relevant organizations and entities are now discussing future activities and expansion of the SPS toward continuance or expansion. Expected actions and improvement are shown as below. Some of these are also required for the 2<sup>nd</sup> Social Experiment and future activities.

- Clarify maintenance and operation structure and cost sharing.
- Strengthen campaigns and public relation activities  
(Finding out possible and effective methods and coordination with relevant entities).
- Provide illegal parking users with accurate information such as locations and available parking spaces, and encourage actual experience of utilizing legal parking lots.
- Strengthen regulations for illegal parking users together with promotion of legal parking utilization (Impose penalties and Increase/introduce on-street parking fees)
- Strengthen the project management structure (particularly time management and communication management)

#### 4. Conduct of the 2<sup>nd</sup> Social Experiment

##### 4.1 Outline of Social Experiment

In the scope of Transportation Master Plan, it is mentioned that establishing a cell system in the Historical Peninsula Area should be developed. According to this necessity, it is decided to implement a “social experiment” model in a sub-district of Historical Peninsula Area.

The traffic cell system is regulating an entering vehicle to target area excluding the public buses etc. The system is introduced in some cities in the world.

##### 4.2 Stakeholders of 2<sup>nd</sup> Social Experiment

The traffic cell which is 2<sup>nd</sup> social experiment was necessary the coordination between some stakeholders. The table below shows the stakeholders of the 2<sup>nd</sup> social experiment.

**Table 4.1 Stakeholders of Social Experiment**

Items		1 <sup>st</sup> Social Experiment	2 <sup>nd</sup> Social Experiment
Purpose of Social Experiment		Effective Utilization of Parking Facility Promote of P&R	Regulation of Through Traffic, Providing of Pedestrian Space
Beneficiary	Beneficiary Group	Parking Users	Residential and Workers in Target Area
	Citizen Group which participate to the social Experiment directory.	no.	Residential Community and Commercial Group Target Area
	Other Groups	no.	Not decided
Government	Preparation and Planning	IMM Traffic Directorate, IMM Road Maintenance and Management Directorate, iSPARK , TAVG	IMM Traffic Directorate, IMM Road Maintenance and Management Directorate, FATIH Government
	Permission	IMM Traffic Directorate	IMM Traffic Directorate (UKOME/UTK)
	Implementation Agency	iSPARK	IMM Traffic Directorate, FATIH Government
	Supporting Agency	IMM Traffic Directorate, IMM Road Maintenance and Management	MM Road Maintenance and Management
Relationship with JICA Team	C/P and participation section of WFM	IMM Traffic Directorate, IMM Road Maintenance and Management, iSPARK, TAVG	IMM Traffic Directorate, IMM Road Maintenance and Management Directorate, FATIH Government
	JCC Members	IMM Traffic Directorate	IMM Traffic Directorate
	Involving section for preparation of social experiment	Bimtas (Survey) Traffic Police	Bimtas (Survey) Traffic Police
	Involving section to get the permission for social experiment	no.	Not decided

IMM Transport Department: Transportation Planning, Transportation Coordination, Traffic and

Public Transportation Directorates

IMM Road Maintenance and Management Directorate: Infrastructure Coordination and Road Maintenance and Restoration Directorates

() shows the organizations which are not decided.

#### 4.3 Schedule

The 2<sup>nd</sup> social experiment was preparing to implement from August of 2013 as the original schedule. The progress was reported to Traffic Director every month.

**Table 4.2 Schedule of 2<sup>nd</sup> Social Experiment**

Traffic Cell System		2012					2013								
		Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sep.
1	Preparation Works														
2	Forming Implementation Plan														
3	1st Social Experiment Committee														
4	Getting UKOME approval for the Implementation														
5	Preparation works for the implementation of the experiment														
6	2nd Social Experiment Committee														
7	Conducting Campaigns and Social Experiment														
8	Observation and Evaluation														
9	3rd Social Experiment Committee														
10	Announcing to the Public and Shareholders and Reporting														

#### 4.4 Selection of the Target Area

Five areas in historical peninsula were selected as the 候補地 of the 2<sup>nd</sup> social experiment based on following information.

(1) Traffic Problem Map (Appendix 7-3)

Traffic problem map which was made by counterpart shows the traffic accident points, road side parking points of sightseeing bus, traffic congestion points and so on. Traffic problem areas were found based on this map.

(2) Traffic Regulation Map (Appendix 7-4)

Traffic regulation map was made by counterpart. The area which does not have pedestrianized road yet were found based on this map.

(3) Hearing from staff of local government

The area which has traffic problem by through vehicle was found based on hearing from Mr. Azat Yalçın who is the staff of Fatih government and also member of .working group.



Figure 4.1 Traffic Problem Map

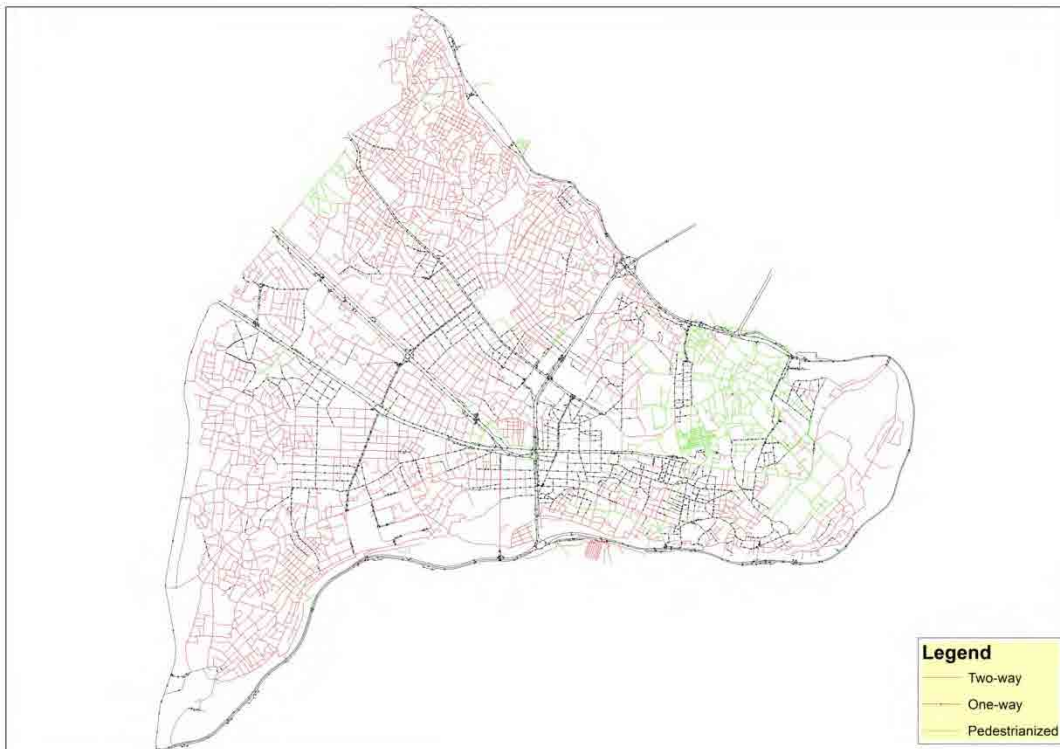
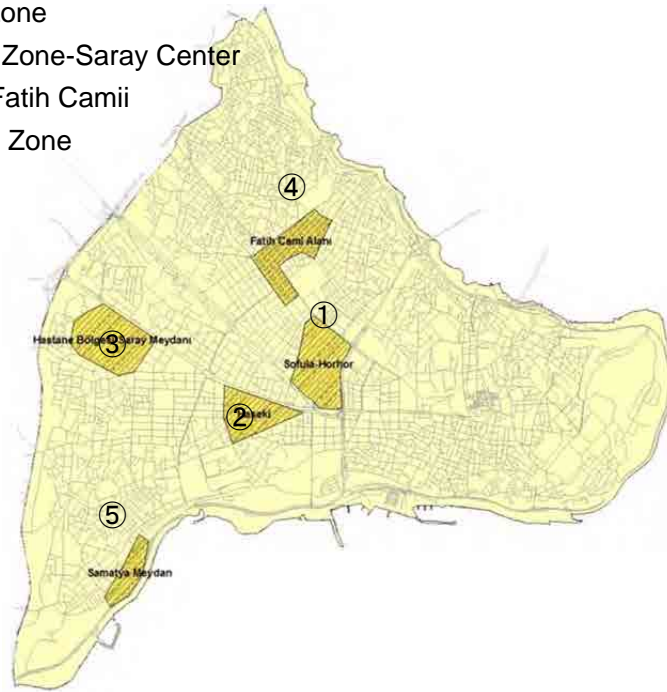


Figure 4.2 Traffic Regulation Map



- ① Aksaray (Sofular-Horhor)
- ② Haseki Zone
- ③ Hastane Bölgesi-Saray Meydanı
- ④ Around Fatih Camii
- ⑤ Samatya Zone



**Figure 4.3 Target Areas of 2<sup>nd</sup> Social Experiment**

In order to select the final target area of social experiment from the five areas, the site survey was implemented and the evaluation table was developed such as shown in table below. Finally, the Aksaray (Sofular- Horhor) was decided as target area of 2<sup>nd</sup> social experiment



**Figure 4.4 Field Survey**

**Table 4.3 Evaluation Table for Selection of Social Experiment**

	Aksaray (Sofular-Horhor)	Haseki Zone	Hastane Zone-Saray Center	Around Fatih Camii	Samatya Zone
Mixed area of some land uses	O: Hospital, Hotel, Restaurant, Office, Resident	O: Hospital, Hotel, Restaurant, Office, Resident	Δ : There are many small shops. On the other hand a resident is few.	Δ : There are many small shops. On the other hand a resident is few.	X: Residential area
Many Through traffic	O: Many through traffic during peak hours	x : Through vehicles are few.	O: Many through traffic during peak hours	x : Traffic regulation was implemented already.	x : Traffic volume is low.
Illegal Parking	O: Traffic congestion was happened caused by road side parking. However roadside parking is not regulated.	O: There are many illegal parking.	x : Traffic regulation was implemented already.	x : Traffic regulation was implemented already.	O: There are illegal parking by residents.
Many pedestrian	Δ : not too much	x : Only few part of area	O: Many pedestrian	O: Many pedestrian	Δ: Pedestrian is not too much during day time.
There is a problem related pedestrian space.	O: Vehicles park on pedestrian space.	Δ : There are wide pedestrian space.	O: The road is narrow.	x : Traffic regulation was implemented already.	O: The road is narrow.
The traffic regulation has not implemented yet.	O: not yet	O: not yet	x : Already	x : Already	O: One way regulation only
	O :5 Δ :1 x :0	O :3 Δ :1 x :2	O :3 Δ :1 x :2	O :1 Δ :1 x :4	O :2 Δ :1 x :2

#### 4.5 Site Survey

After the selection of target area of social experiment, the site visit was conducted again in order to consider a traffic regulation.

- A role and classification of each road
- Location and scale of a hospital, a school and a park
- Traffic flow
- Bottleneck
- Pedestrian facility

As a result of site survey, the target area was divided to five sub zones or cells.

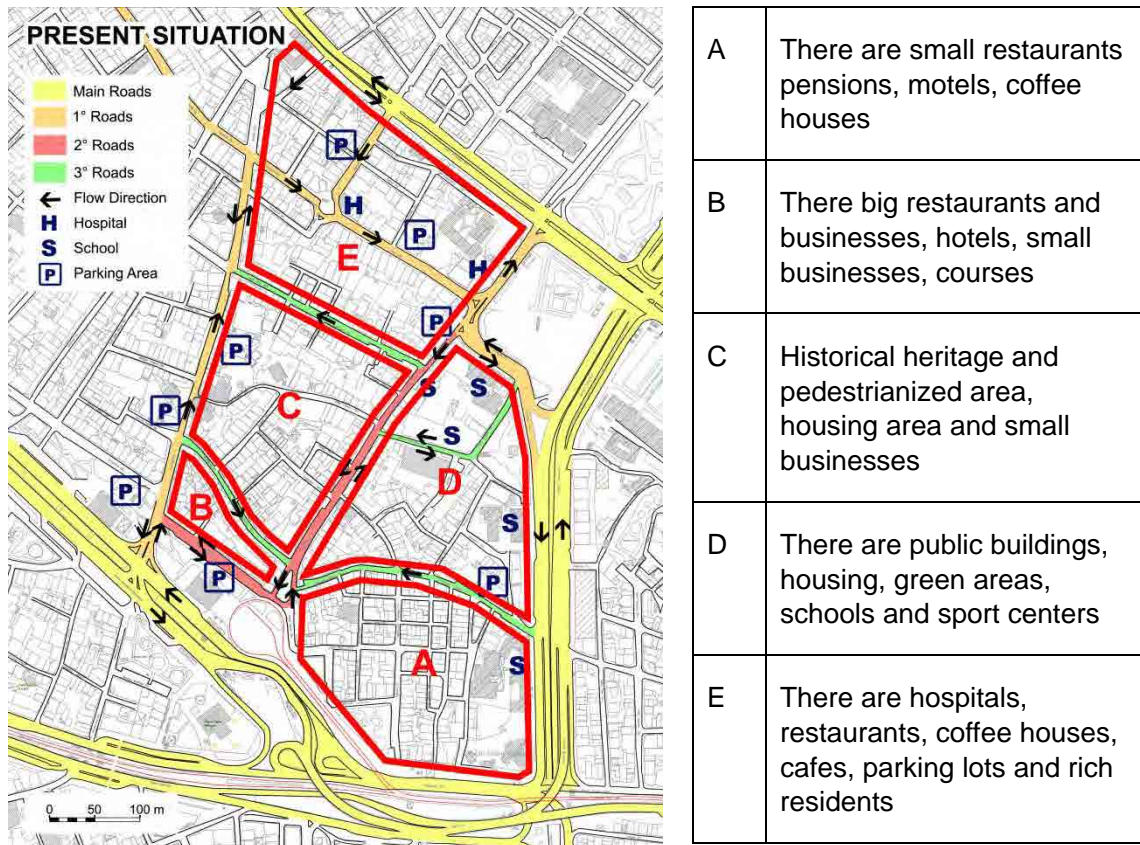


Figure 4.5 Outline of Target Area of 2<sup>nd</sup> Social Experiment

#### 4.6 Implementation Schedule

##### (1) Basic policy

As a result of site survey, in order to improve the residential environment and pedestrian environment, following traffic regulations were proposed.

- Preparation of pedestrianized road
- One way regulation for narrow road
- Access regulation based on vehicle type
- The residents of target area can enter to inside of the sub zone
- Regulation of through traffic
- Parking regulation
- Regulation of logistics activity

##### (2) Detail of the traffic regulation

Based on the basic policy above, detail of the traffic regulations were proposed such as shown below. The roads indicated in orange will be closed to the vehicle traffic and can be used only by pedestrians due to the dense commercial (restaurants) and office services temporary barriers will be located at entrances of area.



- 1) The red points indicate the locations where HGS system can be implemented for checking the entry vehicle.
- 2) The bottlenecks caused by the historical buildings on Horhor Street effects the traffic flow negatively. In order to decrease those negative effects it is planning to allow one-way traffic flow.
- 3) It is planning to allow only one-way roadside parking.
- 4) There is no implementation in the areas where there are schools, hospitals, mosques etc. in order to let them to get service.
- 5) The operation hours of the social experiment of traffic cell system will be between 08:00 – 17:00.
- 6) The roads which do not indicate by color will reject a through traffic. Residents and workers can enter to inside by their vehicle.
- 7) Logistics vehicles can enter to area during night time (22:00 to 7:00). However a post service and transportation of perishable goods may have a permission to enter to the area depend on a result of the logistics survey.

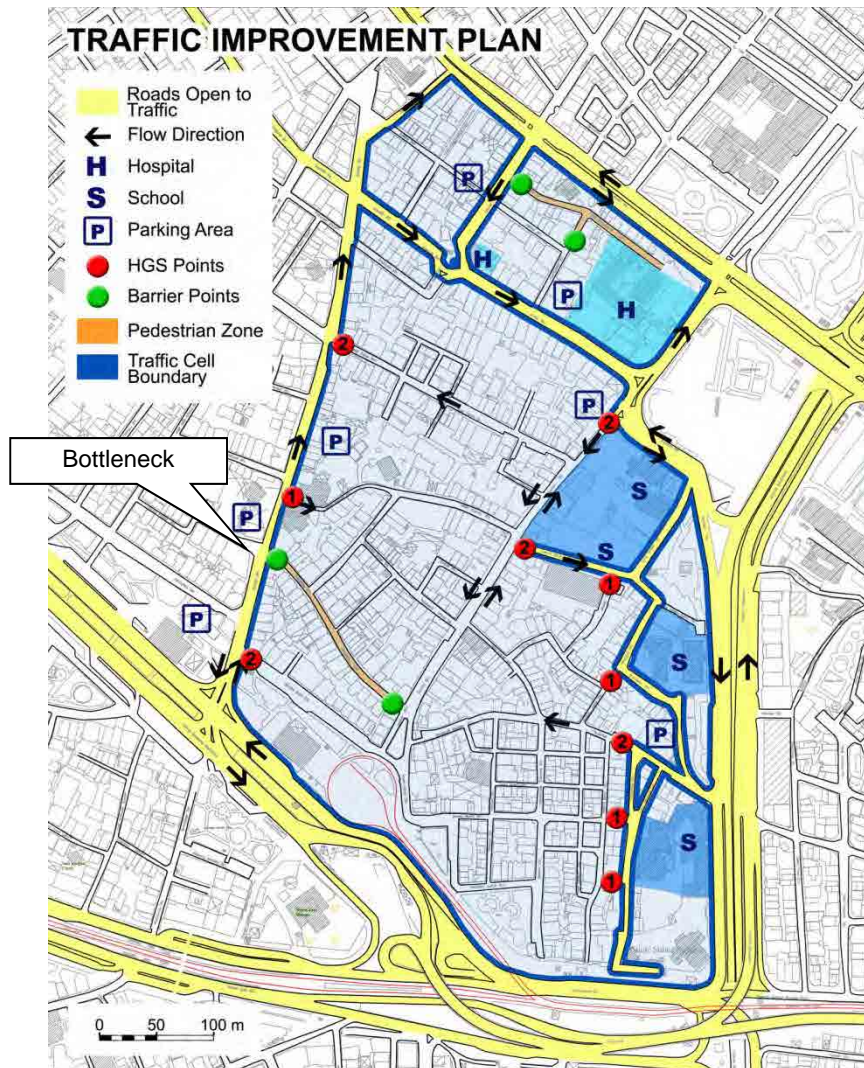


Figure 4.6 Traffic Regulation Plan

HGS system which will be used by the 2nd social experiment is an electronic toll collection system in turkey. It will found a tag which is installed in vehicle, then toll will be collected.

In this social experiment, a tag will be provided to residents and workers in target area. If a vehicle which does not have the tag enters to the area, the driver of the car should pay toll at a later date. PTT which manages HGS planned to provide HGS system without charge.



**Figure 4.7 HGS System**

#### 4.7 Postponement of 2<sup>nd</sup> Social Experiment

IMM requested to postpone the 2<sup>nd</sup> social experiment to JICA because IMM considered the election which was conducted on March 2014.

JICA agreed their request on JCC. 2<sup>nd</sup> social experiment was not conducted during the project period.

## 5. Challenges, Devisal and Lessons for Implementation Project

### 5.1 Activities toward the Achievement of Project Objectives

In the Technical Cooperation Project of JICA, activities prescribed in PDM need to be conducted for achieving the project objectives. And this project has been started based on PDM also.

In that PDM, there are three activities, (i) Traffic characteristics of the Istanbul historical area are clarified and concerns on transportation planning are identified. (ii) Transport department's capacities are strengthened through planning, implementing, evaluating, and analyzing Social Experiments of TDM measures, and (iii) Experience of the Social Experiments is summarized as guidelines and shared among relevant departments of IMM. And the objective of this project, "Transport Department's implementation capacities of TDM measures for the Istanbul historical area are strengthened" would be achieved by those activities.

In this project, JICA project team implemented some additional technical activities as follows to achieve the objective of project effectively.

#### (1) Capacity building of TDM measures

##### 1) Learning about TDM measures

JICA project team supported counterparts to survey and check good practices of TDM measures in the world by using reports and internet and make a long list of TDM measures.

##### 2) Necessity of TDM measures in Istanbul and Historical Peninsula

JICA project team supported counterparts to make a short list of TDM measures for Istanbul and Historical Peninsula based on long list of TDM measures, Urban Transport Master Plan, and other related reports.

##### 3) Correction of TDM measures in Istanbul and Historical Peninsula

Counterparts evaluated a short list of TDM measures by the following criteria and made the project list of TDM measures for Istanbul and Historical Peninsula.

Easiness of Implementation: Easiness of Decision Making, Easiness of having consensus between related departments, and Not require big investment and financial source

- Necessity: Necessity in protection of historical heritage and Necessity in implementation in a big scale
- Benefit: Improvement of security, Reduction of congestion, Reduction of noise, vibration and air pollution, Improvement of parking and Improvement of conditions about pedestrians

**Table 5.1 Project list of TDM measures for Istanbul and Historical Peninsular**

no	no weight		Weight to Necessity and Effectiveness		Weight to Necessity only	
		Score		Score		Score
1	Improving pedestrian and bicycle transportation	5.00%	Improving pedestrian and bicycle transportation	5.00%	Improving pedestrian and bicycle transportation	5.03%
2	Developing Bicycle Transportation Services	4.85%	Developing Bicycle Transportation Services	4.85%	Developing Bicycle Transportation Services	4.88%
3	Reducing Road-side Parking	4.85%	Reducing Road-side Parking	4.85%	Reducing Road-side Parking	4.85%
4	Public Transportation Priority	4.80%	Public Transportation Priority	4.80%	Public Transportation Priority	4.84%
5	Integration of Bicycle and Public Transportation	4.78%	Integration of Bicycle and Public Transportation	4.78%	Integration of Bicycle and Public Transportation	4.80%
6	Campaigns about discouraging private car usage	4.77%	Campaigns about discouraging private car usage	4.77%	Campaigns about discouraging private car usage	4.76%
7	Limitation of freight vehicles access	4.72%	Limitation of freight vehicles access	4.72%	Prohibiting the vehicles at specific hours during daytime	4.70%
8	Bike and Ride	4.66%	Bike and Ride	4.66%	Limitation of freight vehicles access	4.68%
9	Prohibiting the vehicles at specific hours during daytime	4.64%	Prohibiting the vehicles at specific hours during daytime	4.64%	Bike and Ride	4.66%
10	Improving the Stops and Stations	4.60%	Improving the Stops and Stations	4.60%	Intelligent transportation systems	4.64%

(2) Coordination among related agencies for implementation of Social Experiments

JICA project team made the following table and organized stakeholders of two social experiments for counterparts.

**Table 5.2 Stakeholders of Social Experiments**

Items		1 <sup>st</sup> Social Experiment	2 <sup>nd</sup> Social Experiment
Purpose of Social Experiment		Effective Utilization of Parking Facility Promote of P&R	Regulation of Through Traffic, Providing of Pedestrian Space
Beneficiary	Beneficiary Group	Parking Users	Residential and Workers in Target Area
	Citizen Group which participate to the social Experiment directory.	no.	Residential Community and Commercial Group Target Area
	Other Groups	no.	Not decided
Government	Preparation and Planning	IMM Traffic Directorate, IMM Road Maintenance and Management Directorate, iSPARK, TAVG	IMM Traffic Directorate, IMM Road Maintenance and Management Directorate, FATIH Government
	Permission	IMM Traffic Directorate	IMM Traffic Directorate (UKOME/UTK)
	Implementation Agency	iSPARK	IMM Traffic Directorate, FATIH Government
	Supporting Agency	IMM Traffic Directorate, IMM Road Maintenance and Management	MM Road Maintenance and Management
Relationship with JICA Team	C/P and participation section of WFM	IMM Traffic Directorate, IMM Road Maintenance and Management, iSPARK, TAVG	IMM Traffic Directorate, IMM Road Maintenance and Management Directorate, FATIH Government
	JCC Members	IMM Traffic Directorate	IMM Traffic Directorate
	Involving section for preparation of social experiment	Bimtas (Survey) Traffic Police	Bimtas (Survey) Traffic Police
	Involving section to get the permission for social experiment	no.	Not decided

## 6. Recommendations for Achieving the Overall Goal of Project

Overall goal of this project is that appropriate Traffic Demand Management (TDM) measures will be implemented in the Istanbul historical area to create comfortable city environment. And some recommendations for achieving the overall goal are mentioned as follows:

### (1) Holding Regular Meetings for Working-Level

There are two urban transport policymaking committees, UKOME (Transportation Coordination Board) and UTK (Transport and Traffic Management Board) in IMM. Those committees are organized by department manager or higher and rank as the final decision committees for transport-related policies. However, during the making of the preliminary plans, there is not any committees that coordinate related agencies' employees.

In this project, coordination meeting consisting of transport related agencies were held every Friday. In these coordination meetings, working-level staff of related agencies discussed about urban transport issues and made the action plan of social experiment. So the coordination meeting consisting of working-level staff needs to be organized.

### (2) Coordination with Department other than Transport Department for expanding TDM Measures Implementations

As before mentioned, working group was consisted for implementing social experiments in this project. But this working group was composed mainly from Transport Planning Directorate. They have useful and many experiments, but they have little experience in implementing projects. So it took a long time to implement the 1<sup>st</sup> Social Experiment from making action plan.

At the making plan stage, working group consisting of working-level staff can respond to implement social experiments. But if some TDM measure is conducted based on the results of its social experiment, working group needs to coordinate with other related departments.

### (3) Conducting Public Relations Activities

The important lesson learned from the 1<sup>st</sup> Social Experiment is conducting public relations. Public relations are very important activity for conducting TDM measures. Because understandings and corporations of citizens are very important issues to make TDM measures successful.

Now there are some TDM measures, P&R, P&Bike, Bus Priority Lane and others in Istanbul without enough public relation activities. And conduction public relation activities are very useful methods not just for TDM measures but for increasing demand of public transports, Marmaray railway, buses and others.

### (4) Coordination between Transport-related Agencies and Urban Development-related Agencies

When the implementation plan of the 1<sup>st</sup> Social Experiment was being made, 1 parking which was planned to use for the social experiment was closed by IMM, and implementation plan needed to be revised. Moreover, the short-term development plan of the Yenikapi Transfer Center was being made; it was hard to get any information and data. These issues are under the control of the Department of Survey and Projects, and there was a lack of information sharing with that department.

Those two departments have same agenda from the point of view of improvement of the urban transport environment in Istanbul, and if two departments have good coordination, urban transport environment in the historical peninsula will be better with TDM measures.

- (5) Understanding about Traffic-related Surveys and Demand Forecast Analysis corresponding to Regional Development Plan

Some staff of Directorate of Transport Planning which is main counterpart of this project are same staff who formulated the Urban Transport Master Plan in Istanbul, and they have enough capacities and experiments to conduct traffic-related surveys and analyze. On the other hand, they had not enough experiments to conduct surveys and analyze traffic demand at regional area.

In this project, two regional transport plans, the 2<sup>nd</sup> Social Experiment and Yenikapi Transfer Center were formulated and those projects are good experiences and training to build their capacities. And they need to build those capacities continuously.



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## Appendix-1 PDM

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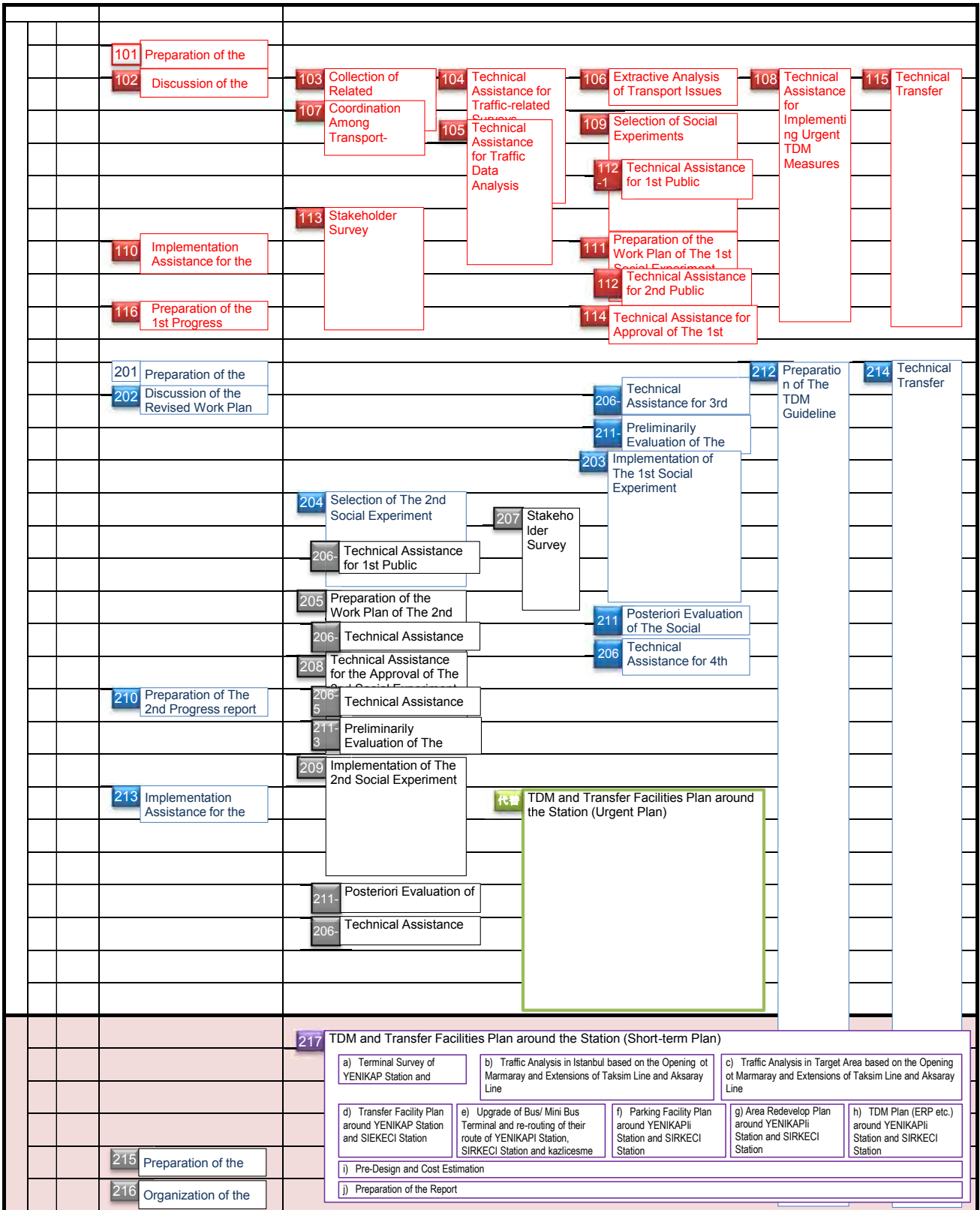
## Project Design Matrix (PDM)

Project Title: The Project on Traffic Demand Management (TDM) for Historical Area in Istanbul, the Republic of Turkey  
 Target Group: Transport Department of Istanbul Metropolitan Municipality (IMM)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
<p><b>Overall Goal</b></p> <p>Appropriate TDM measures will be implemented in the Istanbul historical area to create comfortable city environment.</p>	<ul style="list-style-type: none"> <li>More than <b>two (2) TDM measures</b> are implemented in the Istanbul historical area.</li> <li>Visible improvement is realized by the TDM measures in the Istanbul historical area.</li> </ul>	<ul style="list-style-type: none"> <li>Based on an Interview Survey with the transport department of IMM.</li> <li>Through an Evaluation Survey between before and after TDM</li> </ul>	
<p><b>Project Purpose</b></p> <p>Transportation Department's implementation capacities of TDM measures for the Istanbul historical area are strengthened.</p>	<ul style="list-style-type: none"> <li>More than <b>80% of staffs</b> of the transportation department evaluate that implementation capacities of TDM measures are strengthened.</li> </ul>	<ul style="list-style-type: none"> <li>Interview and Questionnaire survey with the transportation department's staff</li> </ul>	<p>Policy priority on TDM of IMM is not drastically changed during the project period.</p>
<p><b>Outputs</b></p> <p>1. Traffic characteristics of the Istanbul historical area are clarified and issues on transportation planning are identified.</p>	<p>1.1 <b>Survey reports</b> are prepared, describing traffic characteristics, transport planning issues and stakeholders' concerns on transportation improvement</p>	<p>1.1 A series of Transport Survey Reports</p>	<p>Cooperation from relevant entities and organizations is secured.</p>
<p>2. Transportation department's capacities are strengthened through planning, implementing, evaluating, and analyzing social experiments of TDM measures.</p>	<p>2.1 More than <b>80% officers</b> are trained in training courses and seminars.</p> <p>2.2 <b>Two (2) TDM social experiments</b> are implemented.</p> <p>2.3 Implementation reports are developed including analysis results.</p>	<p>2.1 Records of training courses and seminars</p> <p>2.2 Project reports of Social experiments</p> <p>2.3 Implementation reports of TDM social experiments</p>	
<p>3. Experience of the social experiments is summarized as guidelines and shared among relevant departments of IMM.</p>	<p>3.1 <b>Guidelines</b> for TDM measures implementation are prepared.</p> <p>3.2 The guidelines are disseminated to relevant departments of IMM.</p>	<p>3.1 Guidelines Text</p> <p>3.2 Project reports</p>	

## Appendix-2 Flowchart

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Deleted Items
  Alternative Items
  Extension Term
  Additional Items

## Appendix-3 Plan of Operation

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## Appendix-4 Assignment of Experts

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Appendix-5-1 1st Joint Coordination Committee  
Minutes of Meeting and Power Point

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**MINUTES OF MEETING AT  
1<sup>st</sup> JOINT COORDINATION COMMITTEE**

**THE COMMENCEMENT OF  
THE PROJECT ON TRAFFIC DEMAND MANAGEMENT OF  
HISTORICAL AREA IN ISTANBUL**

Istanbul, 18<sup>th</sup> August, 2011

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Mr. Dursun BALCIOĞLU  
Head of Transportation Department  
Istanbul Municipality

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Mr. Hiroyuki TAKADA  
Senior Representative  
JICA Turkey Office,  
Japan International Cooperation Agency

## **1. Commencement of the Project**

Based upon the bilateral agreements of Minutes of Meeting dated 5<sup>th</sup> November, 2010 and Record of Discussions dated 20<sup>th</sup> April, 2011, signed between the Government of Turkey, represented by Istanbul Metropolitan Municipality (referred to as “IMM”) and Japan International Cooperation Agency (JICA), JICA dispatched an expert team, headed by Dr. Katsuhide NAGAYAMA, to Istanbul to commence “the Project on Traffic Demand Management of Historical Area in Istanbul” (referred to as “the Project”) on 26<sup>th</sup> July 2011.

IMM accepted the JICA expert team and kindly provided the office space with sufficient furniture and basic office equipment such as electricity and internet connections for the JICA expert team at the building of Transportation Department, IMM, as promised in the Record of Discussions dated 20<sup>th</sup> April, 2011.

The JICA expert team started its work activities in Istanbul with paying a courtesy call to Mr. Dursun BALCIOĞLU, Head of Transportation Department, IMM, followed by holding a kick-off meeting with the counterpart working team of IMM headed by Mr. İhsan Hadi KARADENİZ.

## **2. Administrative Mechanism for the Project**

In accordance with the Record of Discussions dated 20<sup>th</sup> April, 2011, an administrative structure for management of the Project has been organized with two levels of committees to assure effective and successful implementation of the technical cooperation for the Project, namely, 1) Steering Committee where technical issues are discussed and oriented for their solutions in the course of the Project; and 2) Joint Coordination Committee, the highest decision-making venue for the Project, whose functions are to approve the Project basic framework, to formulate annual work plans, review the progress and direct major issues that may arise during the implementation of the Project.

The Steering Committee, whose members are as listed in Appendix-1, is chaired by Director of Transportation Planning Directorate, IMM, and meetings of the Steering Committee are occasionally held on technical issue-basis and it will be arranged every week regularly.

Whilst, the Joint Coordination Committee, chaired by Head of Transportation Department, IMM, is held at least once a year. Joint Coordination Committee can be thought as a part of UTK. Meeting can be hold within the compass of UTK program and in necessary situations. Additive members can join the meeting according to the subjects discussing in the meeting. Members of the Joint Coordination Committee are responsible representatives from Fatih Municipality as well as transport policy-related departments.

## **3. 1st Joint Coordination Committee Meeting**

The 1<sup>st</sup> Joint Coordination Committee meeting was held at the meeting room of the IMM building at 11:00 hrs on 18<sup>th</sup> August, 2011, chaired by Mr. Dursun BALCIOĞLU, Head of Transportation Department, IMM, with attendants from transportation-related authorities as shown in Appendix-2., Mr. Hiroyuki TAKADA, Senior Representative of JICA Turkey Office also attended at the meeting.



The chairman commenced the meeting with his opening remarks, addressing the importance of the Project and his strong desire for successful outcomes of the Project. Dr. Katsuhide NAGAYAMA, Chief Advisor, JICA expert team, then made a presentation on the outline of, technical approach to and the working schedule for the Project, showing proposals of Project Design Matrix (PDM) and Plan of Operation (PO) which were slightly amended from the original ones agreed on Minutes of Meeting dated 5<sup>th</sup> November, 2010 in terms of time schedule adjusted to meet the reality.

In conclusions, the following are discussed at the meeting:

- 1) The subjects of Project Design Matrix (PDM), Plan of Operation (PO) and Annual Plan shown in Appendices 3, 4, 5 respectively were discussed.
- 2) JCC member list approved in Minutes of Meeting in 20 April 2011 was revised at the end of this meeting. As a result, JCC members are; Directorate of Transportation Planning, Directorate of Traffic, Directorate of Road Maintenance and Repair, Directorate of Public Transportation, Directorate of Transportation Coordination and Fatih Municipality.
- 3) In the meeting, necessity of taking UTK and UKOME decision according to the content of the project implemented in the working period was emphasized.
- 4) The Project will be conducted under strong initiatives by the IMM counterpart team in close collaboration with the JICA expert team.

#### **4. The Way Forward**

It was also confirmed that the following activities in coming months would be undertaken in order to facilitate the implementation of the Project:

- 1) The joint-technical meetings with IMM counterpart personnel and JICA expert team members shall be held on a weekly basis to exchange and share mutual expertise and experiences to seek for TDM measures appropriate for the reality of Istanbul.
- 2) A series of transport surveys, including traffic counting surveys at cordon line and major intersections, bus passenger survey, road speed survey, parking survey and interview surveys to residents and tourist in the historical peninsular area, will be prepared to conduct as soon as possible by the IMM counterpart team jointly with technical support by the JICA expert team.
- 3) A study tour will be conducted for the counterpart team to get concrete insights into the practical TDM measures in advanced cities in Europe, such as Rome, Firenze and Pisa in Italy that have similar characteristics to Istanbul. The study tour for 6~8 counterpart persons will be realized in January 2012 with JICA's financial support.

## **Appendix 1: Members of Steering Committee and Joint Coordination Committee**

### **Steering Committee (SC)**

<b>Roles</b>	<b>Position</b>	<b>Name</b>
Project Manager	Director of Transport Planning Directorate of Transport Department of IMM	Ahmet Hamdi GÜNER
Members	Officer of Transport Planning Directorate	İhsan Hadi KARADENİZ
	Officer of Transport Planning Directorate	Nesligül ÜNAL
	Officer of Transport Planning Directorate	Neriman ŞAHİN
	Officer of Transport Planning Directorate	Dilek ÇOL
	Officer of Transport Planning Directorate	Emel GÜNAY
	Officer of Transport Planning Directorate	Mehmet ÇAKIR
	Officer of Transport Planning Directorate	Nilüfer DÜNYA
	Officer of Transport Planning Directorate	Berna ÇALIŞKAN
	Officer of Transport Planning Directorate	Serap ÇETİNKAYA
	Officer of Transport Planning Directorate	Serkan ŞİMŞEK
	Officer of Transport Planning Directorate	Filiz YILDIRIM
	Officer of Transport Coordination Directorate	İsa CERRAH
	Officer of Traffic Directorate	Hasan Kahraman ÇAVUŞ
	Officer of Mass Transport Services Directorate	Osman KILIÇASLAN
	Officer of Road Maintenance and Repair Directorate	Işıl ÇETİN
	Officer of Fatih Municipality	Seda ÇALIŞKAN

### **Joint Coordination Committee (JCC)**

<b>Roles</b>	<b>Organization</b>	<b>Name</b>
Chairperson	Transport Department	Dursun BALCIOĞLU
	Transport Planning Directorate	Ahmet Hamdi GÜNER
	Transport Coordination Directorate	Adil KARAİSMAİLOĞLU
Turkish Member	Traffic Directorate	M. Necip ERTAŞ
	Mass Transport Services Directorate	Burhan KALE
	Road Maintenance and Repair Directorate	Mehmet ÖZÇELİK
	Fatih Municipality	Adnan GÜLER
JICA	Chief Representative of JICA Turkey Office	Akio SAITO
	JICA Experts	Katsuhide NAGAYAMA

## **Appendix-2: Attendants at the 1<sup>st</sup> Joint Coordination Committee**

Date / Time: 18<sup>th</sup> August 2011, 11:00 – 12:00  
Venue: Office of the Head of Transportation Department, IMM

### List of Attendants

<b>No</b>	<b>Name</b>	<b>Organization</b>	<b>Position</b>
<b>Turkish Side</b>			
1	Mr. Dursun BALCIOĞLU	IMM	Head of Transportation Department
2	Mr. Ahmet Hamdi GÜNER	IMM	Director of Transportation Planning
3	Mr. Mehmet ÖZÇELİK	IMM	Director of Road and Maintenance
4	Mr. İhsan Hadi KARADENİZ	IMM	Deputy Director, Transportation Planning
5	Ms. Nesligül ÜNAL	IMM	Coordinator, Transportation Planning
6	Ms. Neriman ŞAHİN	IMM	Civil Engineer (Msc), Transportation Planning
7	Mr. Mehmet USTAOĞLU	Fatih Municipality	Director of Technical Works
8	Mr. Adnan GÜLER	Fatih Municipality	Deputy Manager
9	Mr. Azat YALÇIN	Fatih Municipality	Landscape Architect
10	Ms. Seda ÇALIŞKAN	Fatih Municipality	Architect
<b>JICA</b>			
1	Mr. Hiroyuk TAKADA	JICA Turkey Office	Senior Representative
<b>JICA Expert Team</b>			
1	Dr. Katsuhide NAGAYAMA	JICA Expert Team	Team Leader/Chief Advisor
2	Mr. Tamaoki WATANABE	JICA Expert Team	Vice Team Leader/Transport Management
3	Mr. Takeshi SHINOMURA	JICA Expert Team	Social Experiment Management
4	Ms. Ece Işın DOĞAN	JICA Expert Team	Secretary/Interpreter

# The Project on Traffic Demand Management of Historical Area in Istanbul

1<sup>st</sup> Joint Coordination Committee Meeting  
for  
Work Plan

1

## Contents

1. Outlines of the Project
2. PDM of the Project
3. PO of the Project
4. Work-flow of the Project
5. Time Framework of the Project
6. Project Site
7. Options of TDM Measures
8. Implementation Structure

\*\*\*

- **What is Social Experiment?**
- **What are TDM? Experiences in other cities**

2

# 1. Outlines of the Project

## 1.1 Overall Goal

Appropriate Traffic Demand Management (TDM) measures will be implemented in the Istanbul historical area to create comfortable city environment.

## 1.2 Project Purpose

Transportation Department’s implementation capacities of TDM measures for the Istanbul historical area are strengthened.

## 1.3 Outputs

Output 1: Traffic characteristics of the Istanbul historical area are clarified and transportation planning issues are identified.

Output 2: Transportation department’s capacities are strengthened through planning, implementing, evaluating, and analyzing Social Experiments of TDM measures.

Output 3: Experience of Social Experiments is streamlined as “guidelines for TDM” and shared among relevant departments of IMM.

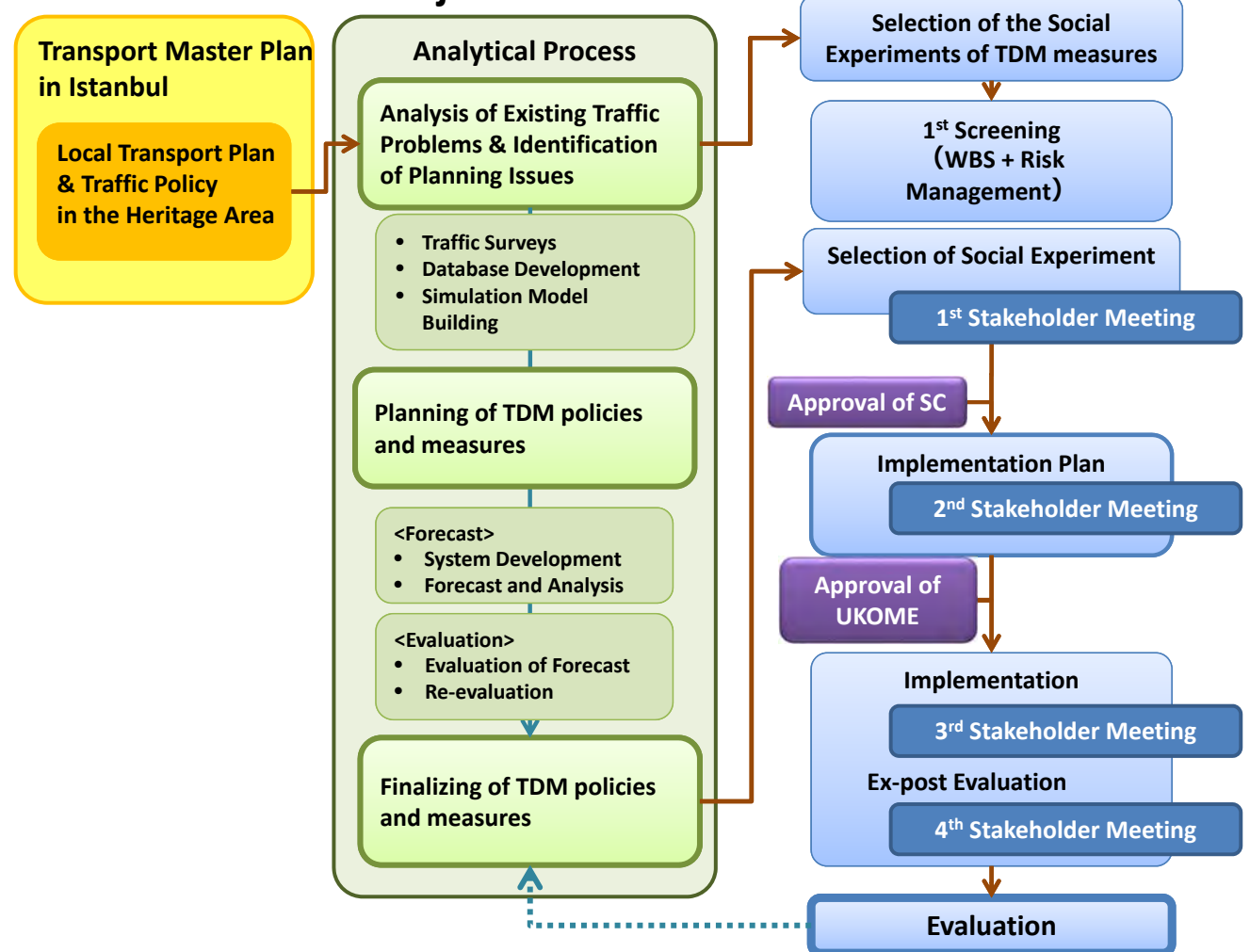
# 2. PDM of the Project

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
<p><b>Overall Goal</b></p> <p>Appropriate TDM measures will be implemented in the Istanbul historical area to create comfortable city environment.</p>	<ul style="list-style-type: none"> <li>More than <b>two (2) TDM measures</b> are implemented in the Istanbul historical area.</li> <li>Visible improvement is realized by the TDM measures in the Istanbul historical area.</li> </ul>	<ul style="list-style-type: none"> <li>Based on an Interview Survey with the transport department of IMM.                             <ul style="list-style-type: none"> <li>Through an Evaluation Survey between before and after TDM</li> </ul> </li> </ul>	
<p><b>Project Purpose</b></p> <p>Transportation Department’s implementation capacities of TDM measures for the Istanbul historical area are strengthened.</p>	<ul style="list-style-type: none"> <li>More than <b>80% of staffs</b> of the transportation department evaluate that implementation capacities of TDM measures are strengthened.</li> </ul>	<ul style="list-style-type: none"> <li>Interview and Questionnaire survey with the transportation department’s staff</li> </ul>	Policy priority on TDM of IMM is not drastically changed during the project period.
<p><b>Outputs</b></p> <p>1. Traffic characteristics of the Istanbul historical area are clarified and issues on transportation planning are identified.</p> <p>2. Transportation department’s capacities are strengthened through planning, implementing, evaluating, and analyzing social experiments of TDM measures.</p> <p>3. Experience of the social experiments is summarized as guidelines and shared among relevant departments of IMM.</p>	<p>1.1 <b>Survey reports</b> are prepared, describing traffic characteristics, transport planning issues and stakeholders’ concerns on transportation improvement</p> <p>2.1 More than <b>80% officers</b> are trained in training courses and seminars.</p> <p>2.2 <b>Two (2) TDM social experiments</b> are implemented.</p> <p>2.3 Implementation reports are developed including analysis results.</p> <p>3.1 <b>Guidelines</b> for TDM measures implementation are prepared.</p> <p>3.2 The guidelines are disseminated to relevant departments of IMM.</p>	<p>1.1 A series of Transport Survey Reports</p> <p>2.1 Records of training courses and seminars</p> <p>2.2 Project reports of Social experiments</p> <p>2.3 Implementation reports of TDM social experiments</p> <p>3.1 Guidelines Text</p> <p>3.2 Project reports</p>	Cooperation from relevant entities and organizations is secured.

# 3. PO of the Project

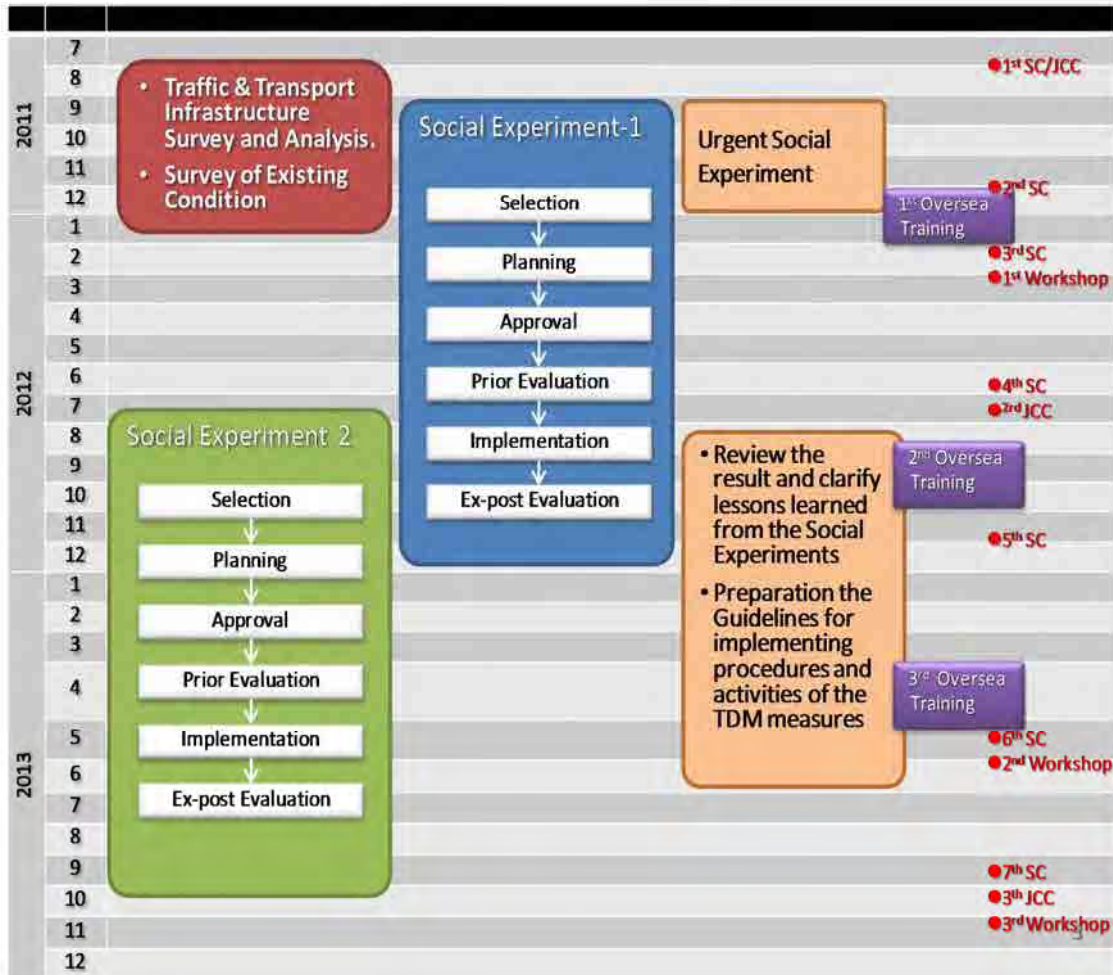
Year	2011				2012												2013												Entity/Departmen in charge	Responsi		
	Month	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9			10	11
Duration	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
<b>Output 1 Traffic characteristics of the Istanbul historical area are clarified and concerns on transportation planning are identified.</b>																																
1-1	Review outline of relevant entities, organizations and stakeholders that are involved in transportation planning in the Istanbul historical area.cal																														Transport Planning Directorate/ Transport Coordination Directorate	Nesliçul Unal Neriman Şah
1-2	Confirm implementation status of activities proposed in the JICA master plan study as well as relevant laws and regulations that have relations with traffic management plans, public transportation development plans, urban conservation plans, and transportation plans.																														Transport Planning Directorate/ Transport Coordination Directorate / +DU79Mass Transport Services Directorate	Nilüfer Dünya
1-3	Conduct a traffic survey, traffic facilities survey, questionnaire survey, etc.																														Transport Planning Directorate	Mehmet Çaku Nilüfer Dünya Dilek Çol, Serap Çetink Serkan Şimş Nesliçul Unal
1-4	Analyze the survey results.																														Transport Planning Directorate	Mehmet Çaku Nilüfer Dünya Dilek Çol, Serap Çetink
<b>Output 2 Transportation department's capacities are strengthened through planning, implementing, evaluating, and analyzing social experiments of TDM measures.</b>																																
2-1	Introduce information sharing tool among relevant agencies of IMM in order to review the progress of measures related to the Project.																														Transport Planning Directorate/ Transport Coordination Directorate	Nesliçul Unal Neriman Şah
2-2	Review and implement already planned TDM measures to be done urgently in the Istanbul historical area.																														Transport Planning Directorate/ Transport Coordination Directorate/ Traffic Directorate/Mass Transport Services Directorate / Fatih Municipality	Emel Günay
2-3	Organize seminars and training courses on TDM measures for staff from the relevant departments of IMM.																														JICA/Transport Planning Directorate/ Transport Coordination Directorate/ Traffic Directorate/Mass Transport Services Directorate / Road Maintenance and Repair Directorate/ Fatih Municipality	Neriman Şah
2-4	Formulate an implementation plan of the TDM social experiments.																														Transport Planning Directorate	Nesliçul Unal Serap Çetink Mehmet Çaku
2-5	Perform required permission and authorization procedure to implement the TDM social experiments																														Transport Planning Directorate/ Transport Coordination Directorate	Neriman Şah
2-6	Implement the TDM social experiments in the Istanbul historical area.																														Transport Planning Directorate/ Road Maintenance and Repair Directorate/Fatih Municipality	Neriman Şah
2-7	Monitor and evaluate the TDM social experiments.																														Transport Planning Directorate/ Traffic Directorate/Fatih Municipality	Nesliçul Unal Mehmet Çaku Serap Çetink
<b>Output 4 Experience of the social experiments is summarized as guidelines and shared among relevant departments of IMM.</b>																																
3-1	Clarify results and lessons learned from the social experiments for implementing TDM measures.																														Transport Planning Directorate/ Traffic Directorate/Fatih Municipality	Nesliçul Unal Mehmet Çaku Serap Çetink
3-2	Prepare the guidelines describing implementation procedures and activities of the TDM measures.																														Transport Planning Directorate	İhsan Hadi Ka Nesliçul Unal Serap Çetink
3-3	Share the guidelines among entities and organizations of the relevant departments of IMM.																														Transport Planning Directorate	Ahmet Hamd

# 4. Work-flow of the Project





## 5. Time Framework of the Project



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## 6. Project Site

Project Site: Fatih District

- World Heritage Area:
1. the Archaeological Park
  2. Süleymaniye Mosque and its associated Conservation Area
  3. Zeyrek Mosque (Pantocrator Church) and its associated Conservation Area
  4. Land Walls of Istanbul



- Fatih District is a **Complex Town** with historical assets and facilities for people's lives such as residential houses, hospitals, universities, commercial shops & hotels, etc.
- Besides **World Heritage Area** specified by UNESCO, there are "**Historical Conservation Areas**" registered by Istanbul.



- TDM measures need to be implemented with respect to each area's characteristics under a **Zoning System**.

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## 7. Options of TDM measures

### Option 1: Parking Control

Crackdown on illegal parking cars, and guide to registered public & private parking lots by **information devices** such as SMS, Information Boards and others.

### Option 2: Park and Ride

Designate "**Public Transportation Priority Areas**" and provide with parking lots for private car users to transfer to public transportation modes

### Option 3: Road Pricing System

Impose some surcharge on vehicles entering "**Traffic-limited Zone**" during a certain period of time.

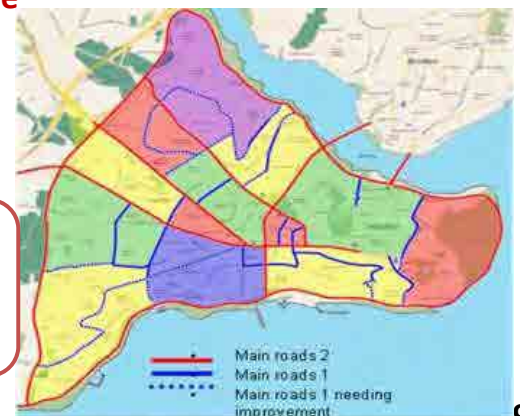
### Option 4: Through Traffic Control

Restrict traffic flows passing through "**Traffic Control Zone**"

### Option 5: Traffic Cell System

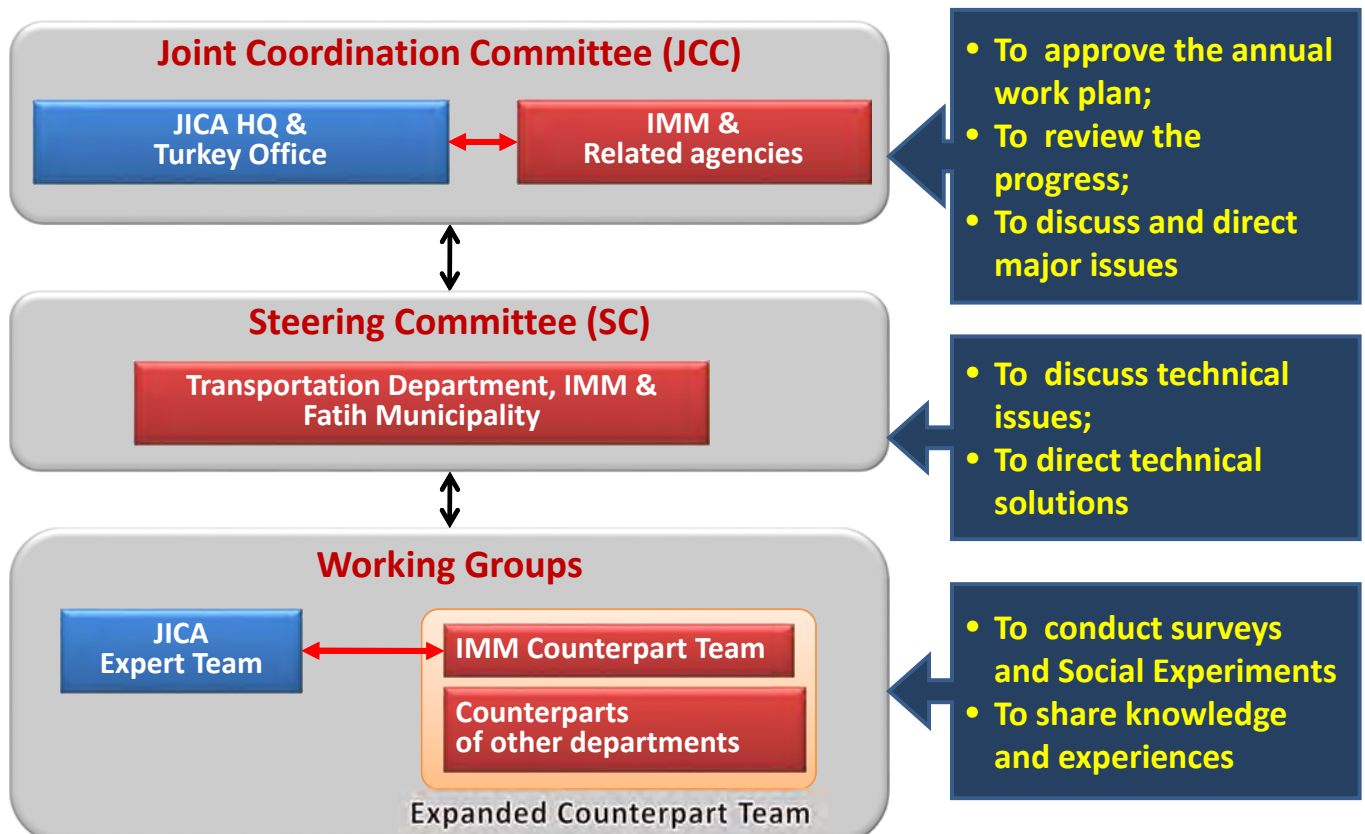
Structure traffic cells where through-traffic is controlled inside.

**Social Experiments of TDM Measure need to be selected with Project Management and Risk Management.**



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## 8. Implementation Structure



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Appendix-5-2 2nd Joint Coordination Committee  
Minutes of Meeting and Power Point

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**MINUTES OF MEETING AT  
2nd JOINT COORDINATION COMMITTEE**

**THE PROGRESS OF  
THE PROJECT ON TRAFFIC DEMAND MANAGEMENT OF  
HISTORICAL AREA IN ISTANBUL**

**Istanbul, 9th May, 2012**

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Mr. Dursun BALCIOĞLU  
Head of Transportation Department  
Istanbul Metropolitan Municipality

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Mr. SAITO AKIO  
Senior Representative  
JICA Turkish Office  
Japan International Cooperation Agency

## 1. **2nd Joint Coordination Committee Meeting**

2nd JCC meeting was held on 9 May 2012 with the participation of Head of IMM Transportation Department Dursun BALCIOĞLU, Manager of Transportation Planning Directorate Ahmet Hamdi GÜNER, Deputy Manager of Transportation Planning Directorate Onursal Baş, Chief of Transportation Planning Department Nesligül Ünal and her team, Manager of Transportation Coordination Adil KARAİSMAİLOĞLU, Chief Representative of JICA Turkey Office Akio SAITO, Program Manager of JICA Turkey Office Ali Bekin and JICA Team Vice Project Manager Tamaoki WATANABE and working team.

## 2. **Discussion Points**

The chairman Dursun Balcıoğlu commenced the meeting with his opening remarks, addressing the importance of the Project and his strong desire for successful outcomes of the Project.

And Ms. Nesligul Unal then made a presentation on the works that is done up to this day within the scope of the project and the following issues.

### (1) Progress and Outcomes

- Time Framework is discussed to identify current situations and issues of the Istanbul historical area. These are selecting and approving of the 1st social experiment , providing technical assistance for traffic-related surveys, holding the Weekly Friday Meeting(WFM), Conducting the 1st oversea training, implementing assistance for the advisory mission, holding the 1st TDM Seminar and the delay of Traffic-related Surveys.

### (2) Work Plan and PO

- In Work Plan, it is added to conduct a study meeting on TDM measures to be implemented in historical area with young researchers. In addition to that reports will be prepared every six month and seminar will be hold at the end of 2013.

- It is decided to extend the schedule of traffic-related survey

### (3) Implementation of the 1<sup>st</sup> Social Experiments

- The 1st Implementation Committee was held.

- SPS will be implemented by three packages, 1. Provision of the parking information by Smart Phone & SMS, 2. Preparation of parking guide board, and 3. Illegal parking enforcement

### (4) Provision of the 2<sup>nd</sup> Social Experiment

- The Traffic Cell will be implemented as the 2nd social experiment. However target area and packages of TDM measures are not fixed yet.

### (5) Countermeasure against Remaining Issues from JICA Advisory Mission

Countermeasures against the issues : Communication with High Officials for the Smooth Implementation, Involvement of Local Academic Experts/Resources, Allocation of Personnel Resources, Output of The Project, The 1st & 2nd Social Experiments, Traffic management around the New Yenikapi station ; are given.



In addition to that Dursun Balcıoğlu emphasized the importance of attending to the meetings so that he requested attendance list of the meetings to check the attendance of related departments.

In conclusion, the following are discussed at the meeting:

- 1) The organization of the regular meetings with young academicians which was strongly suggested by JICA Advisory Mission; was emphasized.
- 2) Details of social experiment were discussed. It was mentioned that social experiment target was to see whether the TDM measure was effective or not; it was going to be applied at a small project site. However if it turned out to be beneficiary it could be implemented at whole Istanbul. In addition to that these measures were very important for effective Park & Ride policies.
- 3) In the meeting, the importance of eliminating the illegal parking and the necessity of taking UTK and UKOME decision for illegal parking was emphasized.

### **3. Presentation**

Mrs. Nesligül from Transportation Planning Department presented the progress of the project. As opening remarks of her presentation she mentioned about the progress and outcomes of the project. She indicated the works were done until this time which were identifying of current situations and issues of the Istanbul historical area, selecting and approving of the 1st social experiment , providing technical assistance for traffic-related surveys, holding the Weekly Friday Meeting(WFM), conducting the 1st oversea training, Implementing assistance for the advisory mission, holding the 1st TDM Seminar however she emphasized that there was a delay in Traffic Surveys. She continued her presentation by adding that a study meeting would be held with young researchers on TDM measures of Historical Peninsula. This meeting would be conducted once a month, every six month report would be prepared and seminar would be hold at the end of 2013. On the other hand, there would be an extension of the schedule of the traffic related survey due to the delay in traffic surveys.

She mentioned that for the progress stage of first social experiment, SPS would be implemented by three packages, 1. Provision of the parking information by Smart Phone & SMS, 2. Preparation of parking guide board, and 3. Illegal parking enforcement . In addition to that, She indicated that The Traffic Cell would be implemented as the 2nd social experiment. However target area and packages of TDM measures had not been fixed yet. In the consequent issue, She summarized the countermeasures for the remaining issues provided by JICA Mission. Lastly, she indicated the Traffic Management in Yenikapi station. She underlined that the following transport policies need to be considered to make a development plan of the new Yenikapi station. And so it is better to involve the transport department and other related agencies to the implementation committee of the new Yenikapi station project. As closing remarks she reviewed the next steps that would be done.

Mr. Akio SAITO, Senior Representative of JICA Turkish Office, commented on the presentations by indicating the difficulty of developing effective transportation policies while trying to preserve historical texture of the region and to obey the principles of UNESCO. JICA had been cooperated with UNESCO in some other countries too. In addition that, He emphasized that to collaborate with young academicians would be beneficiary for the project. He also mentioned that Transparency with Japanese government was required in JICA projects too. He underlined the importance of Historical Peninsula as a world asset, so collaboration with young academicians



was necessary. In addition to these he offered to contact with Japanese consultancy to increase the awareness of the project.

#### **4. The Way Forward**

It was also confirmed that the activities for the implementation of social experiment in coming months would be undertaken in order to facilitate the implementation of the Project.

- 1) It was mentioned that for signalization systems; actual respondent of this issue was Traffic Directorate, not ISBAK.
- 2) It was checked and confirmed that the progress of the project is according to the work schedule.
- 3) It was emphasized that it was difficult to develop effective transportation policies while trying to preserve historical texture of the region and to obey the principles of UNESCO. JICA cooperated with UNESCO in some other countries, too.
- 4) It was added that to collaborate with young academicians would to be beneficiary for the project. Transparency with Japanese government is also required in JICA projects. Since, Historical Peninsula is an important world asset, collaboration with young academicians is necessary.

## **Appendix-1: Attendants at the 2nd Joint Coordination Committee**

Date / Time: 9 May 2012, 09:30-10:00  
Venue: Office of the Head of Transportation Department, IMM

### List of Attendants

<b>No</b>	<b>Name</b>	<b>Organization</b>	<b>Position</b>
<b><u>Turkish Side</u></b>			
1	Mr. Dursun BALCIOĞLU	IMM	Head of Transportation Department
2	Mr. Ahmet Hamdi GÜNER	IMM	Director of Transportation Planning
3	Mr. Onursal BAŞ	IMM	Deputy Director, Transportation Planning
4	Ms. Nesligül ÜNAL	IMM	Coordinator, Transportation Planning
5	Ms. Dilek ÇOL	IMM	Urban Planner (Msc), Transportation Planning
<b><u>JICA</u></b>			
1	Mr. Akio SAITO	JICA Turkey Office	Chief Representative
2	Mr. Ali BEKİN	JICA Turkey Office	Program Manager
<b><u>JICA Expert Team</u></b>			
1	Mr. Tamaoki WATANABE	JICA Expert Team	Vice Team Leader/Transport Management
2	Mr. Takeshi SHIMOMURA	JICA Expert Team	Social Experiment Management
3	Ms. Melike ÖNYILMAZ	JICA Expert Team	Urban Planner, Msc
4	Ms. Ece Işın DOĞAN	JICA Expert Team	Interpreter
5	Ms. Zeynep TOPALOĞLU	JICA Expert Team	Secretary/Interpreter

## Agenda of the 2<sup>nd</sup> JCC Meeting

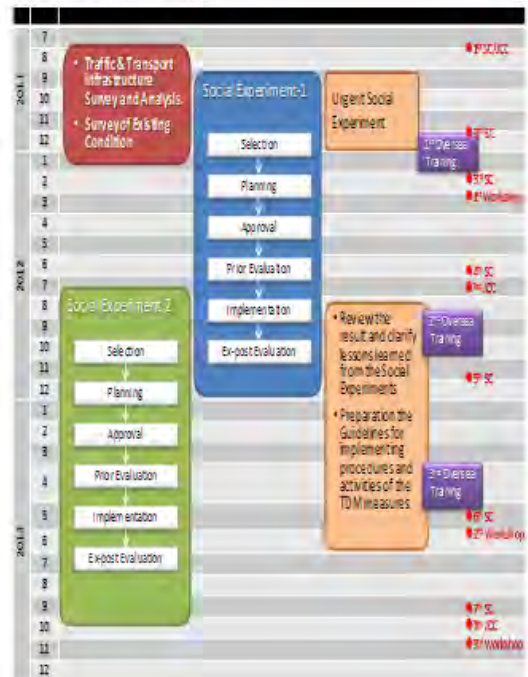
1. Progress and Outcomes (PDM and PO)
2. Work Plan & PO
3. Implementation of the 1<sup>st</sup> Social Experiment
4. Provision of the 2<sup>nd</sup> Social Experiment
5. Countermeasure against Remaining Issues from JICA Advisory Mission
6. Next Steps

## 1. Progress and Outcomes

### 1-1. Time Framework

- Identifying of current situations and issues of the Istanbul historical area
- Selection and approval of the 1<sup>st</sup> social experiment
- Technical assistance for traffic-related surveys
- Held the Weekly Friday Meeting(WFM)
- Conducted the 1<sup>st</sup> overseas training
- Implementation assistance for the advisory mission
- Held the 1<sup>st</sup> TDM Seminar

Time Framework of the Project



# 1. Progress and Outcomes

2nd JCC Meeting - 4

## 1-2. PDM

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
<b>Overall Goal</b> Appropriate TDM measures will be implemented in the Istanbul historical area to create comfortable city environment.	More than two (2) TDM measures are implemented in the Istanbul historical area. Visible improvement is realized by the TDM measures in the Istanbul historical area.	Based on an Interview Survey with the transport department of IMM. Through an Evaluation Survey between before and after TDM	
<b>Project Purpose</b> Transportation Department's implementation capacities of TDM measures for the Istanbul historical area are strengthened.	More than 80% of staffs of the transportation department evaluate that implementation capacities of TDM measures are strengthened.	Interview and Questionnaire survey with the staff	Policy priority on TDM of IMM is not
<b>Outputs</b>			
1. Traffic characteristics of the Istanbul historical area are clarified and issues on transportation planning are identified.	1.1 Survey reports are prepared, describing traffic characteristics, transport planning issues and stakeholders' concerns on transportation improvement	1.1 Assessment Report	
2. Transportation department's capacities are strengthened through planning, implementing, evaluating, and analyzing social experiments of TDM measures.	2.1 More than 80% of officers are trained in training courses and seminars. 2.2 Two (2) TDM social experiments are implemented. 2.3 Implementation reports are developed including analysis results.	2.1 Reports of training courses and seminars 2.2 Project reports of Social experiments 2.3 Implementation reports of TDM social experiments	
3. Experience of the social experiments is summarized as guidelines and shared among relevant departments of IMM.	3.1 Guidelines for TDM measures implementation are prepared. 3.2 The guidelines are disseminated to relevant departments of IMM.	3.1 Guidelines Text 3.2 Project reports	

**Conduct a study meeting on TDM measures to be implemented in historical area with young researchers**

- There has been no problems which is necessary to change the overall goal, project purpose, output and other items in PDM

# 1. Progress and Outcomes

2nd JCC Meeting - 5

## 1-3. PO

	Year	2011	2012	2013	Entry Department in charge	Responsible Officer
<b>Output 1 Traffic characteristics of the Istanbul historical area are clarified and concerns on transportation planning are identified.</b>						
1.1. Approval of travel studies, regulations and stakeholders that are involved in transportation planning in the Istanbul historical area.					Transport Planning Directorate Transport Coordination Directorate	Metin Ural, Mehmet Kar
1.2. Conducting implementation studies of activities proposed in the action plan study as well as relevant laws and regulations that have impact on public management plans, public transportation development plans, urban conservation plans, and transportation plans.					Transport Planning Directorate Transport Coordination Directorate Road Maintenance and Repair Directorate Road Maintenance and Repair Directorate	Metin Ural
1.3. Conduct a traffic survey (traffic, trip, origin survey, questionnaire survey, etc.)					Transport Planning Directorate	Metin Ural, Mehmet Kar, Mehmet Kar, Serap C. Oskaya, Mehmet Kar, Metin Ural
1.4. Analyze the survey results.						Metin Ural
<b>Output 2 Transportation department's capacities are strengthened through planning, implementing, evaluating, and analyzing social experiments</b>						
2.1. Introduce information concerning TDM among relevant agencies (IMM) in order to raise the degree of measures related to the Project.						
2.2. Determine areas proposed, already planned TDM measures and business projects in the Istanbul historical area. <i>Conduct a study meeting on TDM measures to be implemented in historical area with young researchers</i>					IMM Transport Planning Directorate Transport Coordination Directorate Traffic Directorate Transport Services Directorate Road Maintenance and Repair Directorate Road Maintenance and Repair Directorate	Metin Ural
2.3. Organize seminars and training courses on TDM measures for staff from the relevant departments of IMM					Transport Planning Directorate	Metin Ural
2.4. Formulate an implementation plan of the TDM social experiments.					Transport Planning Directorate	Metin Ural, Serap C. Oskaya, Mehmet Kar
2.5. Perform required administrative and technical procedures for TDM social experiments.					Transport Planning Directorate Transport Coordination Directorate	Metin Ural
2.6. Implement the TDM social experiments in the Istanbul historical area.					Transport Planning Directorate Road Maintenance and Repair Directorate Road Maintenance and Repair Directorate	Metin Ural
2.7. Monitor and evaluate the TDM social experiments.					Transport Planning Directorate Traffic Directorate Road Maintenance and Repair Directorate	Metin Ural, Mehmet Kar, Serap C. Oskaya
<b>Output 4 Experience of the social experiments is summarized as guidelines and shared among relevant departments of IMM.</b>						
3.1. Clearly identify and record lessons learned from the social experiments for implementing TDM measures.					Transport Planning Directorate Traffic Directorate Road Maintenance and Repair Directorate	Metin Ural, Mehmet Kar, Serap C. Oskaya
3.2. Prepare the guidelines describing experimental procedures and activities of the TDM measures.					Transport Planning Directorate	Metin Ural, Mehmet Kar, Serap C. Oskaya
3.3. Share the guidelines among entities and organizations of the relevant departments of IMM					Transport Planning Directorate	Metin Ural, Mehmet Kar

**Conduct a study meeting on TDM measures to be implemented in historical area with young researchers**



# 1. Progress and Outcomes

2<sup>nd</sup> JCC Meeting - 6

## 1-4. Time Framework

### 1) Analysis of traffic-related survey schedule

Activities	2011												2012			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Detail Activities	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Technical Assistance for Traffic-related Surveys																
04-1 Assistance for Writing Survey TORs																
04-2 Assistance for Implementation of Surveys																
Technical Assistance for Traffic Data Analysis																
05-1 Assistance for Traffic Data Analysis																

### 2) Conduct a study meeting with young researchers of a university

Technical Assistance for Implementing Urgent TDM Measures	2012												2013							
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Detail Activities	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
06-1 Research and Monitoring of IMM's activities																				
06-2 Meeting with CP and SC																				
06-3 Assistance for Implementation of Urgent TDM Measures																				
06-3a Study Meeting with Young Researchers																				
06-3b Preparation of Reports																				
06-3c Seminar/workshop																				

- ✓ Conduct a study meeting once a month
- ✓ Preparation of reports every six month
- ✓ Hold a seminar at the end of 2013 year

# 2. Progress of the 1<sup>st</sup> Social Experiment

2<sup>nd</sup> JCC Meeting - 7

- ❑ The 1<sup>st</sup> Implementation Committee was held
- ❑ SPS will be implemented by three packages, 1. Provision of the parking information by Smart Phone & SMS, 2. Preparation of parking guide board, and 3. Illegal parking enforcement.
- ❑ Transportation Coordination Directorate estimated that SPS will be implemented by approval of IMM transportation Planning Directorate, IMM Traffic Directorate, iSPARK and TAV without approval of UKOME/UTK.



	5	6	7	8	9
Preparation of implementation plan document and memorandum					
Approval of plan document and sign to memorandum by implementation organization					
Prior evaluation survey					
Preparation of social experiment and campaign					
Implementation of social experiment					
Project evaluation					
Project report					

### 3. Provision of the 2<sup>nd</sup> Social Experiment

2<sup>nd</sup> JCC Meeting - 8

- ❑ The Traffic Cell will be implemented as the 2<sup>nd</sup> social experiment. However target area and packages of TDM measures are not fixed.
- ❑ “Parking policy”, “Regulation for passing traffic” and “Restriction of truck” are being considered as TDM measures. They will be discussed in WFM and the Study Meeting with young researchers.
- ❑ The following components will be discussed about their effects, cost, related agencies, issues and implementation possibility.
  - ✓ Introduction of the circuit mini bus in the cell
  - ✓ Restriction of the sightseeing bus
  - ✓ Area licensing/Road pricing
  - ✓ Time restriction of truck
  - ✓ Regulation for passing traffic
  - ✓ Rental cycle system/ Introduction of cycling way
  - ✓ Others



### 3. Provision of the 2<sup>nd</sup> Social Experiment

2<sup>nd</sup> JCC Meeting - 9

- ❑ Implementation Committee for the 2<sup>nd</sup> Social Experiment consisting of more related stakeholders as follows.

Items		2 <sup>nd</sup> Social Experiment Traffic Cell
Beneficiary	Beneficiary Group	Local Residents, Local workers
	Direct Participating Citizens' Group	neighborhood association, Local Associations
	Direct Participating Groups other Citizens' Group	Not Yet Determined
Public Administration	Relevant Agencies in the Preparatory Stage	Transport Department, Road Maintenance and Infrastructure Coordination Department, Fatih Municipality,
	Approval Agency	Transport Department (UKOME/UTK)
	Main Agency for the Social Experiment	Transport Department, Fatih Municipality
	Support Agency for Social Experiment	Road Maintenance and Infrastructure Coordination Department, Fatih Municipality
Relation with JICA Expert Team	Member of WFM	Transport Department, Road Maintenance and Infrastructure Coordination Department, Fatih Municipality, (Survey and Project Department)
	Member of JCC	Transport Department, Fatih Municipality
	Agency that needs to be involved for implementation	Bimtas, Traffic Police
	Agency that needs to be involved for approval	Not Yet Determined



#### 4. Countermeasure against Remaining Issues from JICA Advisory Mission

2<sup>nd</sup> JCC Meeting - 10

Issues	Countermeasures
(1) Communication with High Officials for the Smooth Implementation	<ul style="list-style-type: none"> <li>❑ The minutes of meeting of every Weekly Meeting will be circulated to the Head of Transport Department</li> <li>❑ Monthly or periodical meetings will be held with the Head of Transport Department, the Director of the project, and if necessary, the Deputy Secretary General.</li> </ul>
(2) Involvement of Local Academic Experts/Resources	<ul style="list-style-type: none"> <li>❑ Implementation Committee</li> <li>❑ Study meeting with young researchers</li> </ul>
(3) Allocation of Personnel Resources	<ul style="list-style-type: none"> <li>❑ Furthermore, two social experiments need to be implemented and medium- and long-term TDM measures need to be prepared, so implementation structure needs to be reconsider for more effective and smooth implementation.</li> </ul>

#### 4. Countermeasure against Remaining Issues from JICA Advisory Mission

2<sup>nd</sup> JCC Meeting - 11

Issues	Countermeasures
(4) Output of The Project	<ul style="list-style-type: none"> <li>❑ Main objective of iSTDM is a implementation capacity development of TDM measures, and also preparation of the effective and realizable TDM measures in the Istanbul historical area.</li> <li>❑ On the other hand, <u>targeted value and overall goal in the Istanbul historical area</u> need to be discussed with high officials of Istanbul Metropolitan Municipality and Fatih Municipality.</li> </ul>
(5) The 1 <sup>st</sup> & 2 <sup>nd</sup> Social Experiments	<ul style="list-style-type: none"> <li>❑ Support smooth implementation of 1<sup>st</sup> social experiment</li> <li>❑ Traffic Cell that was proposed in Istanbul Transport Master Plan will be implemented as the 2<sup>nd</sup> social experiment.</li> <li>❑ Detail contents of traffic cell needs to be discussed with CPs, related agencies and academic experts as soon as possible.</li> </ul>
(6) Traffic management around the New Yenikapi station	<ul style="list-style-type: none"> <li>❑ Proposal of comprehensive transportation policy including the TDM measures</li> <li>❑ Involving of the Transportation planning directorate</li> </ul>

**(6) Traffic management around the New Yenikapi station**

The following transport policies need to be considered to make a development plan of the new Yenikapi station. And so it is better to involve the transport department and other related agencies to the implementation committee of the new Yenikapi station project.

- ❑ Updating of the traffic demand forecast
- ❑ Analysis of trip generation and trip attraction on the new Yenikapi urban development area.
- ❑ Planning of new bus routes and new bus terminal around the new Yenikapi station.
- ❑ Planning of other public transport network.
- ❑ Parking policy around the new Yenikapi station
- ❑ Planning of TDM measures including the new Yenikapi station project.

**5. Next Steps****(1) Support Smooth Implementation of the 1st Social Experiment**

- ✓ Implementation agencies, IMM, iSPARK and TAVG need to change a memorandum on responsibility sharing to implement the 1st social experiment.
- ✓ Detail implementation schedule and project plan of the 1st social experiment needs to be approved.
- ✓ Preparation of questionnaire of prior/ex-post evaluation survey

**(2) Others**

- ✓ Hearings with iSBAK about the signalization system in Istanbul
- ✓ Discussion with implementing agencies of the Yenikapi Urban Design Project
- ✓ Implementation of the Study Meeting with young researchers
- ✓ Preparation of 2nd Social Experiment
- ✓ Formulation of the Medium- to Long-term TDM measures in the Istanbul historical area

Appendix-5-3 3rd Joint Coordination Committee  
Minutes of Meeting and Power Point

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MINUTES OF MEETING  
OF THE 3<sup>rd</sup> JOINT COORDINATION COMMITTEE  
FOR  
THE PROJECT ON TRAFFIC DEMAND MANAGEMENT OF HISTORICAL AREA  
IN ISTANBUL

Istanbul, September 12<sup>th</sup>, 2013

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Mr. Yoshihiro KAKISHITA  
Leader  
Terminal Evaluation Mission  
Japan International Cooperation Agency



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Mr. Muzaffer HACIMUSTAFAOĞLU  
Deputy Secretary General (Transportation)  
Istanbul Metropolitan Municipality

Based upon the bilateral agreements of Minutes of Meeting dated 5<sup>th</sup> November, 2010 and Record of Discussions dated 20<sup>th</sup> April, 2011, signed between the Government of Turkey, represented by Istanbul Metropolitan Municipality (referred to as "IMM") and Japan International Cooperation Agency (JICA), JICA dispatched an expert team, headed by Dr. Katsuhide NAGAYAMA, to Istanbul to commence "the Project on Traffic Demand Management of Historical Area in Istanbul" (referred to as "the Project") on 26<sup>th</sup> July 2011.

Since then, JICA Project Team and the counterpart team have cooperatively been conducting the activities in accordance with the Project Design Matrix (PDM) approved by both parties, and gained some fruitful results through the Project.

The 3<sup>rd</sup> Joint Coordination Committee was held at the meeting room of the IMM building at 14:00 hrs on 12<sup>th</sup> September, 2013, chaired by Mr. Muzaffer HACIMUSTAFAOĞLU, Deputy Secretary General (Transportation), IMM, with attendants from transportation-related authorities as shown in Appendix-1.

The Project is originally scheduled to be terminated by December 2013. On this occasion, JICA dispatched a Terminal Evaluation Mission (referred to as "the Mission"), headed by Mr. Yoshihiro KAKISHITA, to IMM from 8<sup>th</sup> through 13<sup>th</sup> September, 2013. Prior to the Mission, the evaluation consultant, Dr. Maki TSUMAGARI, worked for collecting accurate information on and vivid insights into the reality of the Project implementation to seek for rightful evaluation. The Minutes of Meetings with the Joint Terminal Evaluation Report was signed by both sides.

The chairperson commenced the meeting with his opening remarks, addressing the importance of the Project and his strong desire for successful achievement of the Project. In addition, he stressed the urgent need to formulate an action plan for functional intermodal facilities at Yenikapi Station whose grand opening was due to be undertaken on the end of October, 2013.

Dr. Katsuhide NAGAYAMA, Chief Advisor, JICA Project Team, then made a presentation on current progress and issues to be shared with the JCC members, showing the approved Project Design Matrix (PDM) and Plan of Operation (PO). He also presented a brief of JICA Project Team's technical approach to the issues at and around Yenikapi Station both in the mid- and long-term as well as the short-term.

Next, Mr. Yoshihiro KAKISHITA, Leader of the Mission, submitted the Joint Terminal Evaluation Report to the Chairperson.

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After these presentations, constructive discussions are made. In conclusions, the following are confirmed and/or agreed at the meeting:

- The JCC officially acknowledged Joint Terminal Evaluation Report as guidance to steer the Project towards a more fruitful direction.
- Based on the post evaluation of the 1<sup>st</sup> social experimental project, titled “Introduction of a Smart Parking System”, IMM will further pursue the application of the System in practice at other locations in Istanbul.
- The 2<sup>nd</sup> social experimental project, named “Introduction of a Traffic Cell System” has been thoughtfully prepared for the implementation. The social experiment is recommended to be carried out at an appropriate date after March 2014 with IMM’s efforts, followed by a post evaluation of the performance.
- Intermodal system related to Yenikapi Station shall be timely planned and developed with a mid- and long-term perspective as well as the short-term solutions towards the grand opening of the Station on 29<sup>th</sup> October, 2013, because development of functional intermodal systems is of the most important TDM policy. Based on the Joint Terminal Evaluation Report, JICA Project Team has been requested to study the short-term action plan in order to develop safe and efficient passengers’ transfer corridors to connect Yenikapi Station with the in front of IDO Yenikapi bus terminal (South Corridor) and Aksaray Station (North Corridor). For this purpose, the Project is requested to extend up to June 2014 for this purpose. The Mission concurred such a request by IMM, based on the recognition that such urgent actions to be taken at Yenikapi Station must be an integral component of TDM measures within the framework of the agreed PDM.
- JICA Project Team will present the Turkish side a new work plan and schedule in accordance with the new time framework for its approval, soon after the JICA Tokyo H.Qs officially approves its extension of the Project.
- The JICA side addressed that the Japanese side would look into continuous cooperation on mid- and long-term solutions at Yenikapi station.

The Chairperson closed the 3<sup>rd</sup> JCC at 15:00 hrs.

\* \* \* \*





Appendix-1: Attendants at the 3<sup>rd</sup> Joint Coordination Committee

Date / Time: 14:00 - 15:00, 12<sup>th</sup> September, 2013

Venue: Office of Deputy Secretary General, IMM

List of Attendants

No.	Name	Organization	Position
<b>Turkish Side</b>			
1	Mr. Muzaffer HACIMUSTAFAOĞLU	IMM	Deputy Secretary General (Transportation)
2	Mr. Ahmet Hamdi GÜNER	IMM	Director of Transportation Planning
3	Mr. Onursal BAŞ	IMM	Deputy Director, Transportation Planning
4	Mrs. Nesligül ÜNAL	IMM	Coordinator, Transportation Planning
5	Mrs. Neriman ERÜNSAL	IMM	Transportation Planning
6	Mrs. Berna ÇALIŞKAN	IMM	Transportation Planning
7			
8			
9			
10			
<b>JICA</b>			
Mr. Yoshihiro KAKISHI			
1	Ms. Soari FUKUHARA	JICA H.Q.	Program Officer, Member of JICA-TEM
2	Ms. Maki TSUMAGARI	IMG	Consultant, Member of JICA-TEM
3	Ms. Yumiko HORIWAKI	JICA Turkey Office	Representative
4	Mr. Ali BEKIN	JICA Turkey Office	National Staff
5	Mr. Ali BEKIN	JICA Turkey Office	National Staff
<b>JICA Expert Team</b>			
Dr. Katsuhide NAGAY			
1	Mr. Tamaoki WATANABE	JICA Expert Team	Vice Team Leader/Transport Management
2	Ms. Ece Isin DOĞAN	JICA Expert Team	Local Staff
3	Ms. Meltem DELİBAŞ	JICA Expert Team	Local Staff
4	Mrs. Melike ÖNYILMAZ	JICA Expert Team	Local Staff
5	Mrs. Özge KAISER	Interpreter	-
6			




3. ORTAK KOORDİNASYON KOMİTESİ  
TOPLANTI TUTANAĞI

İSTANBUL TARİHİ YARIMADA TRAFİK TALEP YÖNETİMİ PROJESİ'NİN  
NİHAİ DEĞERLENDİRMESİ

İstanbul, 12 Eylül, 2013



Muzaffer HACIMUSTAFAOĞLU  
Genel Sekreter Yardımcısı  
İstanbul Büyükşehir Belediyesi



Yoshihiro KAKISHITA  
Başkan  
Nihai Değerlendirme Grubu  
Japonya Uluslararası İşbirliği Ajansı

5 Kasım 2010'daki iki yanlı anlaşmanın Toplantı Tutanağına ve 20 Nisan 2011'de İstanbul Büyükşehir Belediyesi (İBB) tarafından temsil edilen Türkiye Hükümeti ve Japonya Uluslararası İşbirliği Ajansı (JICA) tarafından imzalanan Görüşme Kayıtlarına bağlı olarak; JICA, Dr. Katsuhide NAGAYAMA liderliğinde 26 Temmuz 2011 tarihinde İstanbul'a "İstanbul Tarihi Yarımada Trafik Talep Yönetimi" (PROJE olarak bahsedilecektir) PROJESİNE başlamak üzere uzman bir ekip göndermiştir.

Bu tarihten itibaren, JICA uzman ekibi ve Türk çalışma ekibi, iki tarafın da onayladığı Proje Tasarım Matrisi'ne bağlı olarak, iş birliği içinde çalışmalar yürütmüş ve PROJE için verimli sonuçlar elde edilmiştir.

3. Koordinasyon Komitesi İBB binasındaki toplantı odasında 12 Eylül 2013 tarihinde saat 14.00'de Muzaffer HACIMUSTAFAOĞLU (Genel Sekreter Yardımcısı) başkanlığında Ek-1'de gösterilen ulaşım ile ilgili yetkili makamlar ile birlikte toplantı yapmıştır.

PROJE başlangıçta Aralık 2013 tarihinde bitirmek üzere planlanmıştır. Bu sebeple, JICA Yoshihiro KAKISHITA başkanlığında, Nihai Değerlendirme HEYETİni (HEYET olarak bahsedilecektir.) 8 - 13 Eylül 2013 tarihleri arasında İBB'ye göndermiştir. HEYETten önce, danışman Maki TSUMAGARI doğru değerlendirmenin sağlanması ve PROJE uygulanmasında net bir iç görüş sağlanması için geçerli bilgilerin toplanması için çalışmıştır.

Toplantı başkanı toplantıya açılış konuşması ile başlamış, PROJENİN öneminden ve PROJEDEKİ başarının sağlanmasındaki isteğinden bahsetmiştir. Buna ek olarak, Ekim 2013 tarihinde açılacak olan Yenikapı İstasyonundaki fonksiyonel türler arası donatılar için acil bir eylem planının oluşturulmasının gerekliliğini vurgulamıştır.

Katsuhide NAGAYAMA, JICA Uzman Ekibi Baş Danışmanı, mevcut ilerleyiş ve sorunlar hakkında sunum yapmış ve onaylanmış Proje Tasarım Matrisi ve İşletme Planını göstererek OKK üyeleri ile paylaşmıştır. Ayrıca, Yenikapı İstasyonu ve etrafındaki kısa, orta ve uzun dönemli sorunlara JICA ekibinin teknik yaklaşımından da söz etmiştir.

Daha sonra, HEYET Başkanı Mr. Yoshihiro KAKISHITA, Oturum Başkanına ortak değerlendirme raporunu sunmuştur.

Bu sunumlardan sonra, yapıcı bir görüşme yapılmış ve sonuç olarak aşağıdaki konular üzerinde fikir birliği ve/veya onay sağlanmıştır:

- OKK, PROJEYİ daha verimli bir yöne yönlendirmek amacıyla resmi olarak Nihai Ortak Rapor hakkında bilgilendirmiştir.
- "Akıllı Park Sistemine Giriş" adındaki 1. Sosyal Deney Projesinin nihai değerlendirmesine bağlı olarak, İBB İstanbul genelinde kullanımı için bu sistemdeki uygulamayı araştıracaktır.
- "Trafik Hücre Sisteminin Tanıtılması" isimli 2. Sosyal Deney Projesinin uygulama süreci için özenle hazırlanmıştır. Sosyal deney çalışması, Mart 2014'ten sonraki uygun

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bir tarihte İBB'nin katkılarıyla uygulanması ve sonrasında bir performans değerlendirmesi yapılması tavsiye edilmektedir.

- İşlevsel bir türler arası sistem gelişiminin Trafik Talep Yönetiminin en önemli politikası olmasından hareketle, Yenikapı İstasyonu ile bağlantılı olan türler arası bir sistem, İstasyonun 29 Ekim 2013 tarihinde yapılacak olan büyük açılışına paralel olarak kısa dönem çözümleri ile orta ve uzun dönem perspektifi kapsamında zamansal olarak planlanacak ve geliştirilecektir. Nihai Ortak Değerlendirme Raporuna bağlı olarak, Yenikapı İstasyonunu İDO Otobüs Terminali (Güney Koridoru) ve Aksaray İstasyonuna (Kuzey Koridoru) bağlayacak etkin ve güvenli yolcu transfer koridorlarının oluşturulması için JICA PROJE Ekibinin kısa dönem eylem planı üzerinde çalışması istenmiştir.
- Yenikapı İstasyonundaki uygulanacak acil eylemlerin PROJE Tasarım Matrisi çerçevesindeki Trafik Talep Yönetimi ölçütlerinin ile tam bir bileşen oluşturarak ele alınması gerekliliğindeki tanımlamaya bağlı olarak, HEYET İBB'nin teklifi kabul etmiştir.
- JICA Ekibi, JICA Tokyo Merkez Ofisinin PROJE sürecinin Haziran 2014'e kadar uzatılmasını yasal olarak onaylamasının ardından yeni zaman çizelgesi kapsamında yeni iş planı ve programını Türk Tarafına sunacaktır.
- JICA tarafı, Japon tarafın Yenikapı İstasyonundaki orta ve uzun dönem çözümleri için sürekli işbirliği araştırmaları yapacağını belirtmiştir.

Oturum başkanı saat 15.00'da 3. OKK toplantısını bitirmiştir.

\* \* \* \*



### Ek-1: 3. Ortak Koordinasyon Komitesi Katılımcıları

Tarih / Saat: 14:00 - 15:00, 12 Eylül 2013  
Yer: İBB Genel Sekreter Yardımcısı Ofisi

#### Katılımcı Listesi

No.	Adı Soyadı	Kurum	Pozisyon
<b>Türk Ekip</b>			
1	Muzaffer HACIMUSTAFAOĞLU	İBB	Genel Sekreter Yardımcısı
2	Ahmet Hamdi GÜNER	İBB	Ulaşım Planlama Müdürü
3	Onursal BAŞ	İBB	Ulaşım Planlama Müdür Yardımcısı
4	Nesligül ÜNAL	İBB	Koordinatör, Ulaşım Planlama Müdürlüğü
5	Neriman ERÜNSAL	İBB	Ulaşım Planlama Müdürlüğü
6	Berna ÇALIŞKAN	İBB	Ulaşım Planlama Müdürlüğü
<b>JICA</b>			
1	Yoshihiro KAKISHITA	JICA Merkez Ofisi	Lider, JICA Nihai Değerlendirme HEYETİ (JICA-TEM)
2	Soari FUKUHARA	JICA Merkez Ofisi	Program Görevlisi, JICA-TEM Üyesi
3	Maki TSUMAGARI	IMG	Danışman, JICA-TEM Üyesi
4	Yumiko HORIWAKI	JICA Türkiye Ofisi	Temsilci
5	Ali BEKİN	JICA Türkiye Ofisi	Türk Personel
<b>JICA Uzman Ekibi</b>			
1	Katsuhide NAGAYAMA	JICA Uzman Ekibi	Takım Lideri/ Baş Danışman
2	Tamaoki WATANABE	JICA Uzman Ekibi	Takım Lideri Yardımcısı / Ulaşım Yönetimi
3	Melike ÖNYILMAZ	JICA Uzman Ekibi	Yerel Ekip
4	Ece Işın DOĞAN	JICA Uzman Ekibi	Yerel Ekip
5	Meltem DELİBAŞ	JICA Uzman Ekibi	Yerel Ekip
6	Özge Kaiser	Tercüman	-

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Istanbul Metropolitan Municipality (IMM)  
Japan International Cooperation Agency (JICA)

# The Project on Traffic Demand Management of Historical Area in Istanbul

- 3<sup>rd</sup> Joint Coordination Committee Meeting -

September 12, 2013

1

2

## Contents



1. Progress of the Project
2. Implementation of the 1<sup>st</sup> Social Experiment
3. Preparation of the 2<sup>nd</sup> Social Experiment
4. Preliminary Planning of Urgent Actions at Yenikapi Station
5. Next Step

\*\*\*

■ **Joint Terminal Evaluation of the Project**

2

# 1. Outlines of the Project

## 1.1 Overall Goal

Appropriate Traffic Demand Management (TDM) measures will be implemented in the Istanbul historical area to create comfortable city environment.

## 1.2 Project Purpose

Transportation Department's implementation capacities of TDM measures for the Istanbul historical area are strengthened.

## 1.3 Outputs

Output 1: Traffic characteristics of the Istanbul historical area are clarified and transportation planning issues are identified.

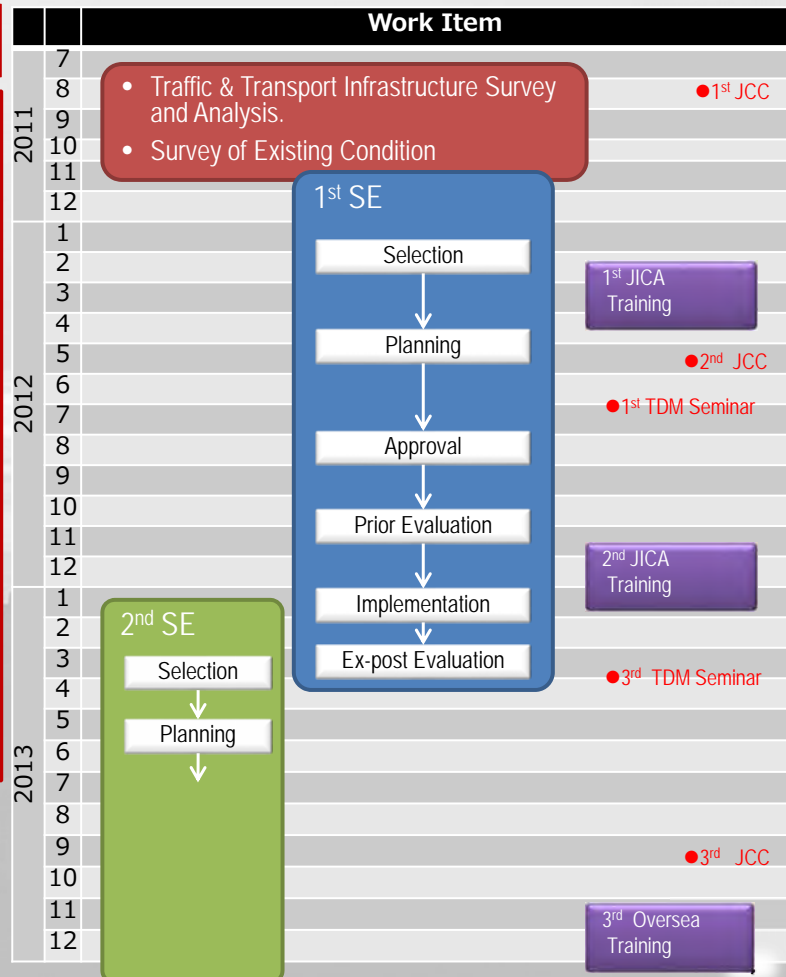
Output 2: Transportation department's capacities are strengthened through planning, implementing, evaluating, and analyzing Social Experiments of TDM measures.

Output 3: Experience of Social Experiments is streamlined as "guidelines for TDM" and shared among relevant departments of IMM.

## The Progress

- 1<sup>st</sup> JCC Meeting on 18<sup>th</sup> August 2011
- 1<sup>st</sup> JICA Training in Japan on Feb. 2012
- 2<sup>nd</sup> JCC Meeting on 9<sup>th</sup> May, 2012
- 1<sup>st</sup> TDM Seminar on 3<sup>rd</sup> June, 2012
- 2<sup>nd</sup> JICA Training in Japan on Nov. 2012
- 1<sup>st</sup> Social Experiment (SPS) on Feb. 2013
- 2<sup>nd</sup> TDM Seminar on 19<sup>th</sup> March, 2013
- 3<sup>rd</sup> JCC Meeting on 12 Sep. 2013
- 3<sup>rd</sup> JICA Training in Singapore on November 2013 (plan)

Time Framework of the Project





## Contents

1. Progress of the Project
  - ➔ **2. Implementation of the 1<sup>st</sup> Social Experiment**
  3. Preparation of the 2<sup>nd</sup> Social Experiment
  4. Preliminary Planning of Urgent Actions at Yenikapi Station
  5. Next Step
- \*\*\*
- Joint Terminal Evaluation of the Project

## The 1<sup>st</sup> Social Experiment:

### Introduction of "Smart Parking System"

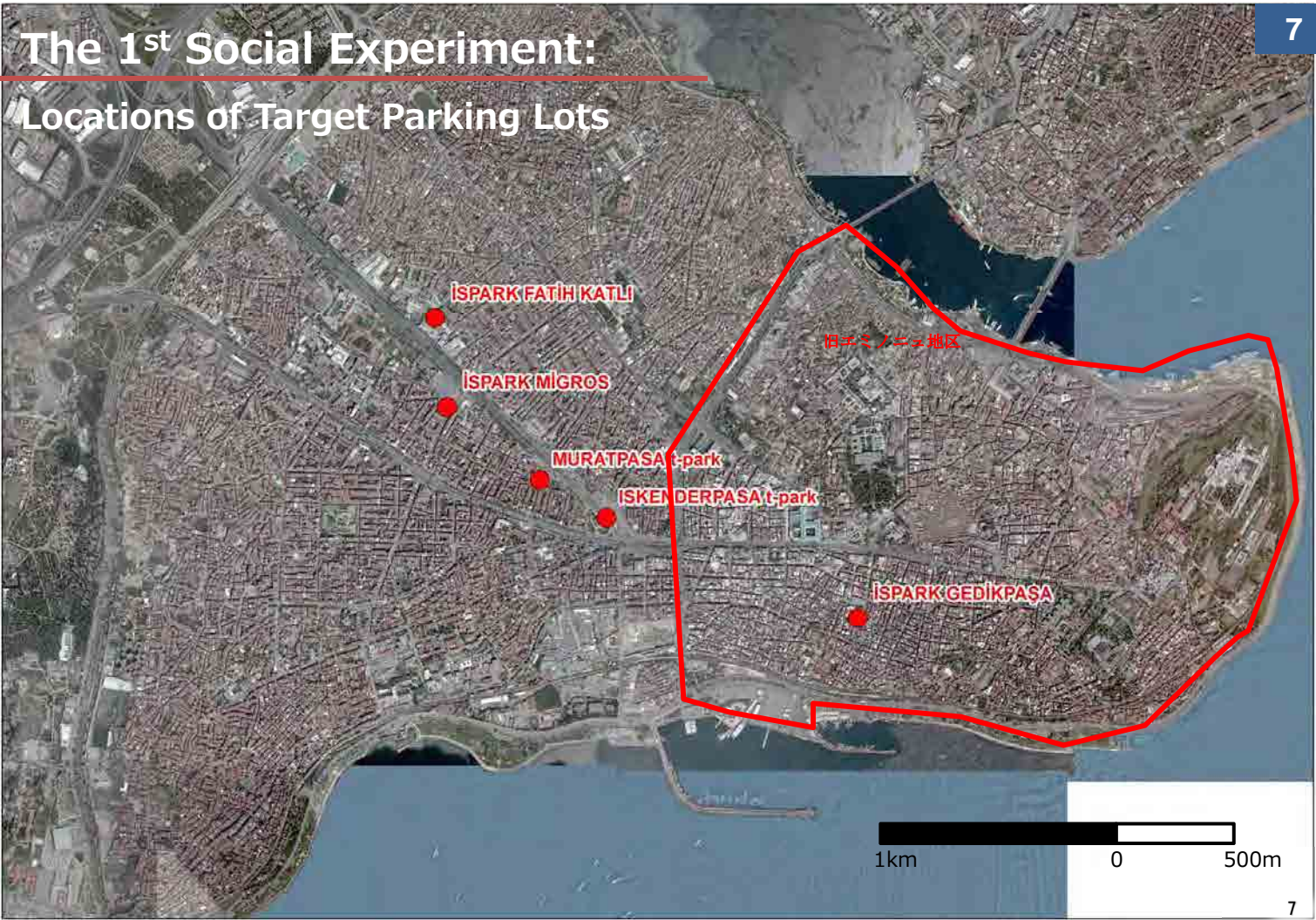
<b>Project Area</b>	Fatih District, Istanbul
<b>Objective</b>	Introduction of an IT-based On-time Information System on Occupancy of Parking Lots at the Eminonu Area, thereby releasing traffic congestion and upgrading accessibility to parking lots.
<b>Execution Date</b>	<ul style="list-style-type: none"> <li>• Pre-test: January 15 to 31, 2013 (17 days)</li> <li>• Execution: February 1 to 28, 2013 (28 days)</li> </ul>

- 1) Check the occupancy of parking lots available in the **Eminonu Area** by the **Internet**
- 2) Check up-dated occupancy condition by **Samrt Phone**
- 3) Check the availability of Parking Lots on some **Information Boards** located at the road side
- 4) Select the available parking lot, then take **shuttle bus service** to the target destination





# The 1st Social Experiment: Locations of Target Parking Lots



# The 1st Social Experiment: Internet & Smart-phone Services

**İBB CEPTRAFİK**

**Park Alanı**  
Gedikpaşa Katlı Otoparkı

Doluluk Oranı	: 70/80
Kapasite	: 630
Boş Yer	: 124
Çalışma Saatleri	: 7/24

**FATİH KATLI OTOPARKI**  
PARK ET DEVAM ET  
Kapasite : 130 Araç / 400  
Çalışma Saatleri : 7/24  
Güvenli Park, Güler Yüzü Hizmeti

<http://tkm.ibb.gov.tr>  
Muratpaşa O. Ücret Tarifesi

0-1 Saat	5 TL
1-2 Saat	7 TL
2-4 Saat	9 TL
4-8 Saat	12 TL
8-12 Saat	15 TL
12-24 Saat	20 TL



# Information Boards



# Shuttle Bus Services



**SERVIS GÜZERGAHI**

**AKILLI PARK SİSTEMİ**

Servislerimiz, 21 Ocak - 28 Şubat 2013 tarihlerinde, her gün 07:00 - 19:00 saatleri arasında, otoparklar ile Beyazıt Meydanı arasında ring yapacaktır.

FATİH KATLI İSPARK - KALKIŞ SAATLERİ		
07:00	11:00	15:40
07:15	11:20	16:00
07:30	11:40	16:20
07:45	12:00	16:40
08:00	12:20	17:00
08:15	12:40	17:15
08:30	13:00	17:30
08:45	13:20	17:45
09:00	13:40	18:00
09:20	14:00	18:15
09:40	14:20	18:30
10:00	14:40	18:45
10:20	15:00	19:00
10:40	15:20	

Seferlerimiz 1-2-3-4-5 ve 5-4-3-2-1 güzergahında ring olarak düzenlenmiştir.

**Service Interval:**

- 15 minutes at peak;
- 20 minutes in off peak

**Operated with:**

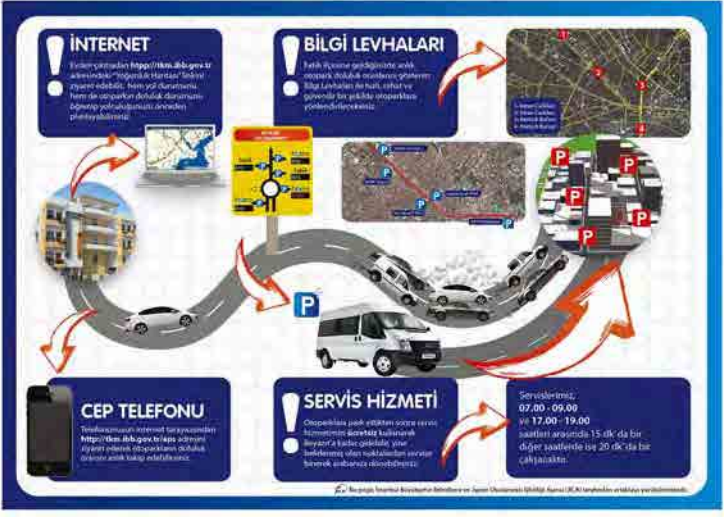
- 6 mini buses



# The 1st Social Experiment: Public Relation by Web-site



This infographic explains the social experiment and the smart parking system. It includes sections for "SOSYAL DENEY NEDİR?" (What is a social experiment?), "TRAFİK TALEP YÖNETİMİ NEDİR?" (What is traffic demand management?), "AKILLI PARK SİSTEMİ NEDİR?" (What is the smart parking system?), and "İLETİŞİM BİLGİLERİ" (Contact information). It features the "Akıllı Park Sistemi" logo and the Istanbul Metropolitan Municipality logo. The text describes how the system uses smart parking signs, traffic density maps, and mobile phones to help drivers find parking spots more efficiently.



# The 1st Social Experiment: Exposure through Mass Media

- TV stations (TNT1 & KANEL\_D) took up this event in their news programs; and
- 12 newspapers reported this event.



A newspaper clipping from Yeni Şafak dated 26 Ocak 2013. The headline is "Akıllı otopark dönemi başladı!". The article reports that the Istanbul Metropolitan Municipality has started the smart parking system in the Tarihî Yarımada area. It mentions that the system will help reduce traffic congestion and improve parking efficiency. The article also includes a photo of a car in a parking lot and a quote from a city official.

## Assessment of Users' Willingness

### Interviewees:

- Users of the parking lot
- non-users who are using illegal street parking

Interviewees	Weekday	Weekend	Total
<b>Pre-experiment</b>			
Users	194	201	395
Violators	99	68	167
Total	293	269	<b>562</b>
<b>During the experiment</b>			
Users	449	428	877
Violators	123	94	217
Total	572	522	<b>1,094</b>

Will you want to use the SPS?

	Yes, strongly ←————→ No, at all					Total
<b>Users</b>	<b>202</b> <b>(51.1%)</b>	133 (33.7%)	47 (12.0%)	0 (0.0%)	13 (3.2%)	395
<b>Violators</b>	44 (26.3%)	<b>90</b> <b>(53.9%)</b>	6 (3.6%)	22 (13.2%)	5 (3.0%)	167

Do you know that the SPS is in service?

	Yes	No	Total
<b>Users</b>	288 (32.8%)	<b>589</b> <b>(67.2%)</b>	877
<b>Violators</b>	55 (25.3%)	<b>162</b> <b>(74.7%)</b>	217

## Users' Assessment on the SPS

### Interviewees: Users of the SPS

Question	Yes, surely	←————→ Modestly	←————→ No, at all	No.	Av. p oint	
Given Scores (5 to 1)	5	4	3	2	1	
1 Do you use the SPS, if it is applied at other areas?	<b>202</b> <b>(71.9%)</b>	48 (17.1%)	16 (5.7%)	5 (1.8%)	10 (3.6%)	281 4.5
2 Is the SPS understandable?	<b>143</b> <b>(51.4%)</b>	60 (21.6%)	33 (11.9%)	34 (12.2%)	8 (2.9%)	278 4.1
3 Was the SPS information accurate?	<b>98</b> <b>(36.4%)</b>	72 (26.8%)	81 (30.1%)	5 (1.9%)	13 (4.8%)	269 3.9
4 Was the information properly up-dated?	47 (17.0%)	62 (22.5%)	<b>126</b> <b>(45.7%)</b>	15 (5.4%)	26 (9.4%)	276 3.3
5 Was the number of parking lots under the SPS sufficient?	69 (24.7%)	<b>92</b> <b>(33.0%)</b>	36 (12.9%)	21 (7.5%)	61 (21.9%)	279 3.3
6 Were the information boards satisfactory?	69 (24.8%)	<b>71</b> <b>(25.5%)</b>	55 (19.8%)	42 (15.1%)	41 (14.7%)	278 3.3
7 Was your travel time shortened by using the SPS?	62 (22.6%)	34 (12.4%)	55 (20.1%)	<b>79</b> <b>(28.8%)</b>	44 (16.1%)	274 3.0
8 Are you satisfied with shuttle bus services?	40 (16.5%)	25 (10.3%)	<b>96</b> <b>(39.7%)</b>	40 (16.5%)	41 (16.9%)	242 2.9
9 Do you use more public transportation rather than shuttle bus, if the public transportation service is up-graded?	60 (22.0%)	34 (12.5%)	49 (17.9%)	38 (13.9%)	<b>92</b> <b>(33.7%)</b>	273 2.8
10 Is the public campaign on the SPS effective and influential?	18 (6.6%)	17 (6.2%)	21 (7.7%)	83 (30.4%)	<b>134</b> <b>(49.1%)</b>	273 1.9



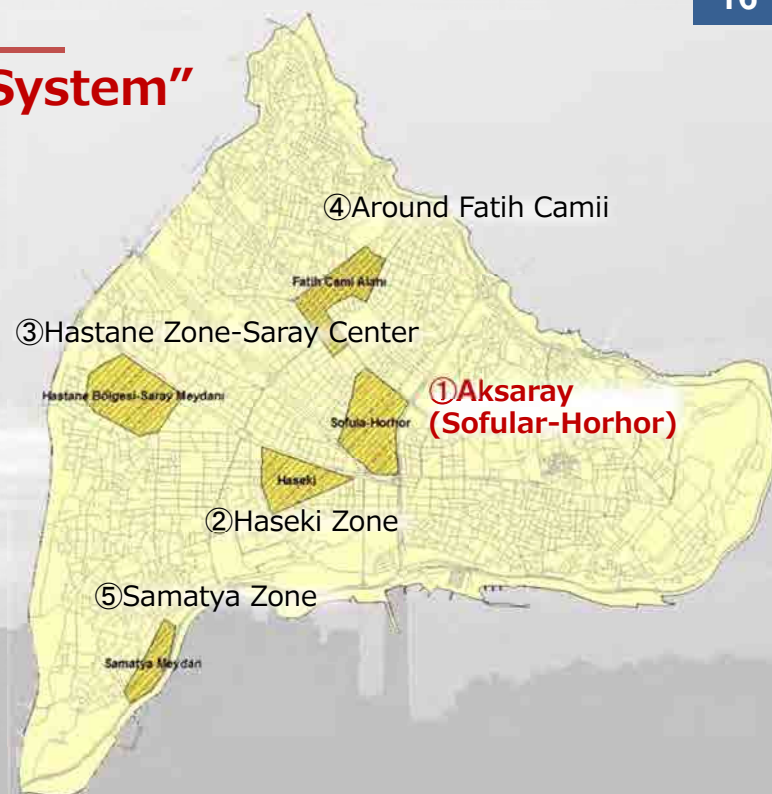
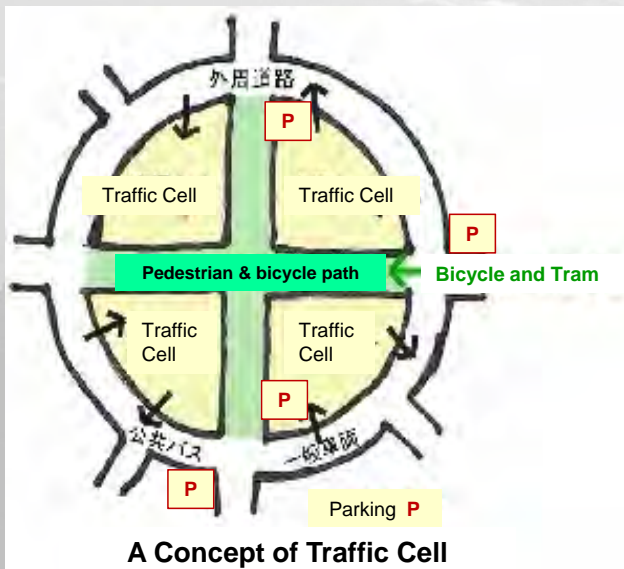
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## The 2<sup>nd</sup> Social Experiment:

### Introduction of "Traffic Cell System"

- The concept of "Traffic Cell System" was introduced to be applied in the Historical Peninsular in the Master Plan.
- Out of five alternatives, a model area, **Aksaray**, was selected for the 2<sup>nd</sup> Experiment Project.

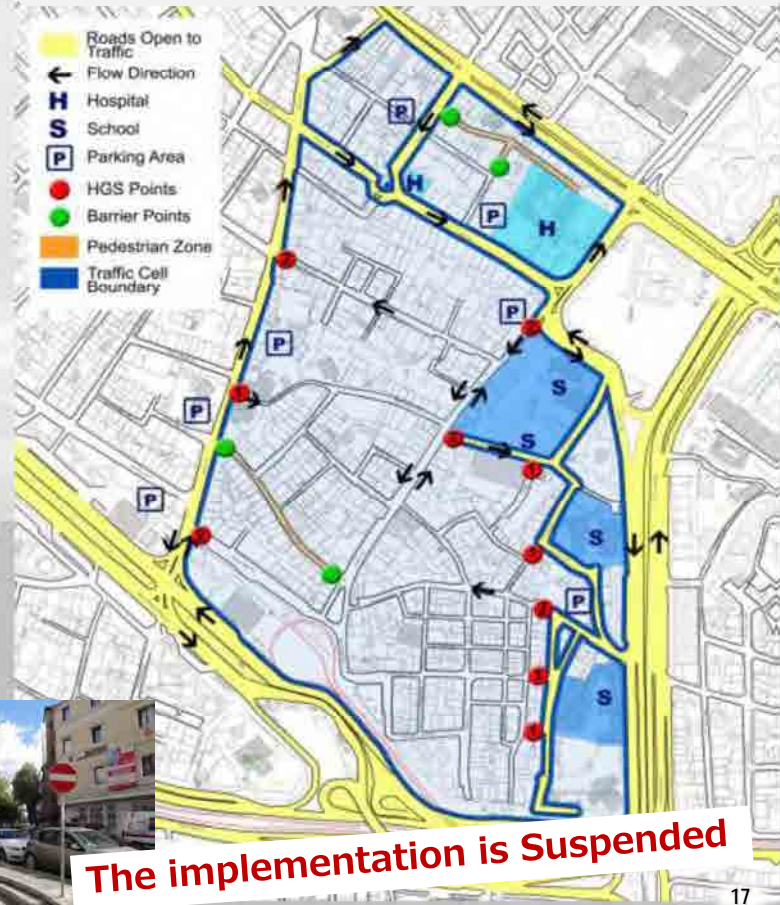




## Measures of "Traffic Cell System"

### Basic Measures:

- ✓ Introduction of Exclusive **Pedestrian Path**
- ✓ Access Control : Only residents' access is allowed in sub-cell, being monitored by a **surveillance system**
- ✓ Controlled through-traffic and **one-way system** at bottlenecks
- ✓ Parking control: **one-side** road parking
- ✓ Freight traffic control (truck ban): only night time (22:00-7:00) is allowed to enter.



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# Urgent Actions at Yenikapi Stn.

## Need of an Intermodal System

1. Yenikapi Stn. will be a huge scale intermodal point with 1.7 million passengers per day.

- Aksaray - Airport Line
- Taksim - Yenikapi Line
- Marmaray Railway
- IDO Ferry Terminal

2. Yenikapi Stn. is an important cultural asset in Turkey.

- Port facilities and 35 ships in the Theodosius Era (379~395)
- Villages in B.C8500

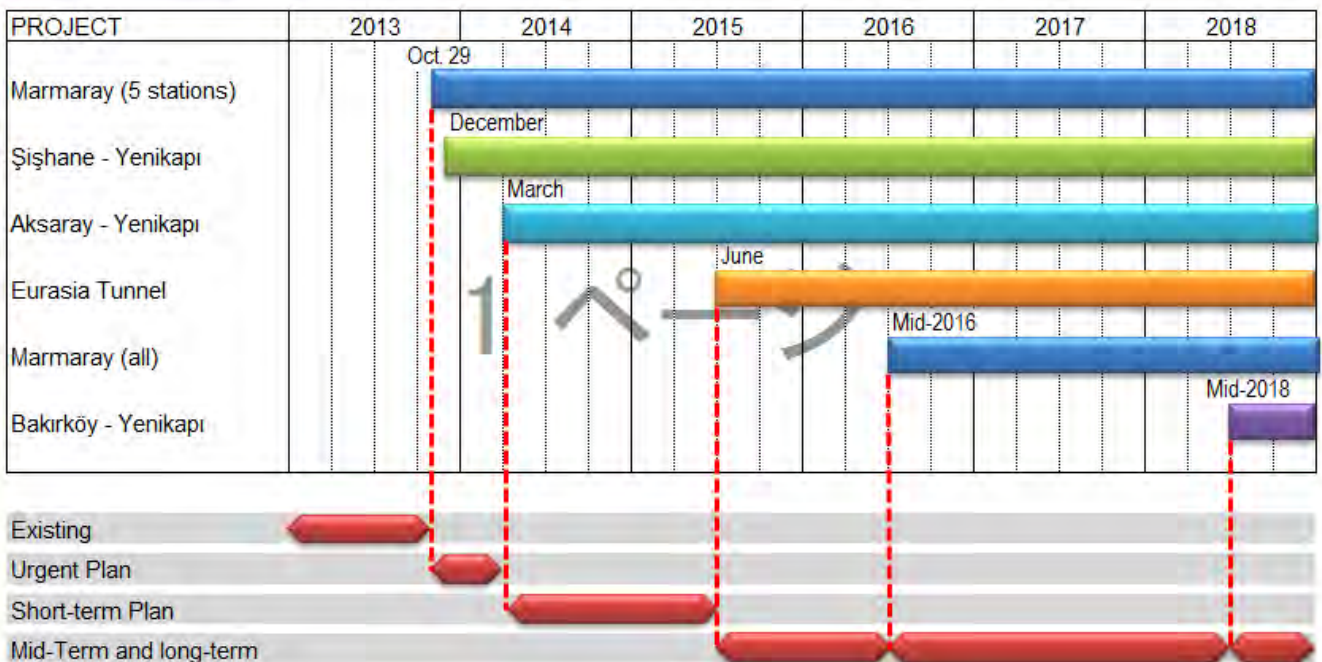


# Urgent Actions at Yenikapi Stn.

## Future Plans

### Development at/around YENIKAPI Station

Assumed Schedule of Transport Infrastructure Development in Historical Area

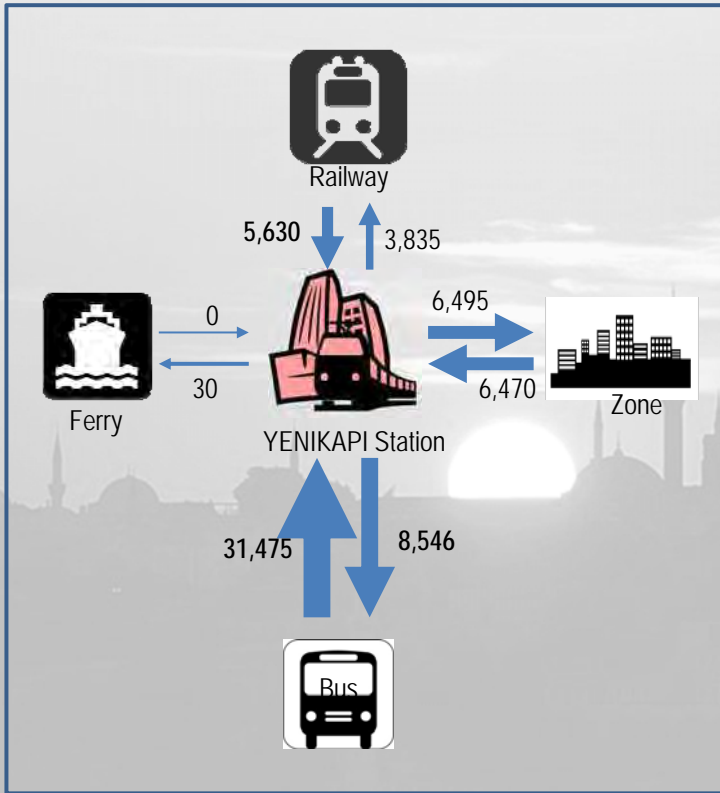




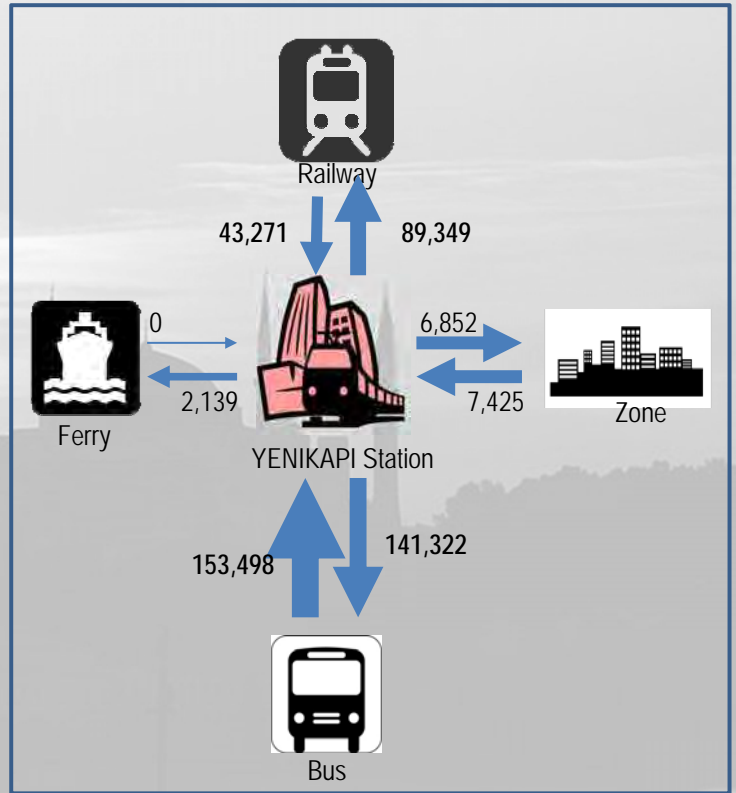
# Urgent Actions at Yenikapi Stn.

## Projection of Passengers 1

Present Condition



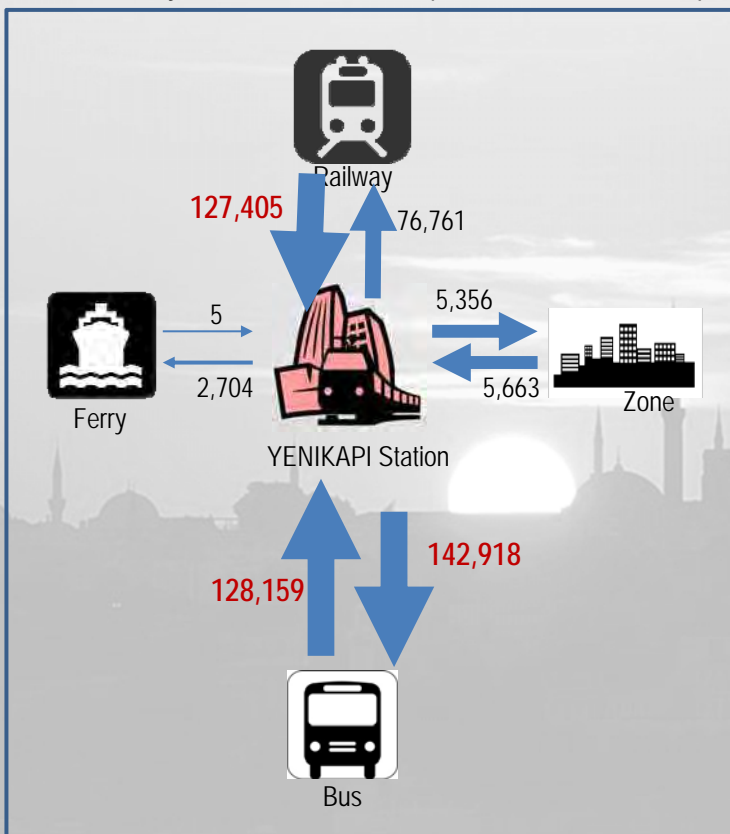
Marmaray (5 stations) (October 29, 2013)



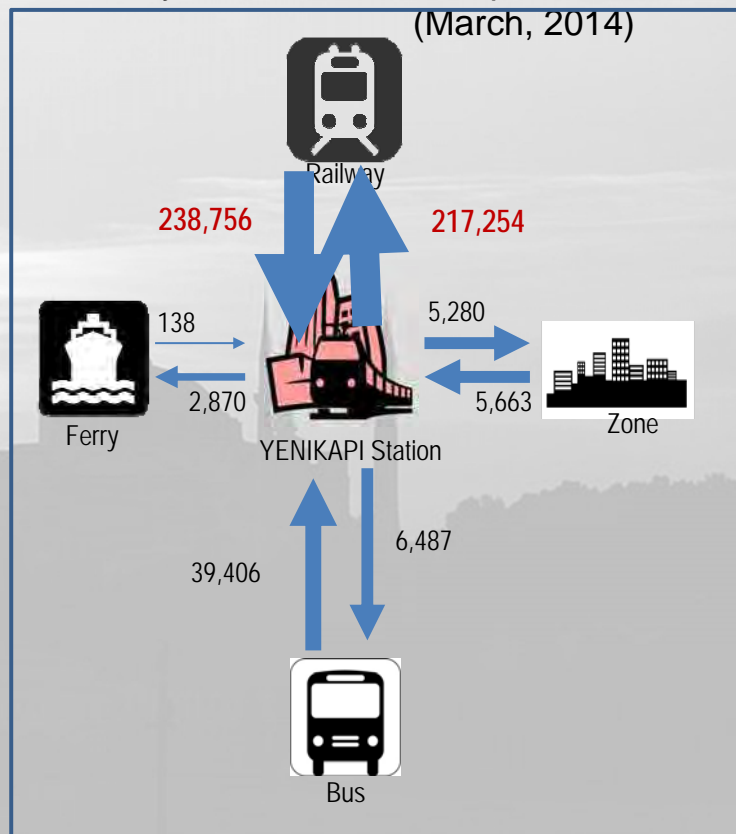
# Urgent Actions at Yenikapi Stn.

## Projection of Passengers 2

Marmaray + Taksim Line (December, 2013)

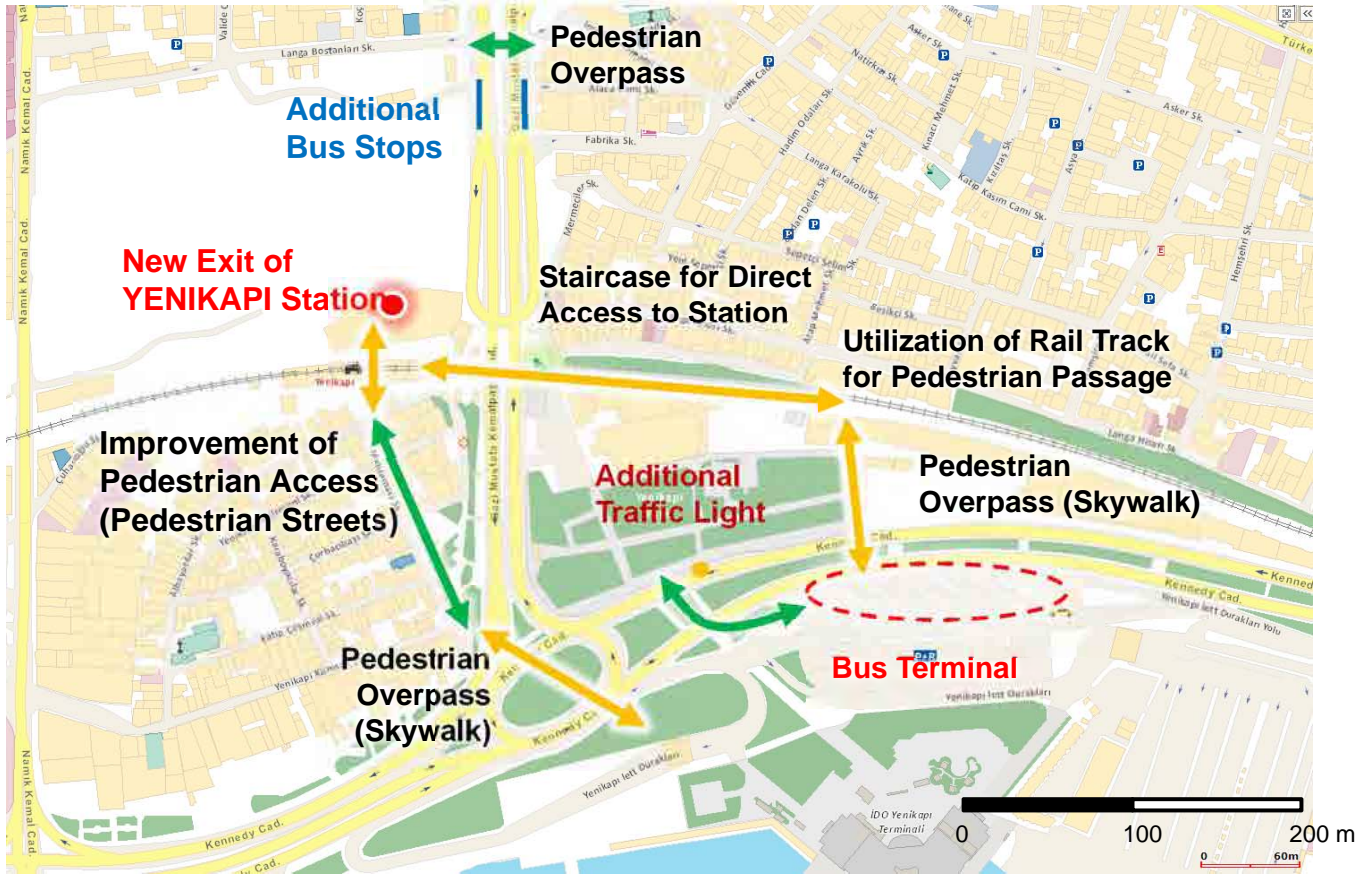


Marmaray + Taksim Line + Airport Line (March, 2014)



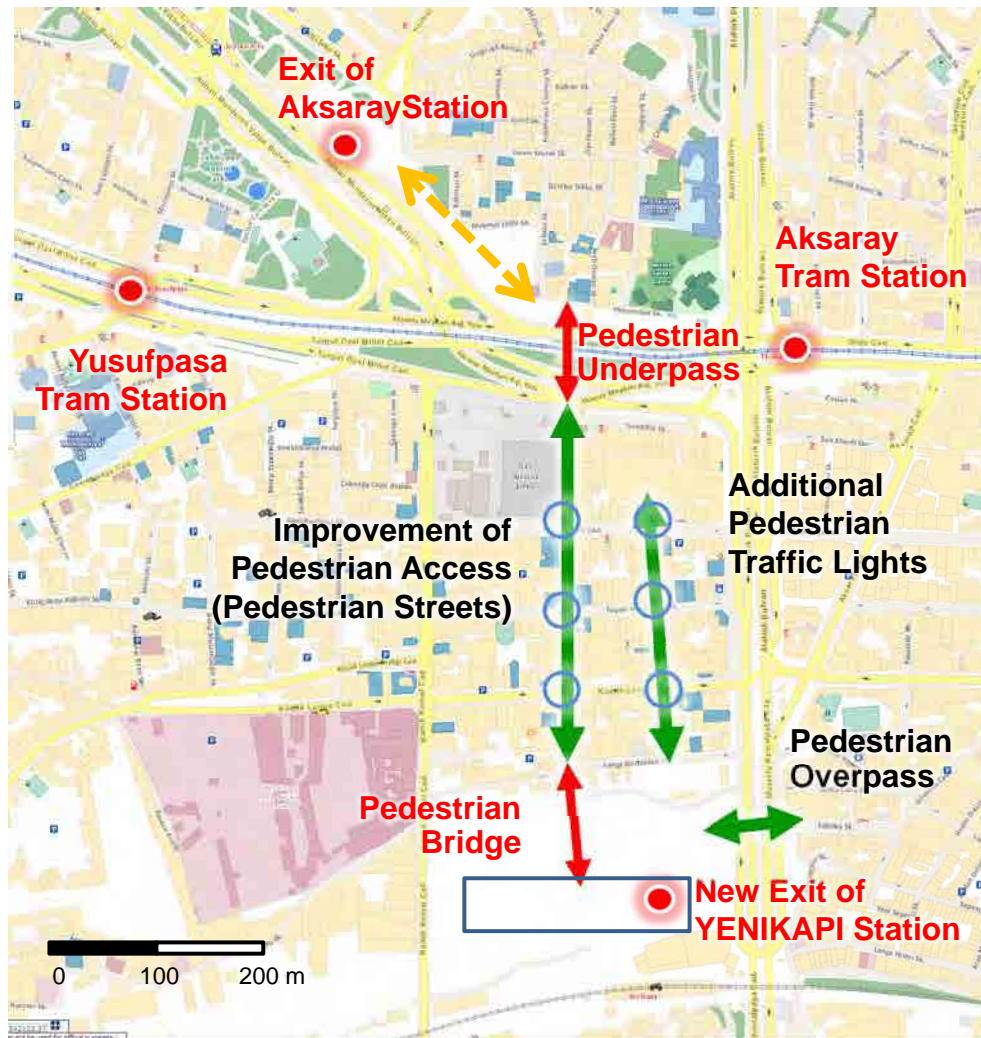
# Accessibility Improvement

## YENIKAPI St. and IDO Bus Terminal

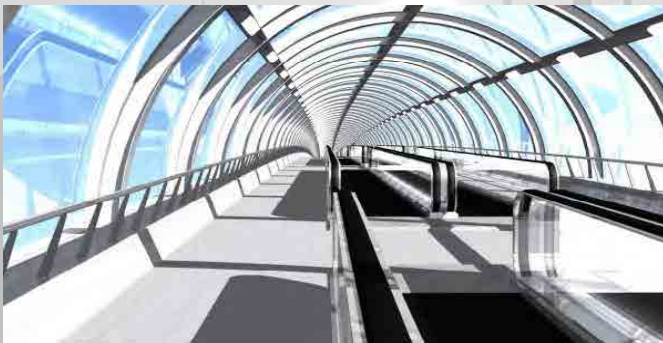


# Accessibility Improvement

## YENIKAPI St. - Aksaray St.







Yokohama City, Japan



Osaka City, Japan



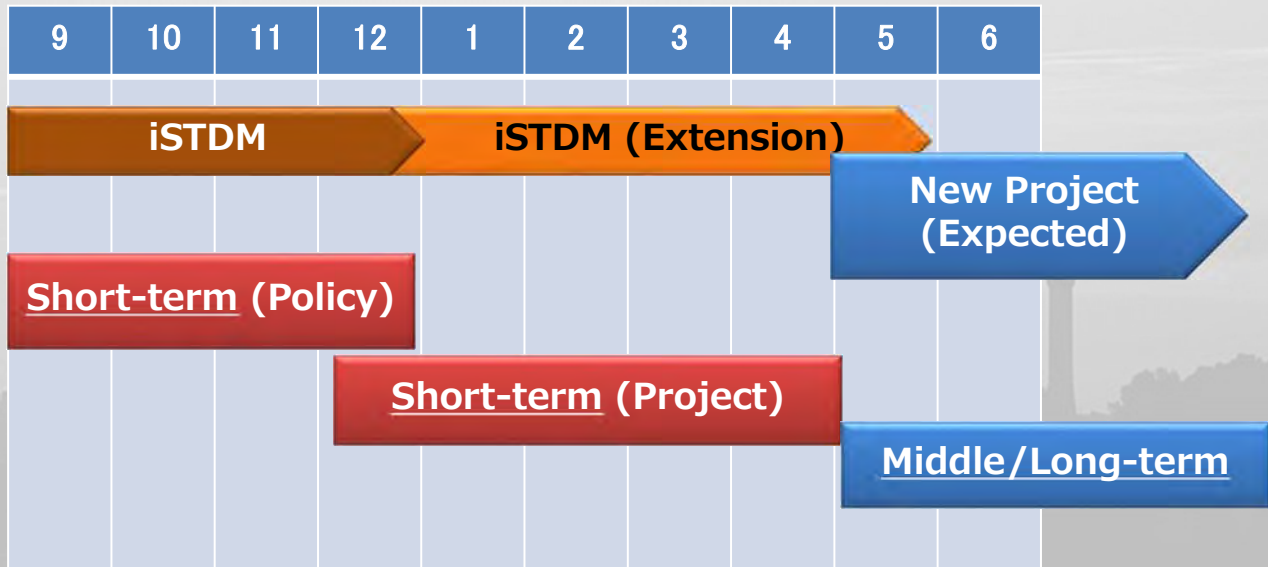
New York City, USA



# Next Work Plan of the JICA Project

## Schedule for Action Planning at Yenikapi Station

Extension of iSTDM, followed by a New Project (Expected)



Opening of Yenikapi Station

The Election

