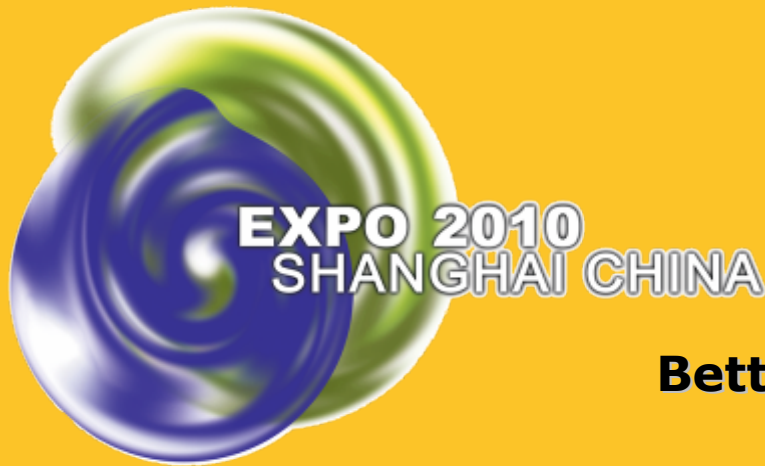# Architecture Research On Transport Information Services of EXPO 2010 Shanghai China

Better City, Better Life!
Better Transport, Better EXPO 2010!

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Brief Information on World EXPO 2010 Shanghai China

上海世博会区位图

❑ The area for EXPO 2010 Shanghai China is within the inner-city, which is located at Nanpu Bridge–Lupu Bridge region along both sides of the Huangpu River.

❑ The planning area within the site boundary covers both Puxi and Pudong areas ,up to 6.68 sq km. The duration of World EXPO 2010 is 184 days.
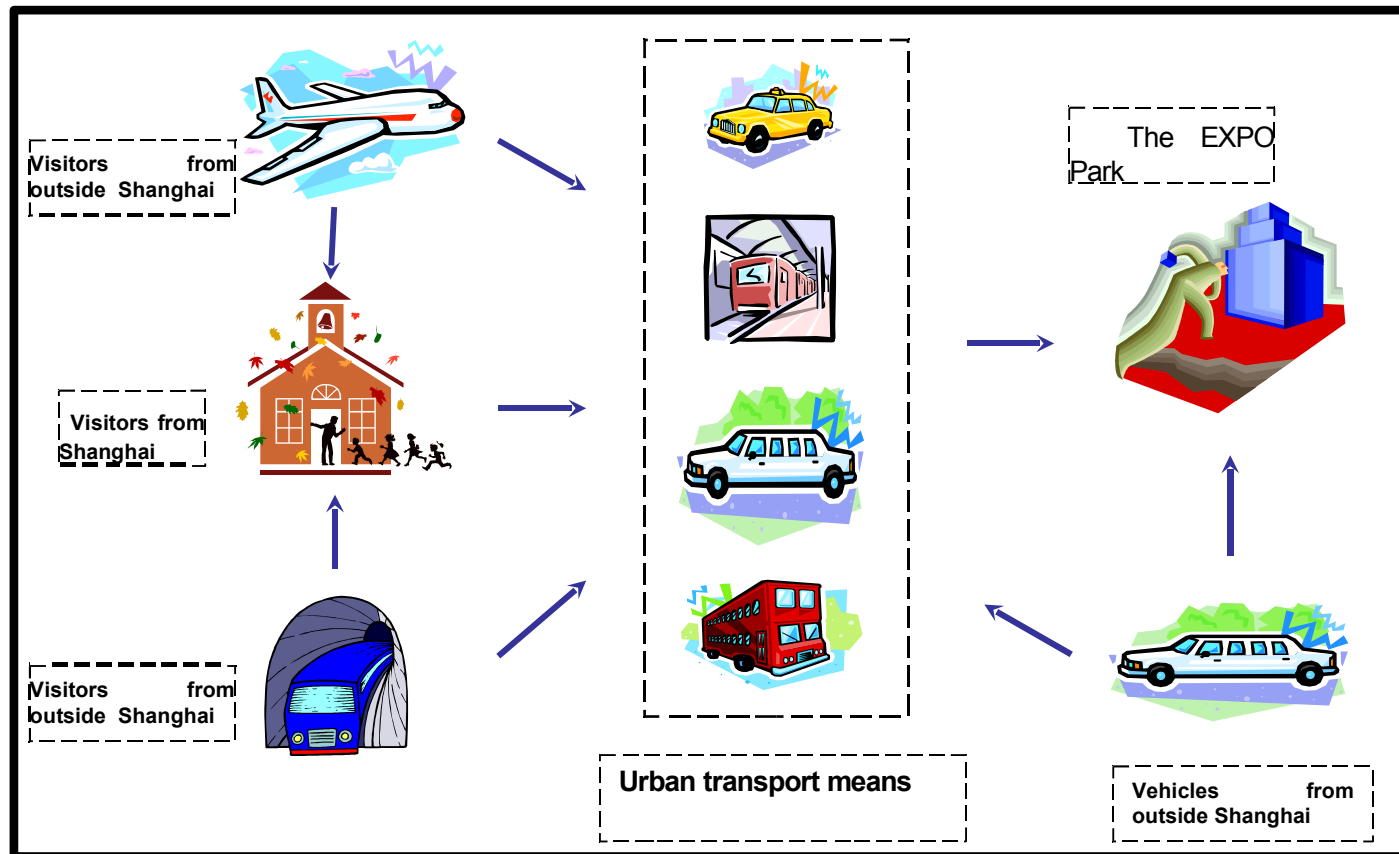
Summary

1. **Demand characteristics of transport related to EXPO 2010 Shanghai China**

3. **Overview of transport information service system of EXPO 2010 Shanghai China**

5. **Brief information on EXPO 2010 transport information application service system**
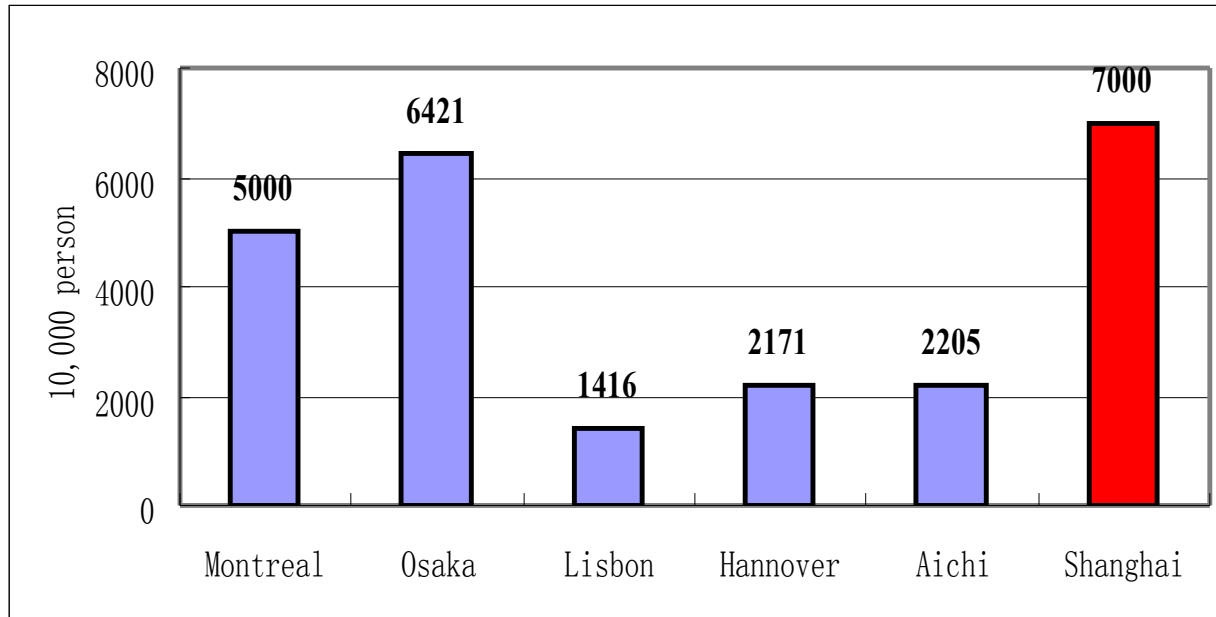
1. Demand characteristics of transport related to EXPO 2010 Shanghai China

☐ Scale of visits

☐ Impact on urban transport
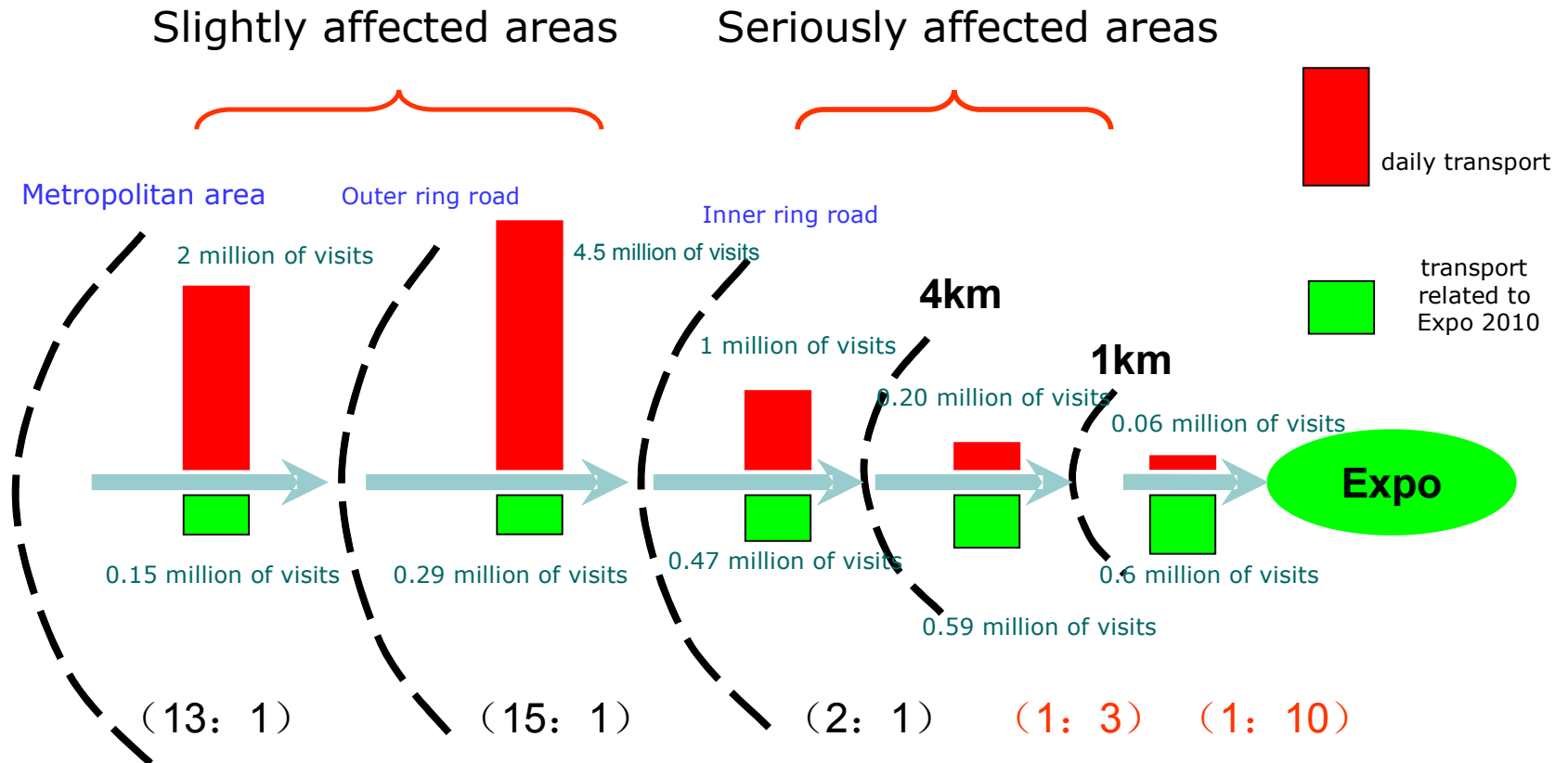
（1） **Scale of visits to EXPO 2010**

Comparison of EXPO historical data

- **It is estimated that a total of 70~80 million visits to EXPO 2010 will set a record.**

- **400,000 visits per day on average, 600,000 visits on a peak day, and the maximum of 800,000 visits on an extremely peak day.**

（2） EXPO impact on daily transport

Slightly affected areas   Seriously affected areas

daily transport

transport related to Expo 2010

Metropolitan area   Outer ring road   Inner ring road

2 million of visits   4.5 million of visits

4km

1 million of visits   0.20 million of visits   1km

0.06 million of visits

Expo

0.15 million of visits   0.29 million of visits   0.47 million of visits   0.6 million of visits

0.59 million of visits

（13：1）   （15：1）   （2：1）   （1：3）   （1：10）

☐ **To ensure the high level of mobility of transport in 2010, Shanghai will adopt 3 administrative approaches. Construction of TIS system is one of the 3 administrative approaches for EXPO 2010 Shanghai China.**

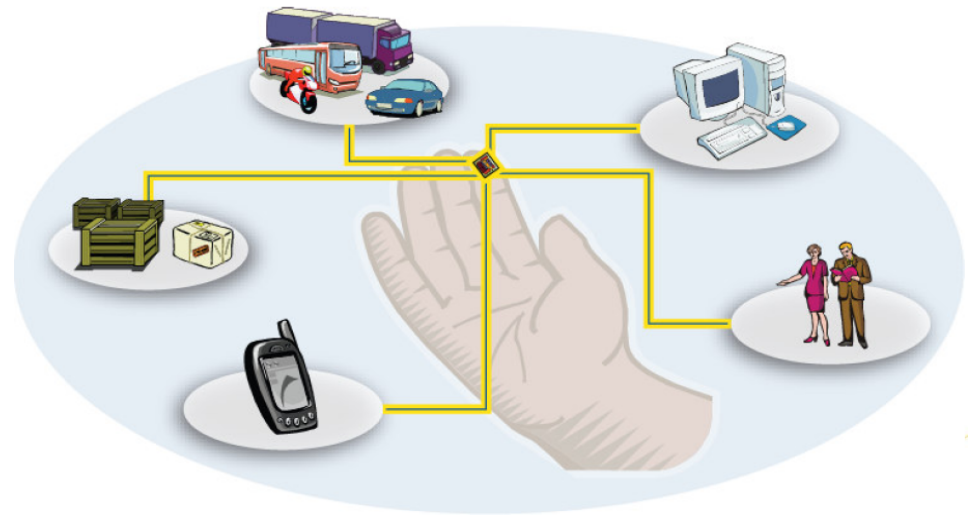# 2.Overview of transport information service system of EXPO 2010

□ **Characteristics and objectives**

□ **Framework of EXPO 2010 TIS system**

（1） Main Characteristics and objectives

□ **On the basis of Shanghai Transport Comprehensive Information Platform (STCIP).**

□ **Directly serving EXPO tourists and traffic organizers.**

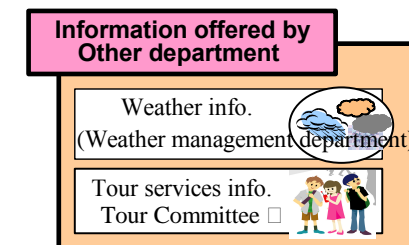□ **System Integration and integrated application.**

➡ To provide

□ **Accurate, comprehensive and abundant travel information.**

□ **Balanced and smooth road traffic based on traffic guidance and linkage.**

□ **Accurate, prompt, transparent and interactive public traffic information.**

□ **Practical and effective parking guidance at right time and right place.**

□ **Seamless integration of traffic hub information to facilitate traffic distribution.**

□ **Accurate and intelligent passenger flow forecast to grant powerful support.**

（2） Framework of EXPO 2010 TIS system

☐ **Transport information collection system**
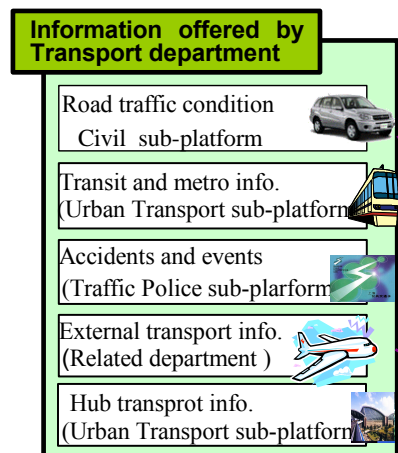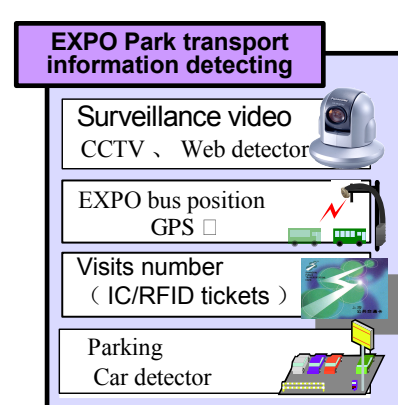
☐ **Integrated application platform**

☐ **Transport information application service system**

EXPO Park transport information detecting

Surveillance video
CCTV 、 Web detector
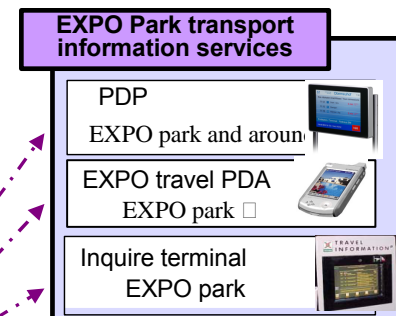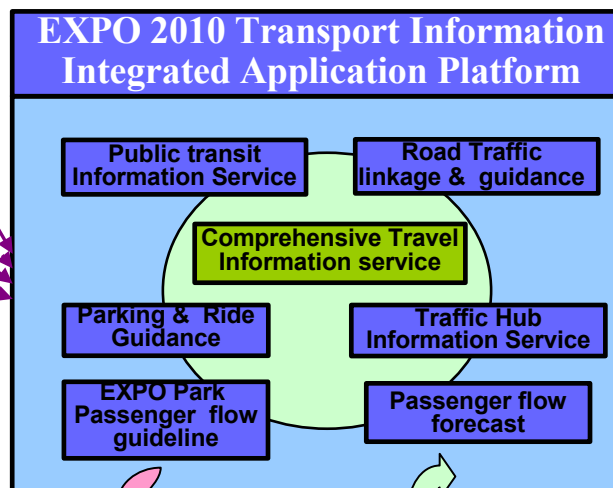
EXPO bus position
GPS

Visits number
（IC/RFID tickets）

Parking
Car detector

Information offered by Transport department

Road traffic condition
Civil sub-platform

Transit and metro info.
(Urban Transport sub-platform)

Accidents and events
(Traffic Police sub-plarform)

External transport info.
(Related department)

Hub transprot info.
(Urban Transport sub-platform)

Information offered by Other department

Weather info.
(Weather management department)

Tour services info.
Tour Committee

EXPO 2010 Transport Information Integrated Application Platform

Public transit Information Service

Road Traffic linkage & guidance

Comprehensive Travel Information service

Parking & Ride Guidance

Traffic Hub Information Service

EXPO Park Passenger flow guideline

Passenger flow forecast

Shanghai Transport Comprehensive Information Platform

EXPO Park transport information services

PDP
EXPO park and around

EXPO travel PDA
EXPO park

Inquire terminal
EXPO park

Transport information services in Shanghai

EXPO travel guidance
Shanghai

EXPO FM broadcast
Shanghai

Cell phone transport info. services（Shanghai）

VMS
(Freeway, urban road, P+R parking)

PDP
（Hubs 、 metro stations）

Electronic station panel
(EXPO transit stations)

Transport information services in China

EXPO transport website
(multi-language, for the world)

EXPO Hot-line
For all china

Dynamic Navigation
（Shanghai）

☐ Transport information collection system

What`s to collect?

❖ **Transport information in EXPO park**

❖ **EXPO parking information**

❖ **EXPO special bus lines operating information**

❖ **Real-time information on road traffic**

❖ **Bus ,metro and water-bus operating information**

❖ **Transport hubs information**

❖ **Information of rail, highway, aviation**

How to collect?

❖ **From Shanghai Transport Comprehensive Information Platform**

❖ **From Transport Information Center of EXPO park**

❖ **From other transport systems**

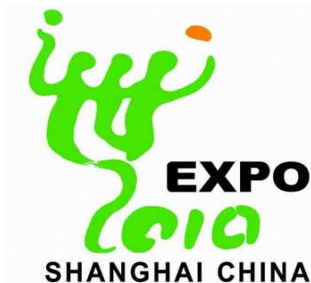# Transport information integrated application platform

❖ **Conserves and manages all gathered transport information related to EXPO 2010.**

❖ **Realizes the interconnection, data exchange and sharing among various application services**

❖ **Executes unified data exchange and connection with Shanghai Transport Comprehensive Information Platform and other IT systems.**

❖ **Different interfaces to transport managers offering information querying, statistic analyzing and form making.**
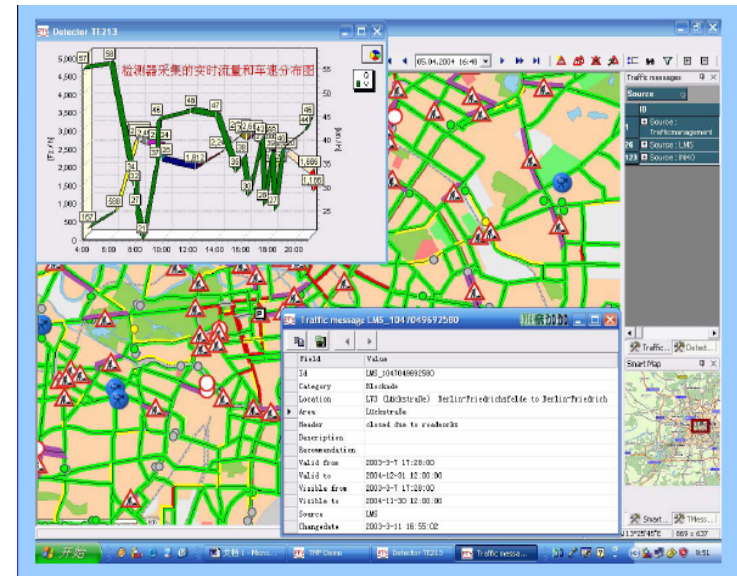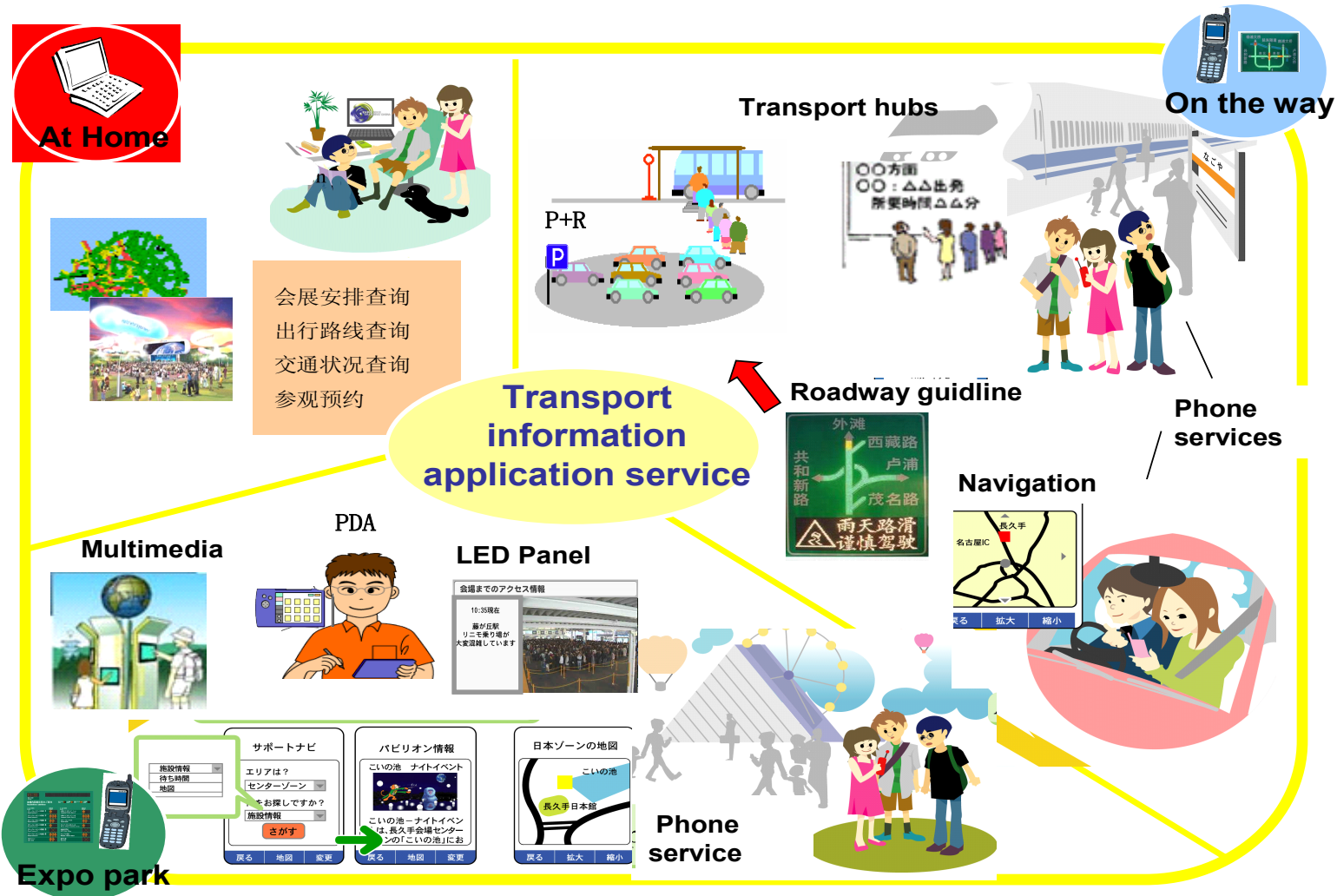
Transport information application system

7 transport information application service:

❖ **Comprehensive travel information service**

❖ **Road traffic linkage and guidance**

❖ **Public transit information service**

❖ **Parking and ride guidance service**

❖ **Traffic hub information service**

❖ **Passenger flow forecast**

❖ **EXPO Park passenger flow guideline**

3. Brief information on transport information application service system

At Home

会展安排查询
出行路线查询
交通状况查询
参观预约

Transport information application service

Transport hubs

P+R

On the way

Roadway guidline

外滩
西藏路
卢浦
共和新路
茂名路
雨天路滑
谨慎驾驶

Phone services

Navigation

名古屋IC
長久手

戻る 拡大 縮小

Multimedia

PDA

LED Panel

会場までのアクセス情報
10:35現在
藤が丘駅
リニモ乗り場が
大変混雑しています

Expo park

サポートナビ
エリアは？
センターゾーン
地図
施設情報
待ち時間
施設情報
さがす
戻る 地図 変更

パビリオン情報
こいの池　ナイトイベント
こいの池－ナイトイベン
トは、長久手会場センター
ゾーンの「こいの池」にお
戻る 地図 変更

日本ゾーンの地図
こいの池
長久手日本館
戻る 拡大 縮小

Phone service

（1） Comprehensive travel information service system

Characteristics:

☐ **Provides comprehensive transport information covering all transport means.**

☐ **Facilitates tourists to grasp overall knowledge on EXPO transport before departure, during the travel process and within the EXPO Park.**

☐ **Services offered generally in such a simple way that either one website or one telephone.**
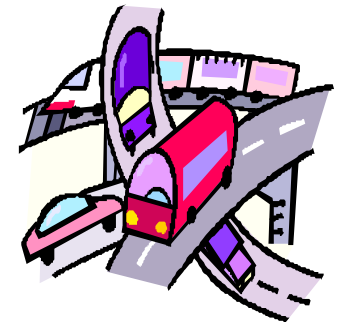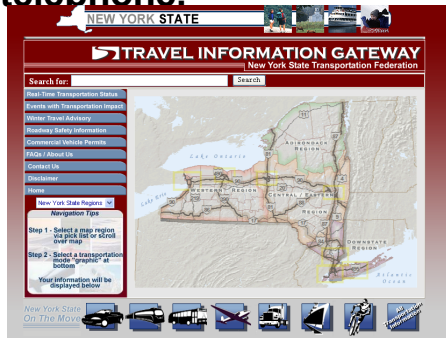
Service means:

☐ **EXPO 2010 Transport Website (transport information column under EXPO 2010 Website)**

☐ **WAP service website,**

☐ **EXPO 2010 hotlines,**

☐ **Specialized channel of transport radio station, TV station and etc.**

（2） Road traffic linkage and guidance system

☐ **With the principle of EXPO priority.**

☐ **Implements universal guidance to road transport systems within the metropolis and even Yangtze Delta.**

☐ **Service means include road traffic guidance within controlled areas, road traffic linkage and guidance in EXPO related routeways, on-board navigation, mobile navigation and etc.**

（3） Public transit information service system

Composed of:

☐ **EXPO rail transport information service system.**

☐ **EXPO public transit specialized line information service system.**

☐ **Water-bus information service system.**

☐ **taxi information service system and etc.**

（4） P + R guidance service system

Composed of:

☐ **P+R guidance system.**

☐ **Parking space reservation system.**

停车信息发布屏　停车信息发布屏　　电话　手机短信　网站

停车换乘诱导系统　　停车预约系统

世博停车信息服务
公共停车信息系统

引导区停车换乘枢纽(P+R)　…　缓冲区停车换乘枢纽(P+R)　　临时停车场

（5） Transport hub information service system

☐ **Mainly refer to external transport hubs and large-scale urban public transit hubs.**

☐ **Provide EXPO passengers with interchange guidance, as well as real-time traffic information services.**

☐ **Means include LED panels, individualized and people-oriented inquiry via touch screen, information bulletin, station broadcasting and etc.**

☐ **Congestion video information on forward interchange stations is suggested.**

（6） Passenger flow forecast system

- ☐ A transport demand management system that makes forecast and effective adjustment of EXPO transport demands.

- ☐ Guarantees the balance of EXPO passenger flows, prevent extreme passenger flow peaks, and minimize the disturbance on urban normal operation .

（7） EXPO park passenger guidance system

- ☐ On basis of EXPO park IT systems such as transport monitoring system, ticket system and public transit operation system.

- ☐ Transport information outside EXPO park is collected from SCTIP or other systems.

- ☐ Service means include large-scale screen, touch screen for inquiry, information service inquiry center, PDA, transport manual and etc..

Thank you!