



URBAN TRANSPORT DEVELOPMENT PLAN CAPITAL CITY ULAANBAATAR MONGOLIA

ULAANBAATAR –City data at a Glance (as of 2013)

Area

- Total Administrative Area : 4700 km²
- Divided in 9 districts /including three remote districts/

Population

- Population: around 1.2 Million (about 45% of total population)
- Population density: 40 persons/hectare

Environment

- Extremely cold climate: lowest temperature in winter -40° C
- Annual average temperature: -2° C
- Annual precipitation: about 250 mm
- Situated at 1300m above the sea level
- Duration of heating season: 8 month

Priority issues in urban development

Improve infrastructure to meet the rapid population growth and increase the efficiency of services.

Improve the *sub urban areas* by provision of basic infrastructure such as water supply, sewerage, heat, road, etc.

Develop efficient Urban planning and Land management system.

Develop satellite towns to decrease the concentration in Ulaanbaatar.

Develop efficient transport system.

THE POPULATION FORECAST AND HOUSING SITUATION IN ULAANBAATAR

2020

2030

- Currently about **40%** of the population of Ulaanbaatar lives in apartment buildings connected to centralized grids.
- By increasing of housing supply it is planned to provide apartments to **58.5%** of the population of Ulaanbaatar in 2020, and to **70.1%** in 2030.

Current situation of urban transport

By the end of 3rd quarter of 2013

375,000 vehicles registered only in Ulaanbaatar city. Daily,

over **180,000** vehicles travels along city roads. It is expected

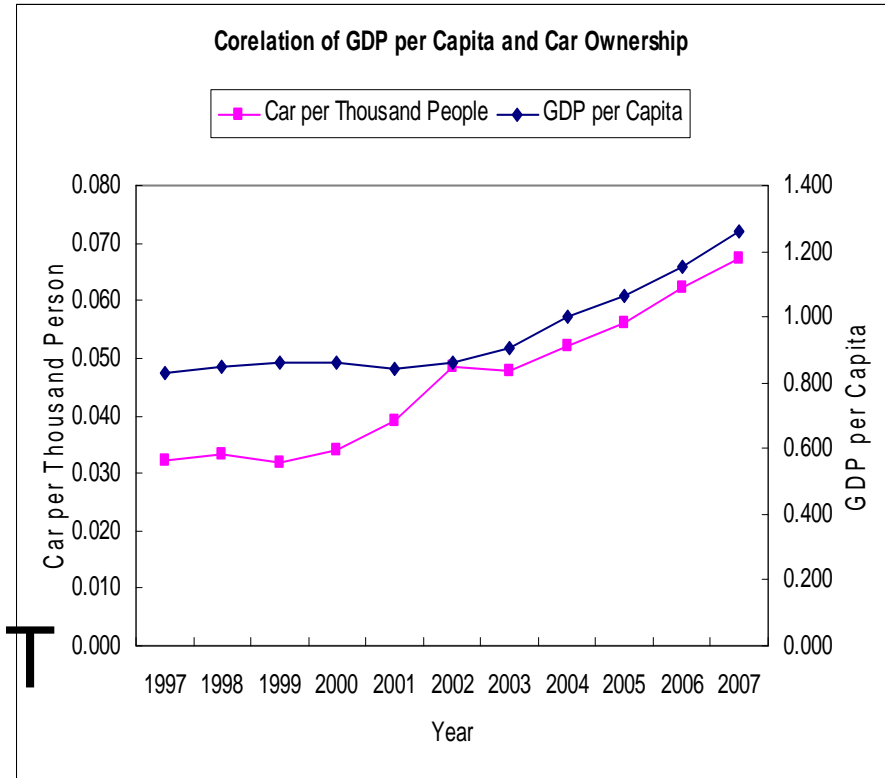
to reach **970,000** vehicles by

2020 IN CASE IF

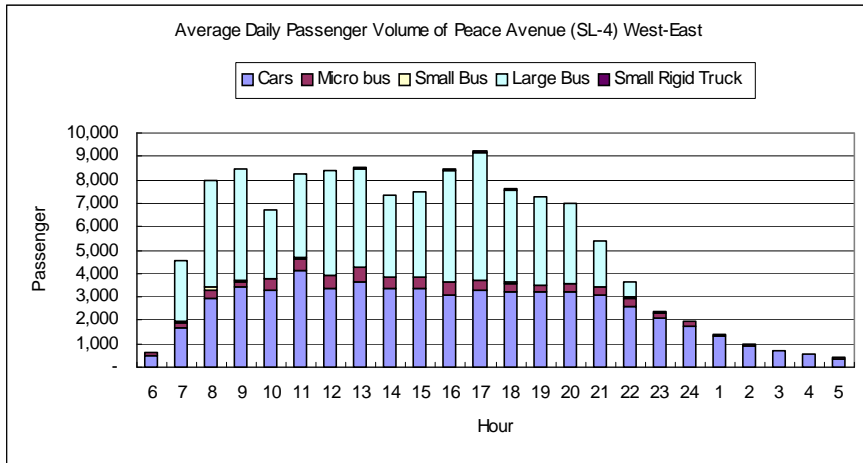
MUNICIPALITY DOESN'T

TAKE ANY of

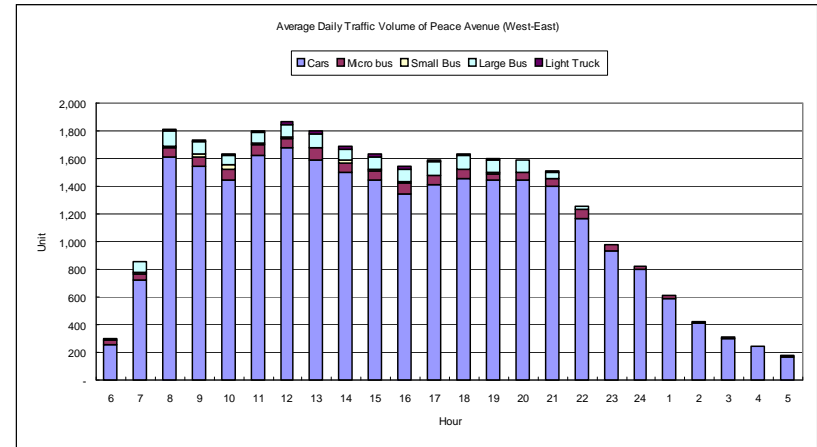
INTERVENTION in the sector.



Current situation of urban transport



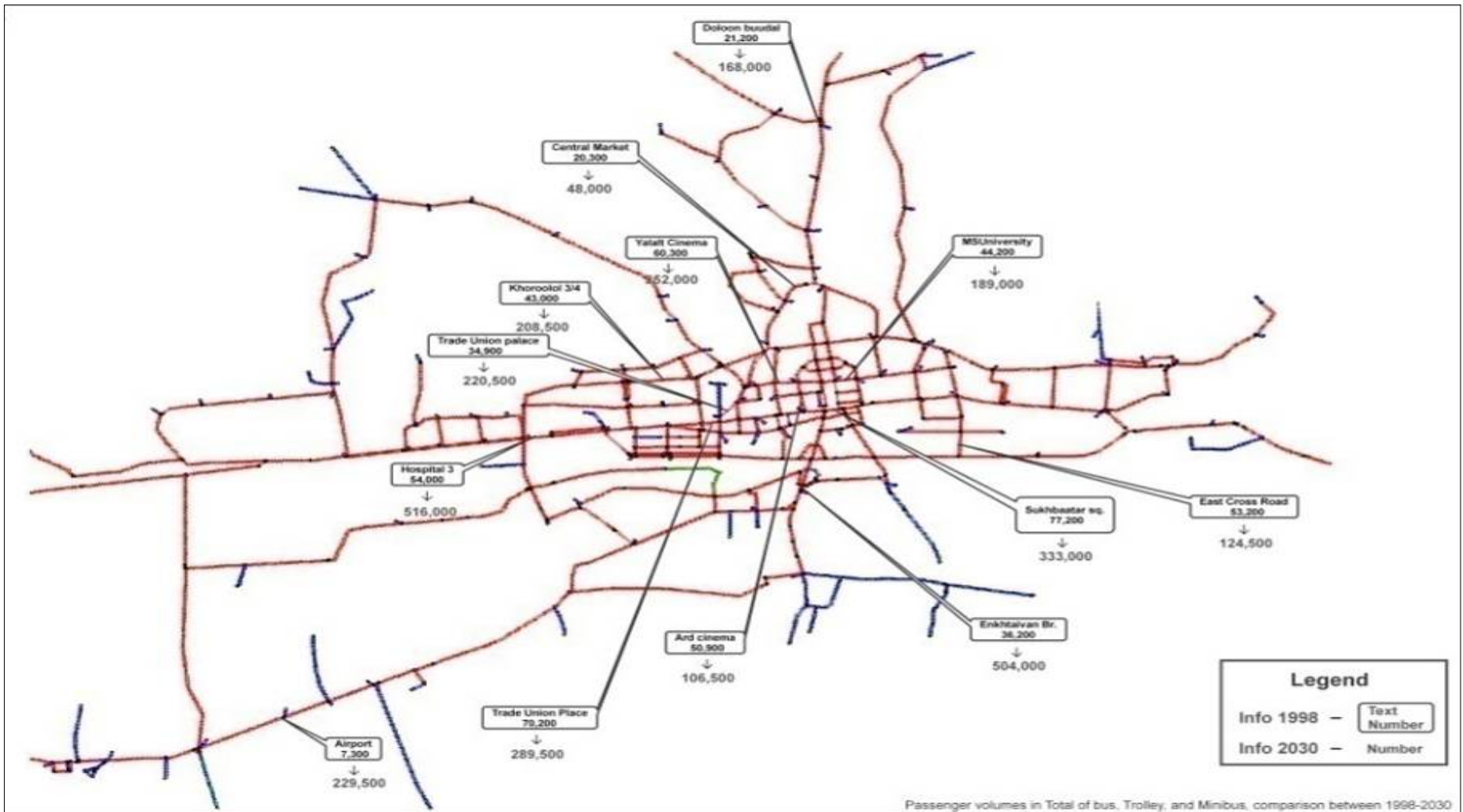
passenger flow



vehicles' number

<i>Indicator</i>	<i>Public transportation</i>	<i>Private vehicles</i>
<i>Vehicles' ratio in daily traffic</i>	1 %	99%
<i>Passengers ratio transporting</i>	60%	40%
<i>Road use ratio</i>	5%	95%

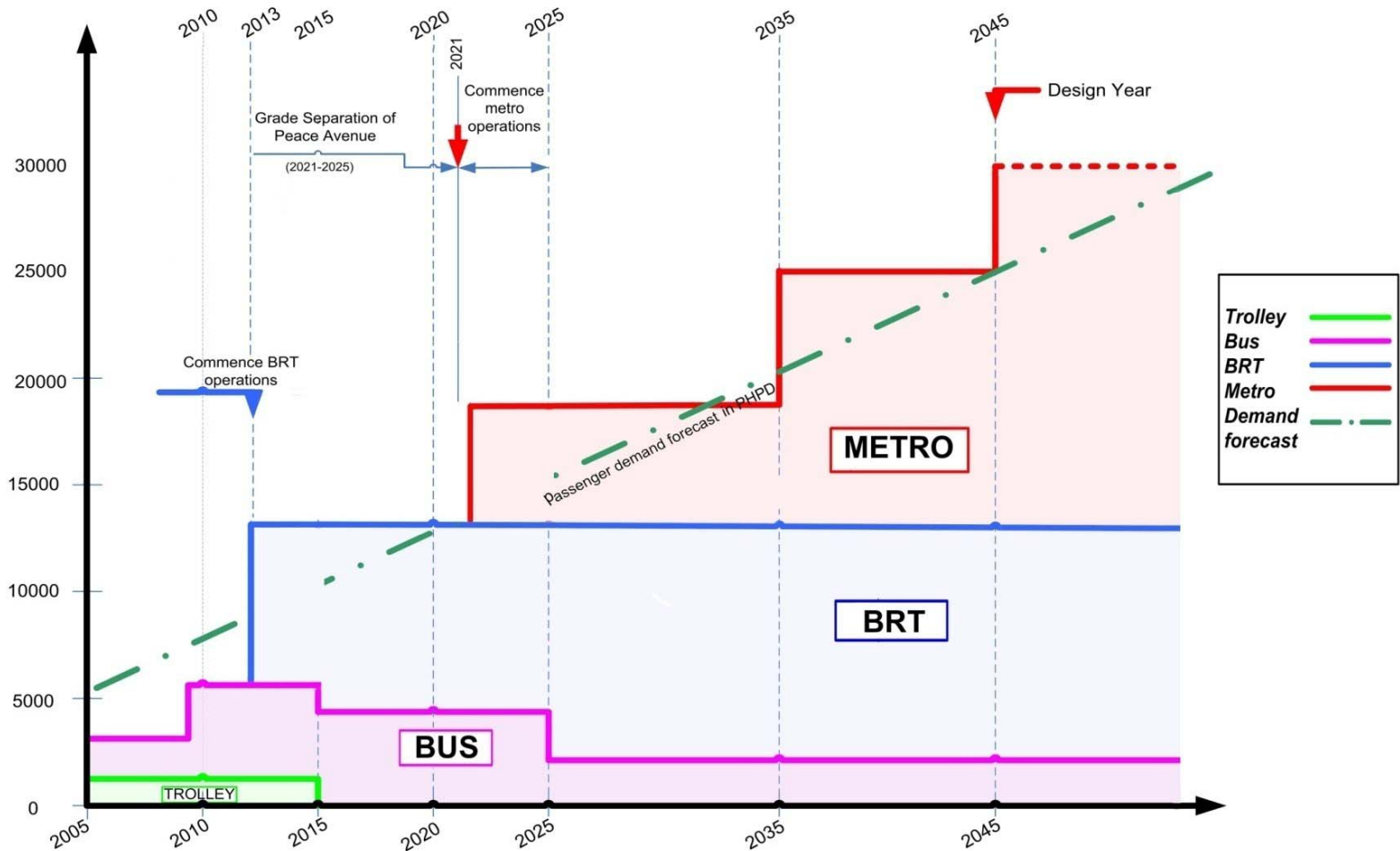
2020 O H. Expected road, traffic congestion by 2020

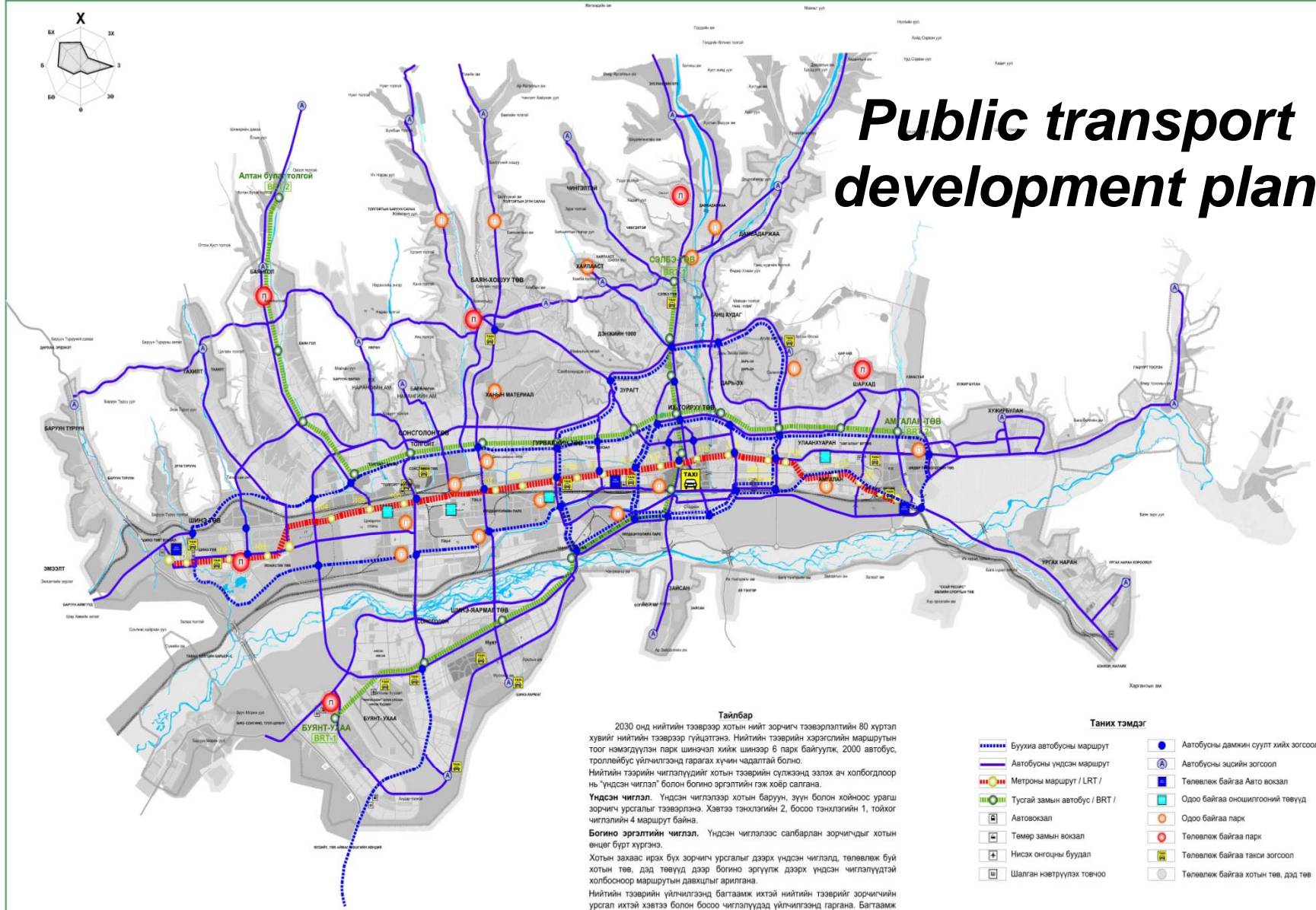
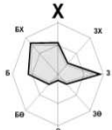


Source: UBMP study team report, 2009.

Urban transport development plan

ULAANBAATAR Public Transit Network
Line 1 - Peace Avenue
Passenger Demand Forecast





Public transport development plan

Тайлбар

2030 онд нийтийн тээвэрээс хотын нийт зорчигч тээвэрлэлтийн 80 хуртал хувийг нийтийн тээвэрээр гүйцэтгэнэ. Нийтийн тээврийн хэрэгслийн маршрутын тоог нэмэгдүүлэн парк шинэчлэл зийж шинээр 6 парк байгуулж, 2000 автобус, троллейбус үйлчилгээнд гарагах хүчин чадалтай болно.

Нийтийн тээврийн чиглэлүүдийг хотын тээврийн сүлжээнд эзлэх ач холбогдлоор нь "үндсэн чиглэл" болон богино эргэлтийн гэж хөвр сэлгэнэ.

Үндсэн чиглэл. Үндсэн чиглэлээр хотын баруун, зүүн болон хойноос урагш зорчигч урсгалыг тээвэрлэнэ. Хэвтээ тэнхлэгийн 2, босоо тэнхлэгийн 1, тойрог чиглэлийн 4 маршрут байна.

Богино эргэлтийн чиглэл. Үндсэн чиглэлээс салбарлан зорчигчдыг хотын өнцөг бүрт хүргэнэ.

Хотын заххаас ирэх бүх зорчигч урсгалыг дээрх үндсэн чиглэлд, төлөвлөж буй хотын төв, дэд төвүүд дээр богино эргүүлж дээрх үндсэн чиглэлүүдтэй холбооноор маршрутын давхцлыг арилгана.

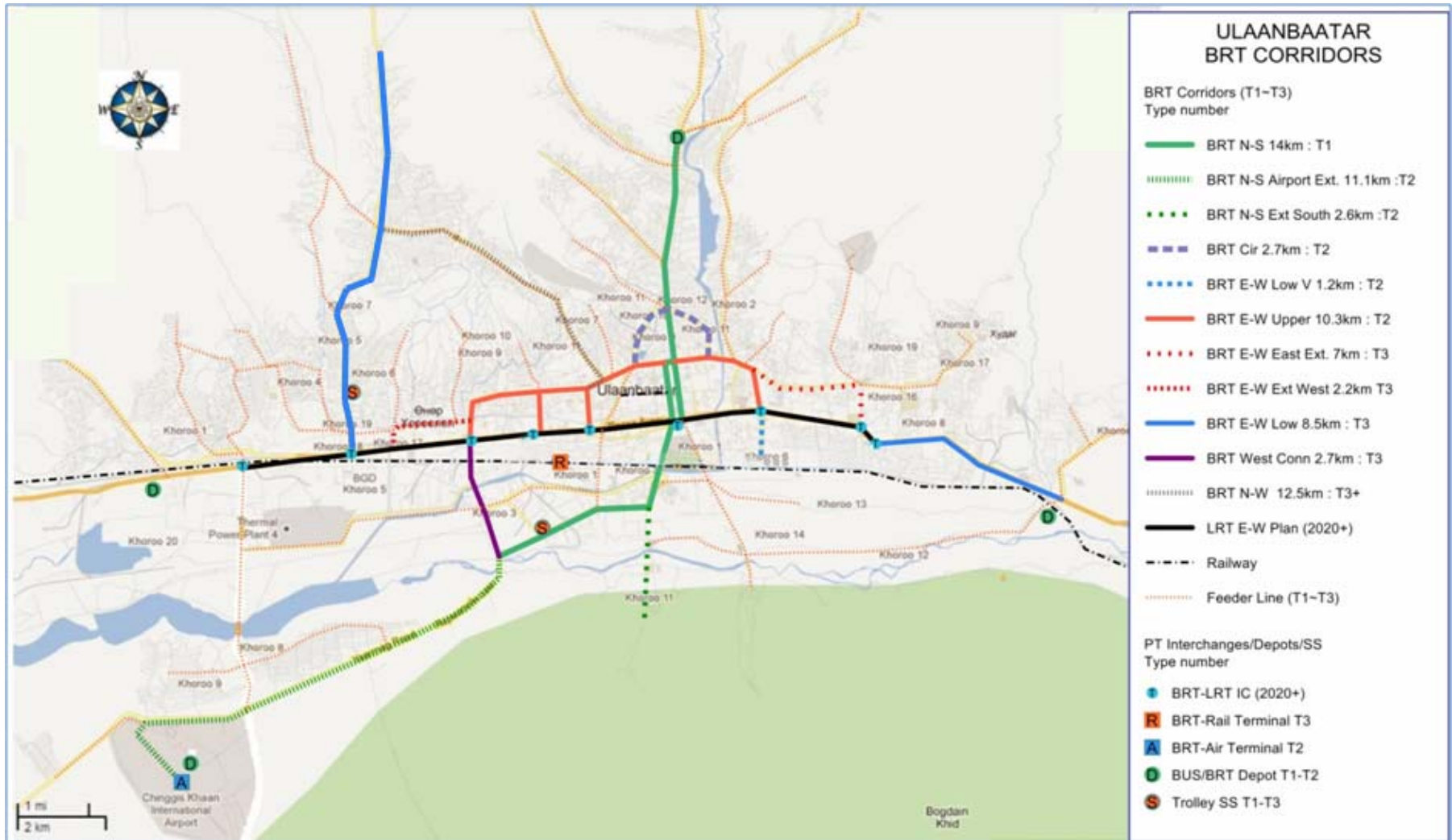
Нийтийн тээврийн үйлчилгээнд багтаамж ихтэй нийтийн тээврийг зорчигчийн урсгал ихтэй хэвтээ болон босоо чиглэлүүдэд үйлчилгээнд гаргана. Багтаамж ихтэй нийтийн тээвэр тусгай замын автобус /BRT-ны 2 шугам, хөнгөн галт тэрэг /LRT-ний 1 шугам байна.

Таних тэмдэг

- Буухиа автобусны маршрут
- Автобусны дамжин суулт хийж зогсоол
- Автобусны үндсэн маршрут
- A Автобусны зогсонги зогсоол
- Метроны маршрут / LRT /
- A Төлөвлөж байгаа Авто вокзал
- Тусгай замын автобус / BRT /
- A Одоо байгаа ношилгооны төвүүд
- A Автовокзал
- A Одоо байгаа парк
- A Төлөвлөж байгаа парк
- A Автовокзал
- A Төлөвлөж байгаа такси зогсоол
- A Төлөвлөж байгаа хотын төв, дэд төв
- A Төмөр замын вокзал
- A Нисэх онгоцны буудал
- A Шалган нэвтрүүлэх товчоо

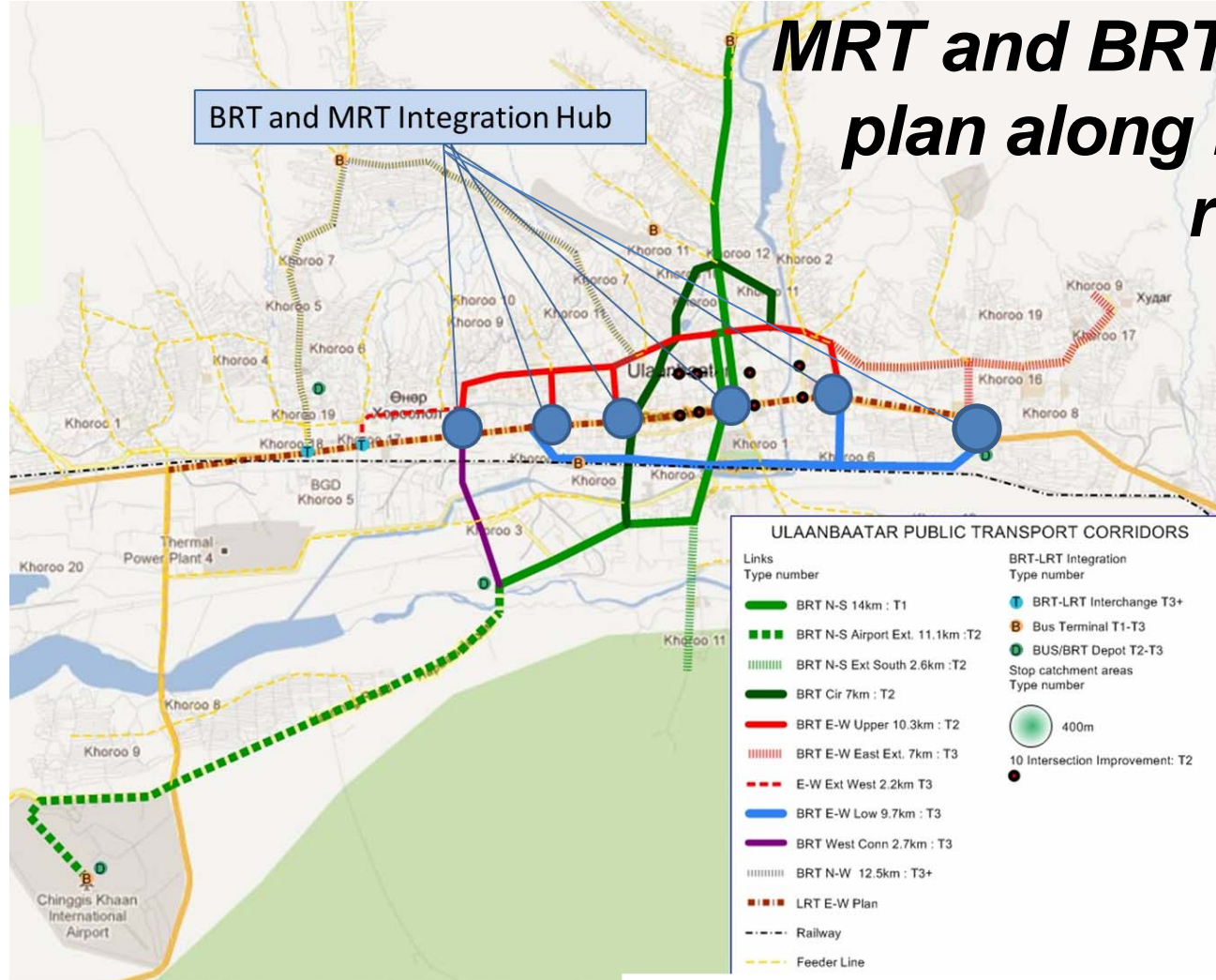
ULAANBAATAR CITY MASTER PLAN – up to 2030

Mass transit modals – MRT and BRT planned main corridors to be developed



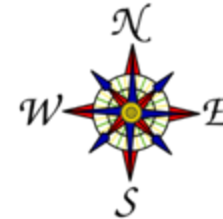
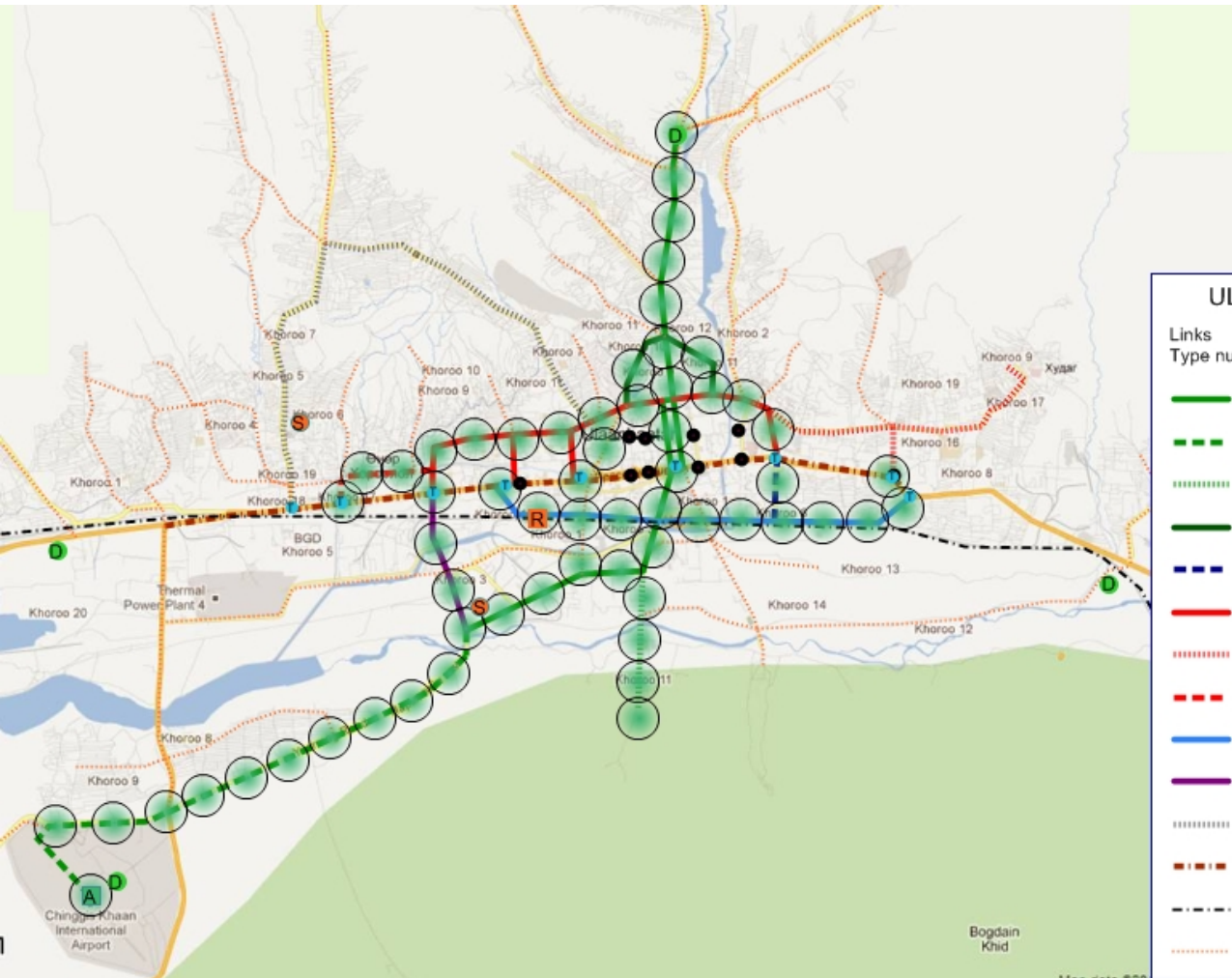
MRT and BRT integration hub plan along main collector road

BRT and MRT Integration Hub



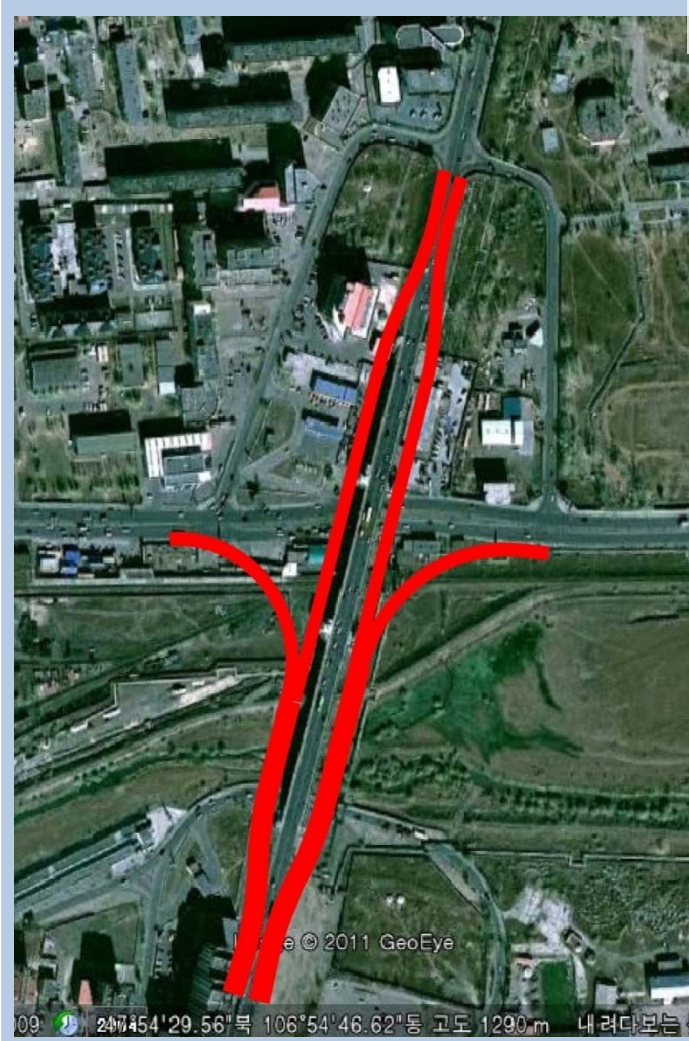
Bus rapid transit concept plan

Bus rapid transit corridors (short and mid term development plan)

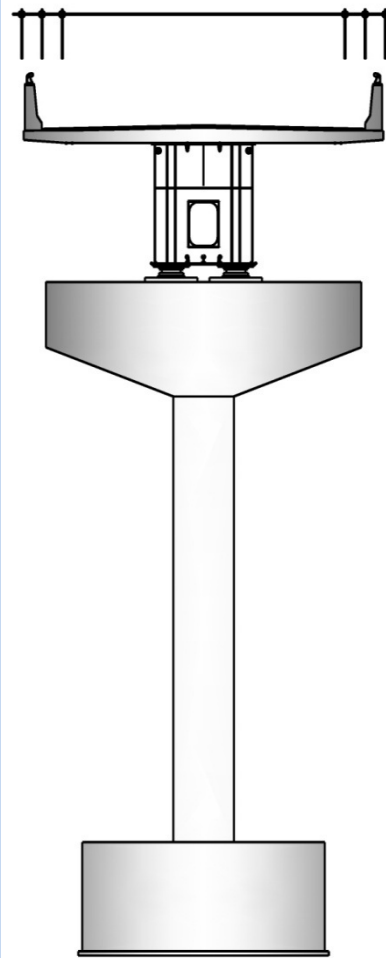


ULAANBAATAR PUBLIC TRANSPORT CORRIDORS	
Links Type number	BRT-LRT Integration Type number
BRT N-S 14km : T1	BRT-LRT Interchange T3+
BRT N-S Airport Ext. 11.1km :T2	BRT-Rail Terminal T3
BRT N-S Ext South 2.6km :T2	BRT-Air Terminal T2
BRT Cir 2.7km : T2	BUS/BRT Depot T1-T2
BRT E-W Low V 1.2km : T2	Trolley SS T1-T3
BRT E-W Upper 10.3km : T2	Stops
BRT E-W East Ext. 7km : T3	Stop catchment areas Type number
BRT E-W Ext West 2.2km T3	400m
BRT E-W Low 8.5km : T3	10 Intersection Improvement: T2
BRT West Conn 2.7km : T3	
BRT N-W 12.5km : T3+	
LRT E-W Plan	
Railway	
Feeder Line	

Road infrastructure development



0.5 0.5 **2@3.5=7.0** 0.5 0.5



introduction of intelligent transport system



cta Chicago Transit Authority
CTA Bus Tracker

1. SELECT ROUTE 2. SELECT DIRECTION 3. SELECT STOP
20 West Bound MADISON + CALIFORNIA Map

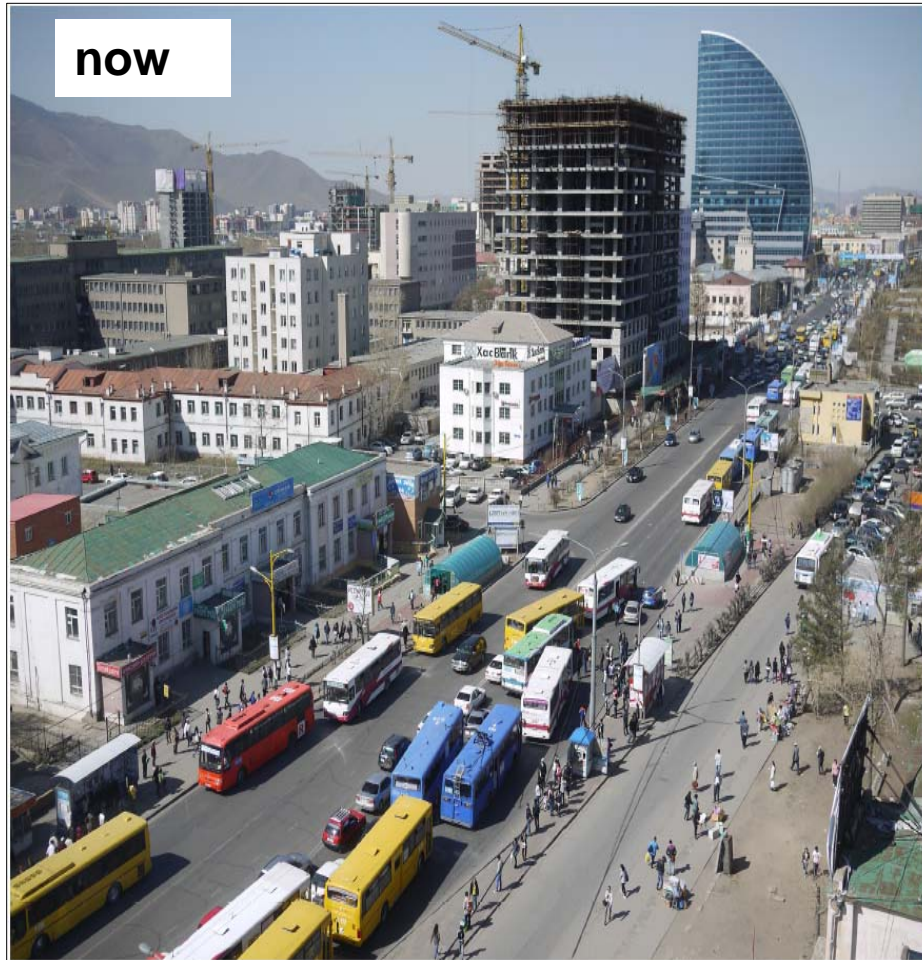
MADISON + CALIFORNIA (West Bound) 3:25 PM

ROUTE / DESTINATION	ESTIMATED ARRIVAL / BUS #
20 TO MADISON AUSTIN	6 MINUTES 6877
20 TO MADISON AUSTIN	9 MINUTES 6882
20 TO MADISON AUSTIN	9 MINUTES 6720
20 TO MADISON AUSTIN	18 MINUTES 6700
20 TO MADISON AUSTIN	29 MINUTES 6887

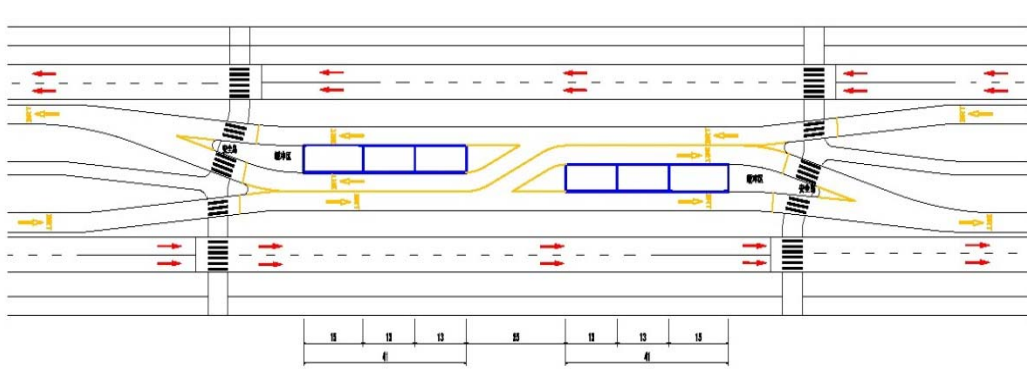
powered by BusTime



Concept plan for brt corridors

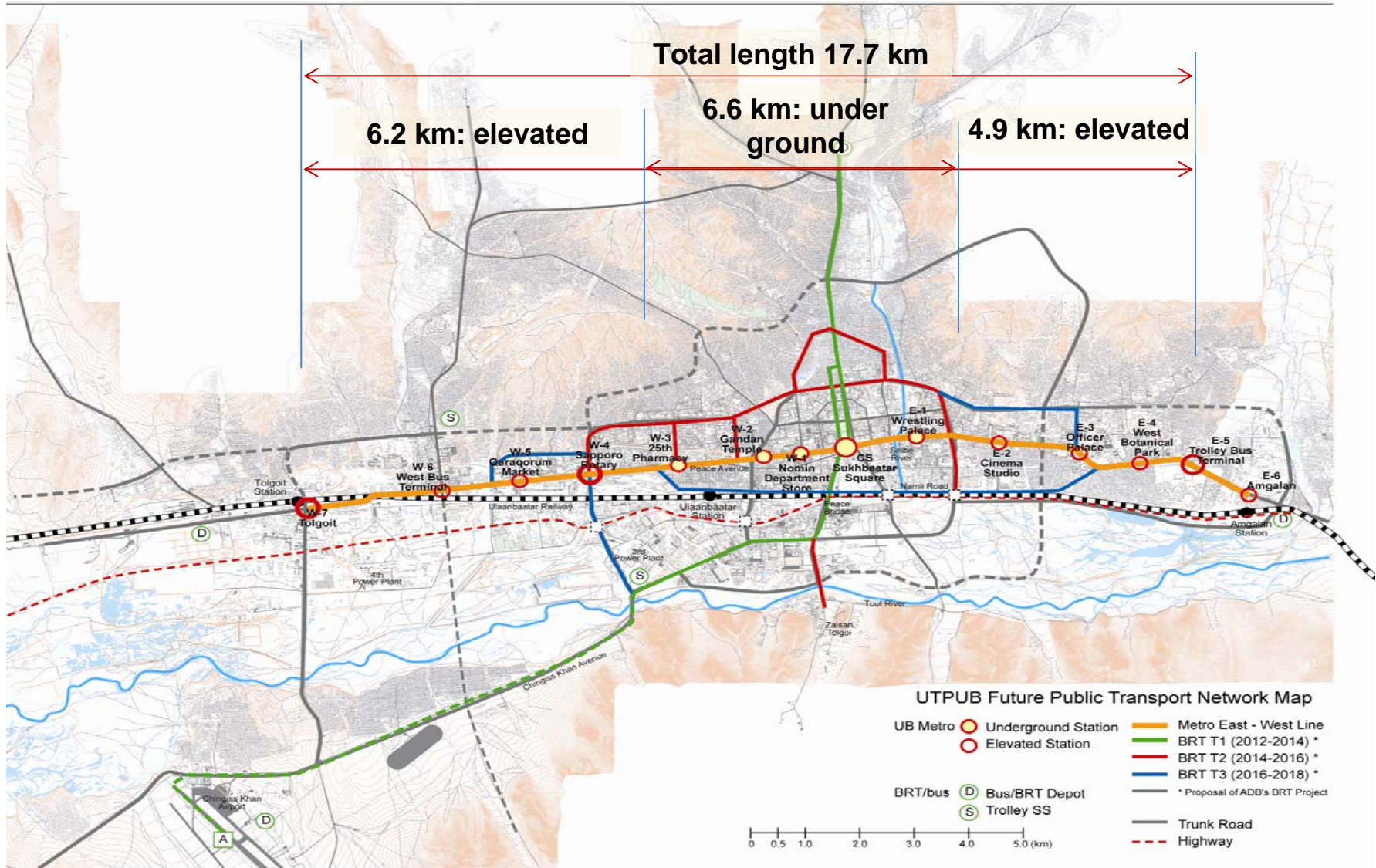


Concept plan for brt corridors



Metro concept plan

Concept plan for mrt corridors



Open Space Framework

With future development availability

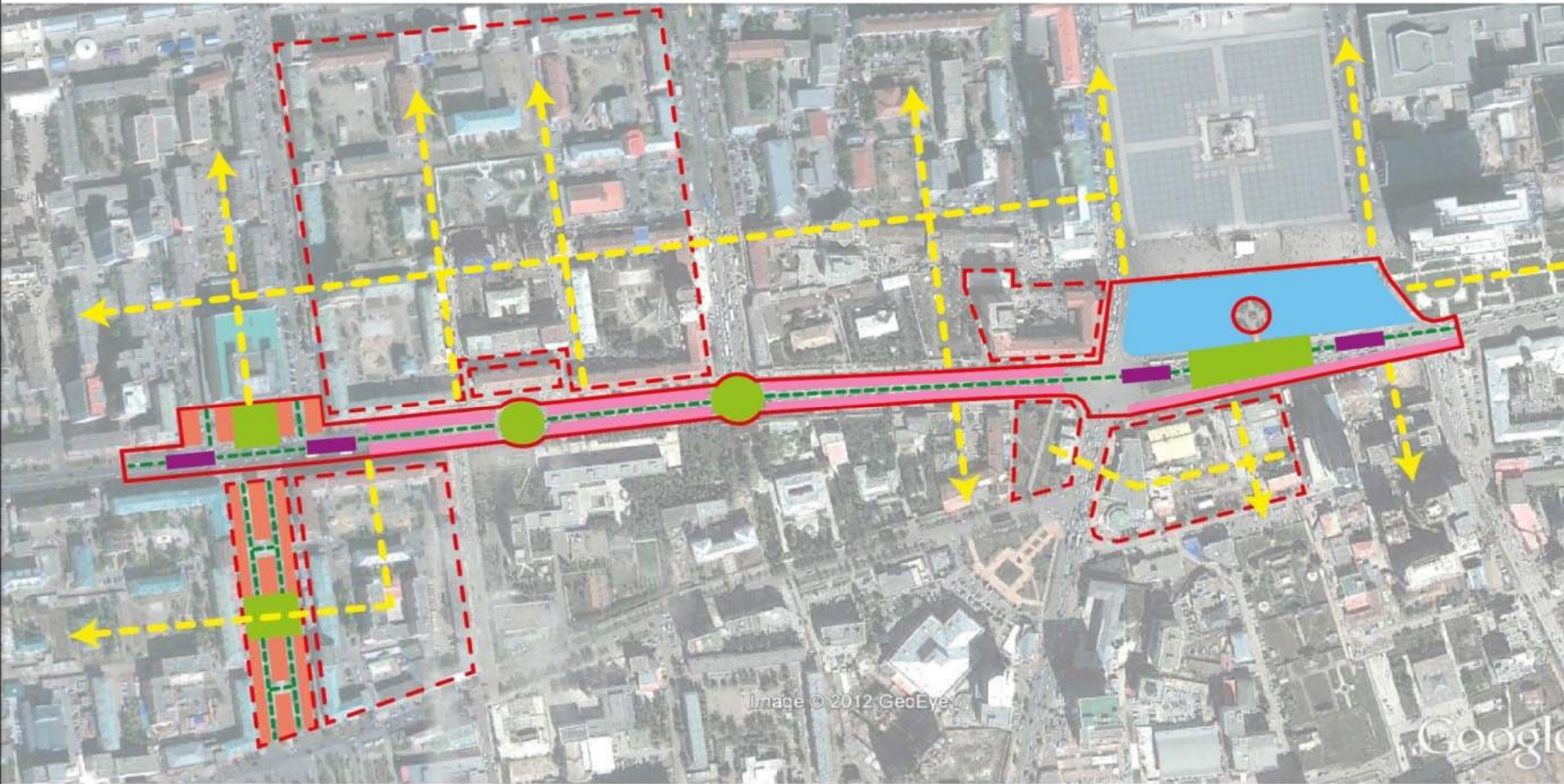











Image © 2012 GeoEye

Google

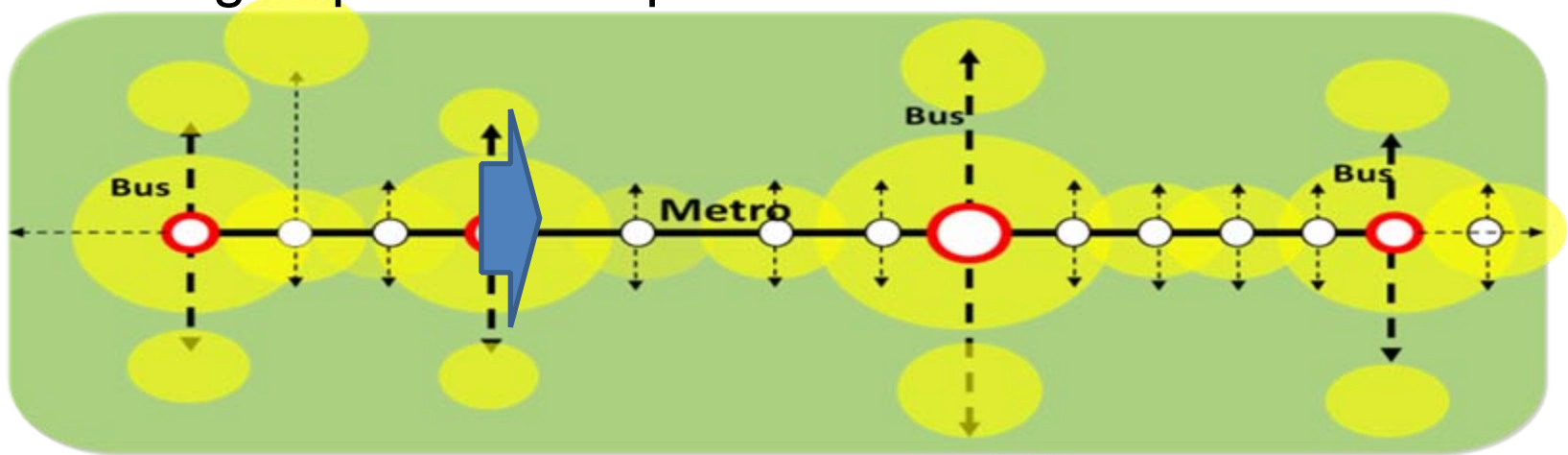


500ft
200m

- | | | |
|--|--|--|
|  Underground square |  Underground aquarium |  Underground city area |
|  Shopping street |  Wicket |  Future underground development |
|  Shopping mall | |  Pedestrian path |
| | |  Potential future connections |

Concept plan for mrt corridors

Remodeling of public transport routes



○ Center & Sub Center

MRT station concept plan



conclusion

- Investments are needed for implementation of Master Plan for Ulaanbaatar City Development in 2020-2030.
- Master Plan is approved and being implemented in order to make green and smart city.
- Mega-projects like Subways, BRT, and water reservoir are on the pipeline.



Thank you!