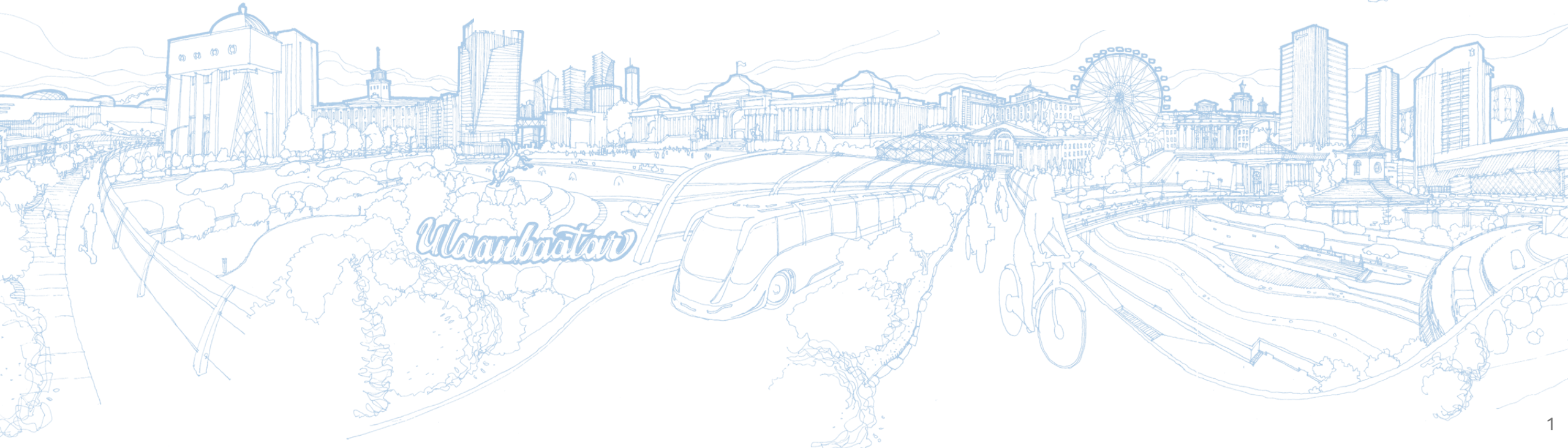
GOVERNMENT OF MONGOLIA

MINISTRY OF ROAD AND TRANSPORT

FIRST MEETING OF THE SMART MOBILITY WORKING GROUP

21 MAY 2026, MANILA, PHILIPPINES



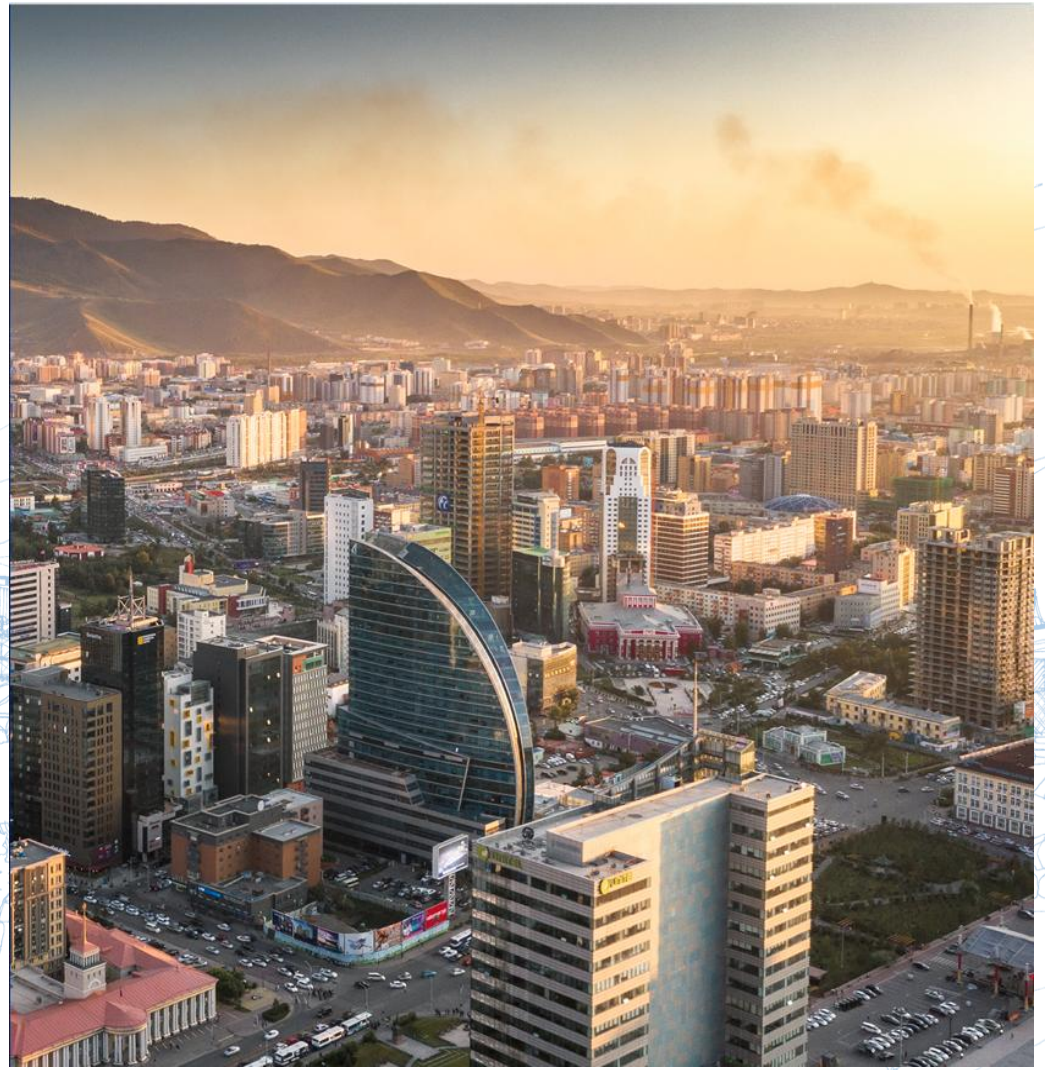
GOVERNMENT OF MONGOLIA

GOVERNOR'S OFFICE OF THE CAPITAL CITY

ULAANBAATAR SUSTAINABLE URBAN TRANSPORT PROJECT

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

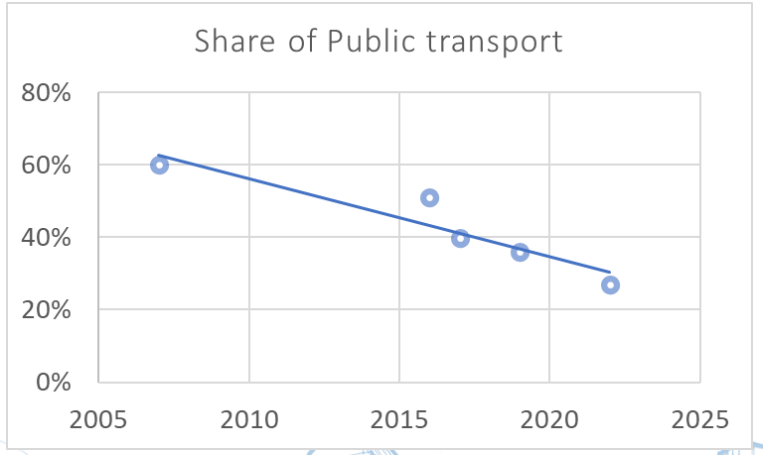
Sustainable Urban Mobility Strategy and Plan for Ulaanbaatar City in 2050

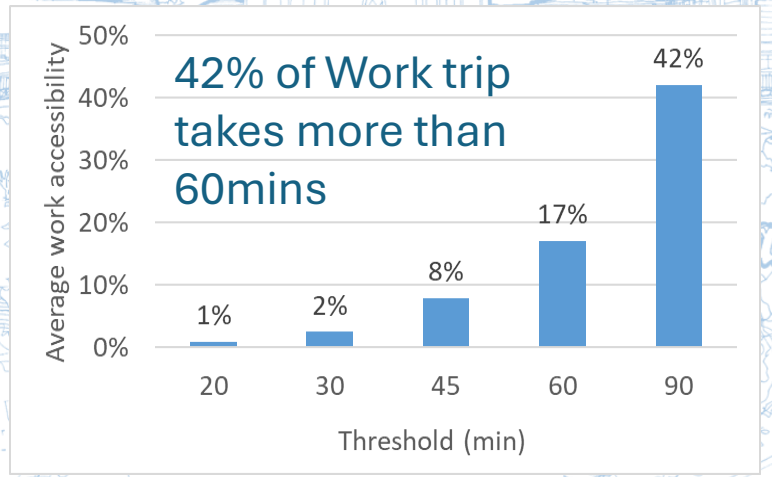


Diagnostic Analyses

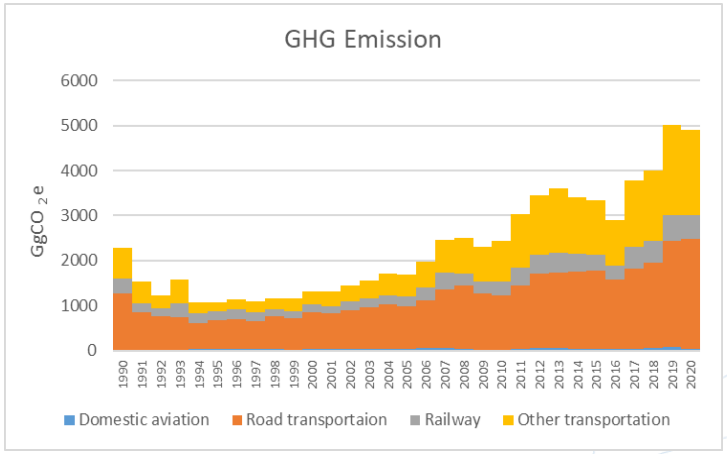
1 Current Mobility Issues in UB based on Diagnostic Analyses

Inclusive problem

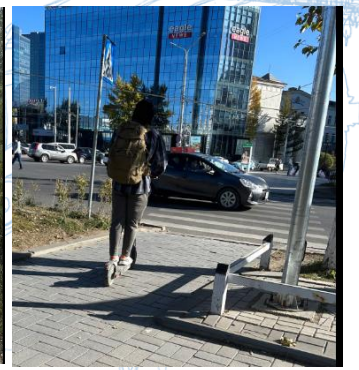




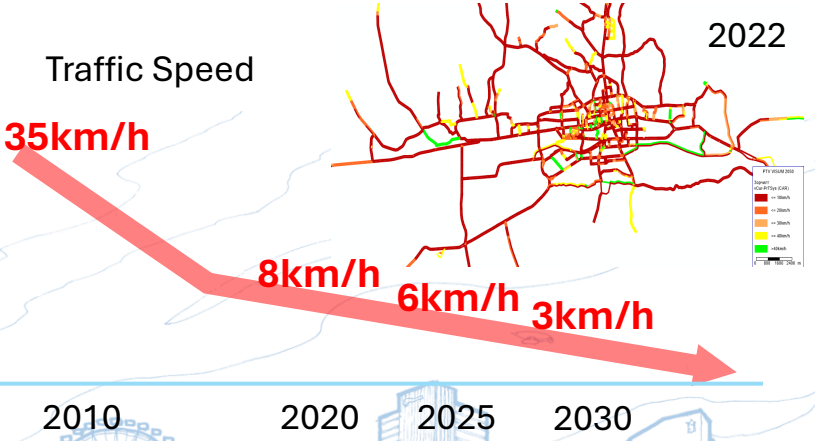
Environment problem



Not enough of network for active transport



Sustainable problem



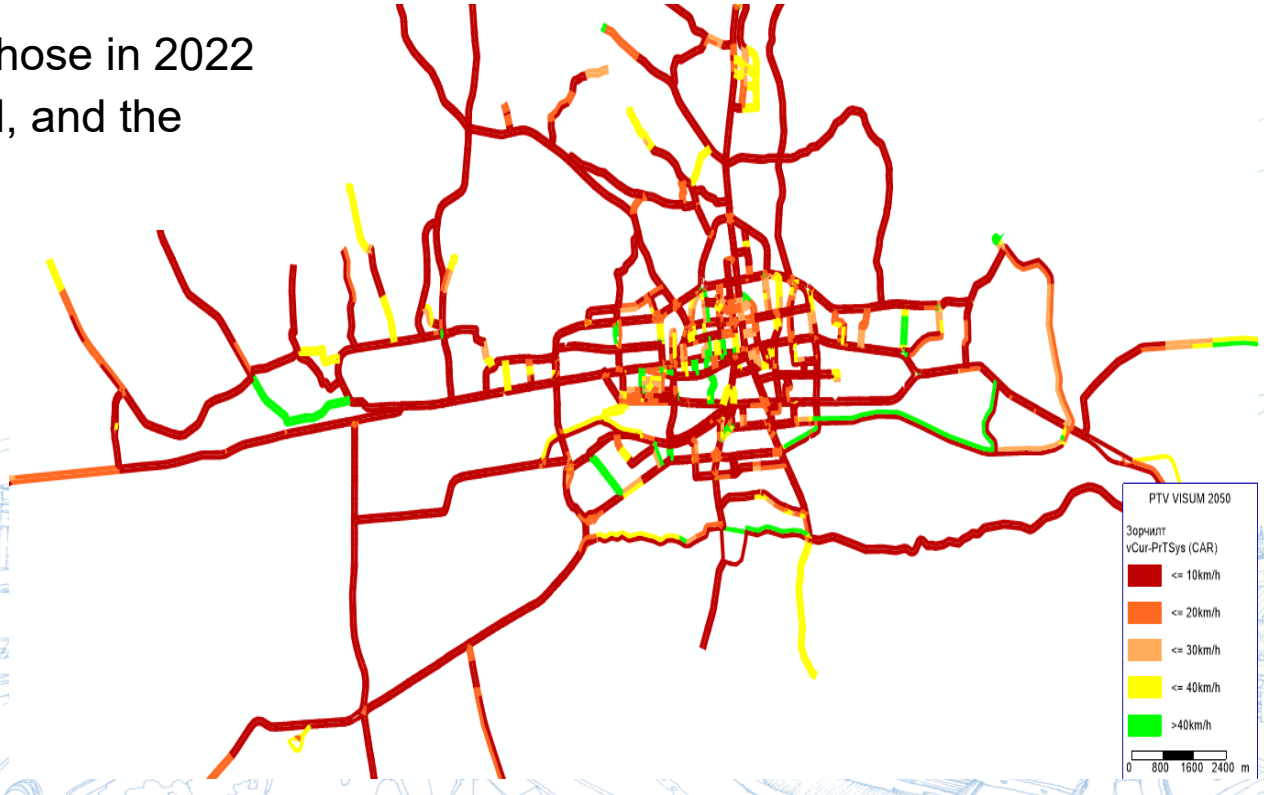
Traffic Accident map

2 What will happen on UB Traffic State in 2050, if no actions are taken? It is the worst scenario for UB Transportation.

Do Nothing 2050

- Transport cost will reach 26 times from 2022
- NOx and CO2 emission will reach 5 times as much as those in 2022
- Almost of all sections of roads will be heavily congested, and the average travel speed in the UB City will be 2km/h.

Category	Current	Future (2050) If do-nothing
Demography (Population)	1.5 mil.	**2.5 mil.**
Public Transport Usage (PT Share)	27%	**Less than 5%**
Traffic Congestion (Average Travel Speed)	12 km/h	**2 km/h**
Transport Cost	9 mil. USD (2022)	**243 mil. USD (26 times)**



Everywhere will be heavily congested!!

SUMS Framework

3 Current Issues — Measures/Strategies — Key-Strategic Axis

- Transport cost is very high
- Low travel speed
- Need to encourage the public transport and active transport usage
- Public transport share is going down
- Improve traffic safety
- Inclusive designed facilities are necessary
- Need to Secure the Equity
- Mono-centric city
- Need to utilize the ITS to improve the mobility
- Need to decline the GHGs and air pollution
- Weak Institution, No coordination with other departments/ agencies

- Encourage to use of public transport for passenger and logistics
- Improvement of road capacity
- Encourage to use the active transport
- Development of Transit Oriented Development for rail and bus
- Sharing vehicle system
- Implementation of TDM
- Improvement of traffic management, traffic safety
- Strengthening parking function
- Equity
- Distribution of the vehicle demand
- Promotion of urban decentralization
- Inter-city mobility development
- Smart mobility or passenger and logistics
- New Mobility
- Strengthening ITS
- Improvement of Environment
- Encourage to use the EV/HEV
- Road pricing
- Strengthening resilience (flood, earthquake, snow disaster)
- Reduction of CO_2 emission and carbon neutral
- Evaluation and monitoring system
- Establishment SUMS committee
- Citizen Engagement

Inclusive

- No. of public transport ridership
- People Coverage from bus stop/station
- Wheelchair networks

Green

- No. of Pedestrian
- The share of EV/HEV
- Emission amount (PM, Nox, CO)

Sustainable

- Average speed
- Transport cost
- No. of days for road closure with disaster

4 Composition of Proposed Strategies and Projects for UB-SUMS 2050

Vision (1)

Inclusive, Green and Sustainable City

Goals/Objectives (3)

1) Inclusivity
2) Green
3) Sustainability

Cross-Cutting (5)

1) Promotion of Urban Decentralization and 20-minutes City
2) Mass Transit on High Demand Corridors
3) Expand Coverage & Rerouting of Bus Service Network
4) Community Engagement and Citizen Participation
5) Institutional Reform and Capacity Building

Strategies (24)

1) For Inclusivity: 8 Strategies;
2) For Green: 4 Strategies; and
3) For Sustainability: 12 Strategies

Proposed Projects (164)

Estimated Total Cost: 43,906 Mill. USD

5

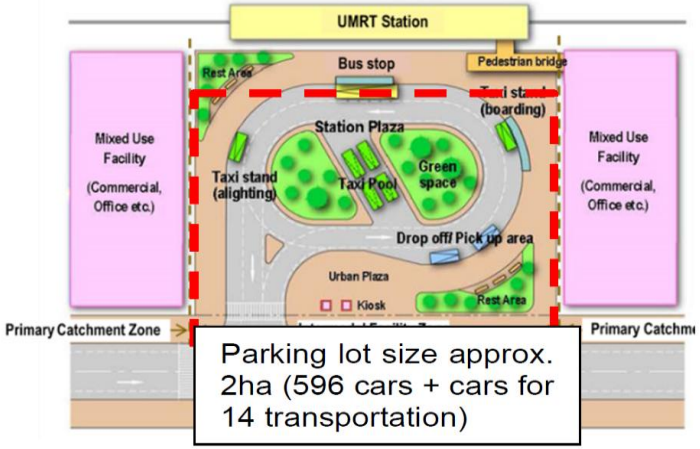
Inclusivity (1/2)

Goal: All groups of citizens have equal access to any socio-economic opportunity.

Key Objective	Strategy
Improved quality and coverage of public transport	I1: Integrated fares and ticketing across transport modes
	I2: Multi-modal interchange facilities
	I3: Comfortable and safe bus shelters
	I4: Test the viability of on-demand transportation services
Inclusive and affordable transport options	I5: An extensive and accessible pedestrian network
	I6: A city-wide network of cycle routes linking key destinations and supporting the 20-minute city
	I7: Universally accessible transport infrastructure
	I8: Support the development of Mobility as a Service

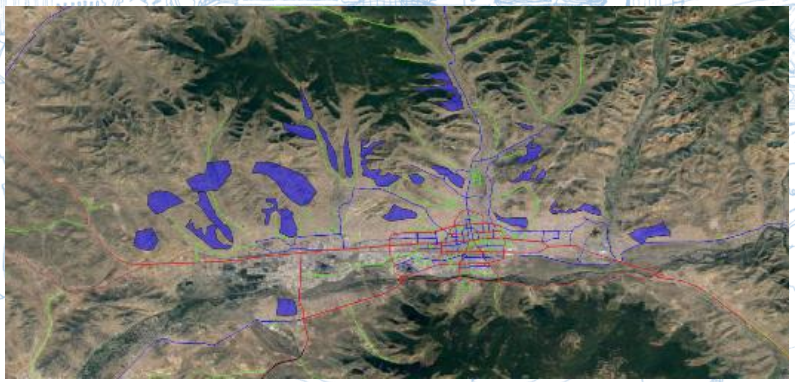
I1. Integrated fares and ticketing across transport modes

I2. Multi-modal interchange facilities,



I3, Safe bus shelters with Realtime information system

I4. Test the viability of On-Demand transportation services

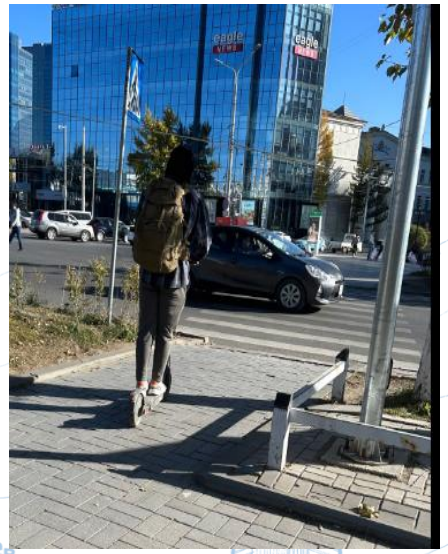


Inclusivity (2/2)

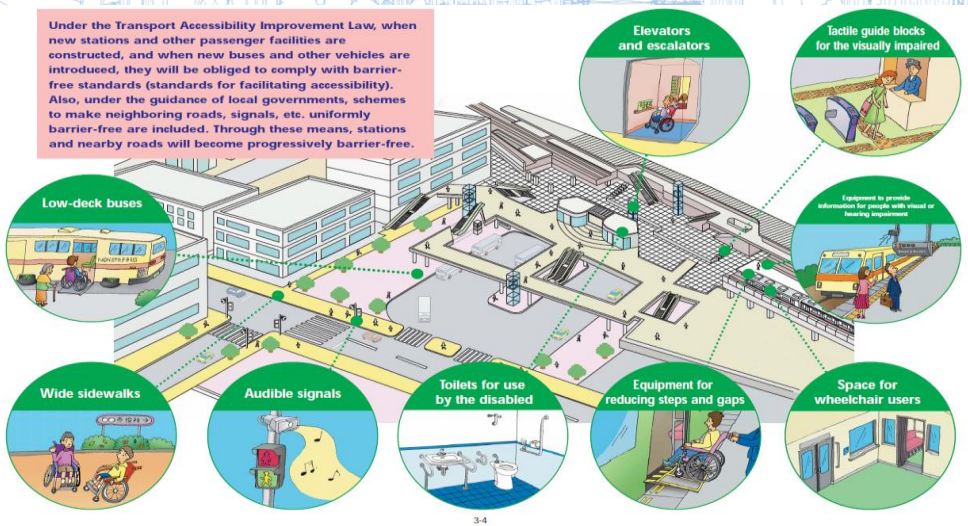
Goal: All groups of citizens have equal access to any socio-economic opportunity

I5: An extensive and accessible pedestrian network

I6: A city-wide network of cycle routes linking key destinations, supporting the 20-minute city structure.



I7: Universally accessible transport infrastructure



I8: Support the development of **Mobility as a Service**

7

Green

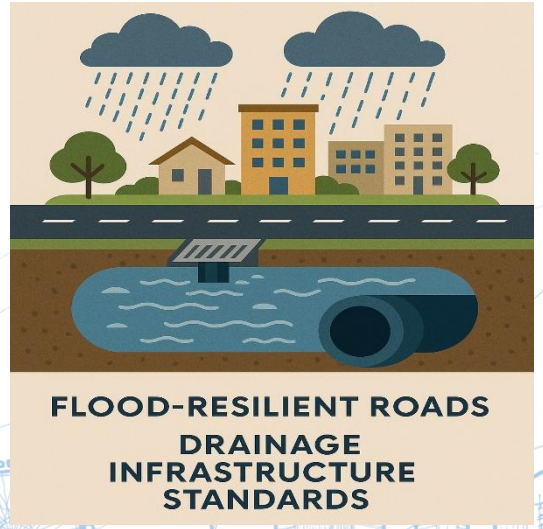
Goal: Healthy and livable urban environment should be ensured for residents.

Key Objective	Strategy
Reduced emissions from road transport	G1: Greening of transport corridors G2: Promotion of electric vehicles
Resilience and security to climate and disaster shocks	G3: Stormwater system improvements G4: Earthquake warning system
Greater use of active transport	See Inclusivity Strategies 5 and 6

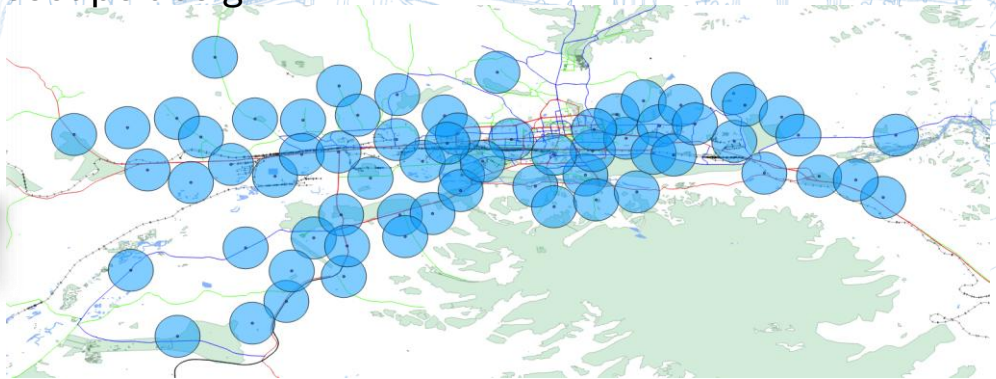
G1. Greening of transport corridors through tree-lined boulevards and alcove parks.

G2. Introducing electric vehicles, promoting active transportation, creating emission-zero zones, and regulating

G3. Drainage management, flood-resistant roads standards



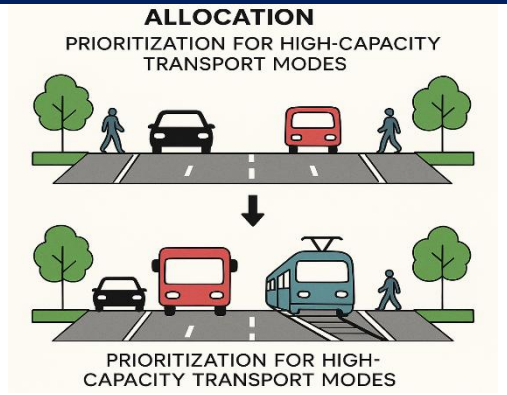
G4. Disaster (e.q. Earthquake) warning system. Earthquake warning system, emergency transportation routes, evacuation plans, and fire escape design.



8 Sustainability (1/2)

Goal: Efficient, safe and advanced mobilities for people and freights should be well-maintained

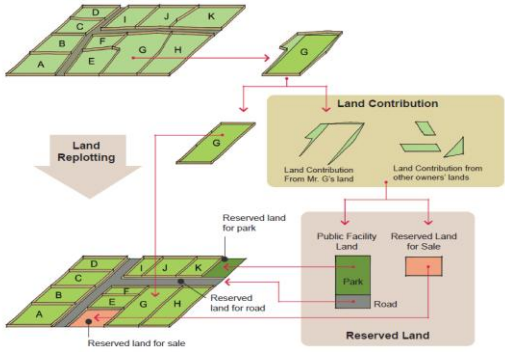
Encourage behavior change to support use of efficient transport modes	S1: Allocate road space to space efficient transport modes
	S2: Support implementation of shared mobility options and their integration with the public transport network
Reduce the need to travel	S3: Assess appropriate travel demand management measures
	S4: Continued formalization and development of Ger areas
	S5: Transit Orientated Development



S1 Allocate road space to space efficient transport modes

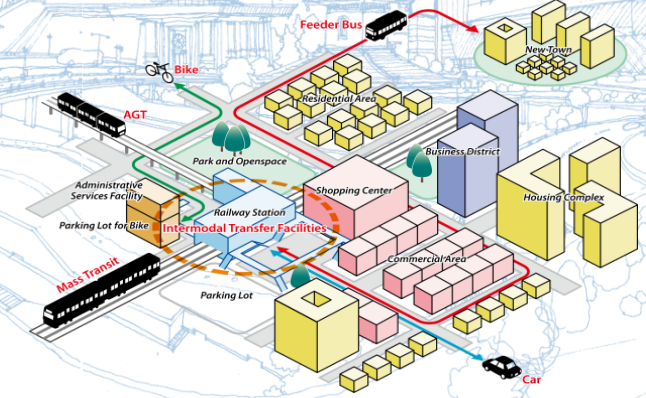
S2 Carpooling, improving intersections, reducing parking demand, etc.

S3 Carpooling, improving intersections, reducing parking demand, etc.



S4 Traffic demand management, toll roads, parking control, and delivery zone planning

S5 : Transportation-oriented development (TOD), station-area real estate, PPP financing

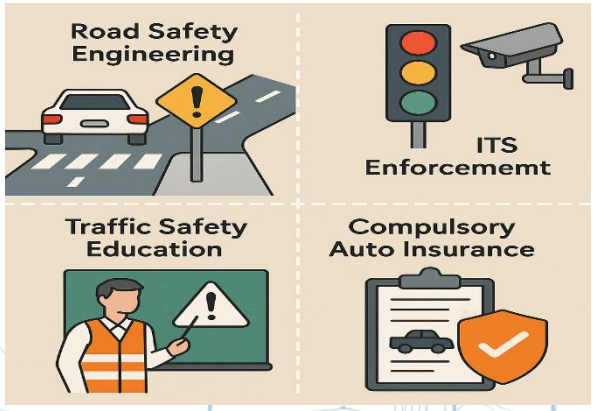


TOD Concept

9 Sustainability (2/2)

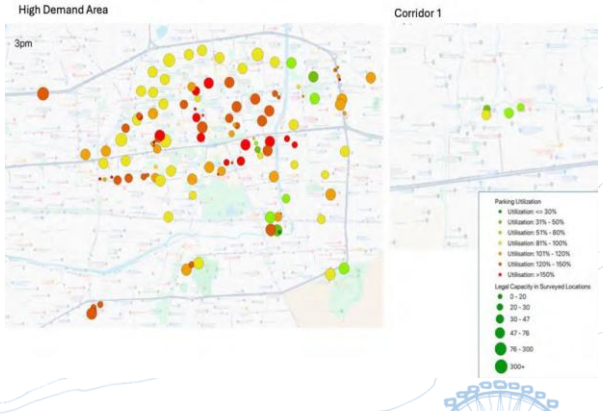
Goal: Efficient, safe and state-of-the art mobilities for people and freights should be well-maintained

S6 : Traffic safety engineering, ITS implementation, traffic safety education, compulsory automobile insurance



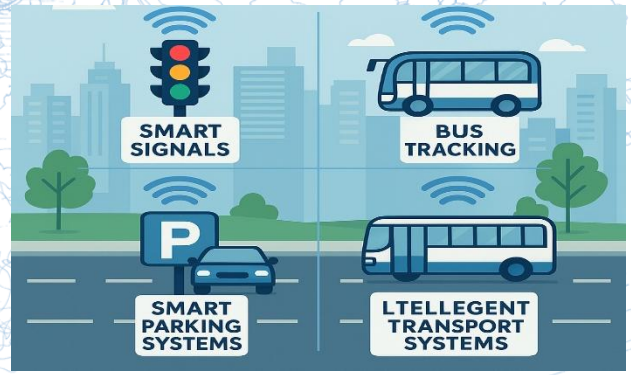
S7 Priority bus lanes, centralized bus lanes, public transport traffic light priority, touch-sensitive traffic lights, etc.

S10 Parking management system, dedicated parking for logistics, reducing traffic congestion

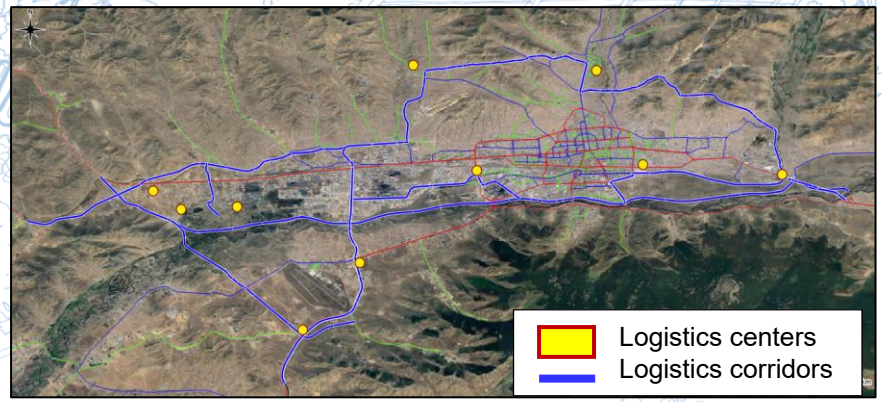


S11: Improve intersections, turn lanes, improve signals, improve road network connectivity

S8 : Intelligent transportation system (ITS), smart traffic lights, bus location tracking, smart parking system



S9 Relocation of logistics centers, integrated logistics centers, specialized centers, online ordering, cold chain warehouses



S12: Comprehensive street design, multi-modal transportation infrastructure, universal and accessible green streets

10

Cross-cutting (1/2)

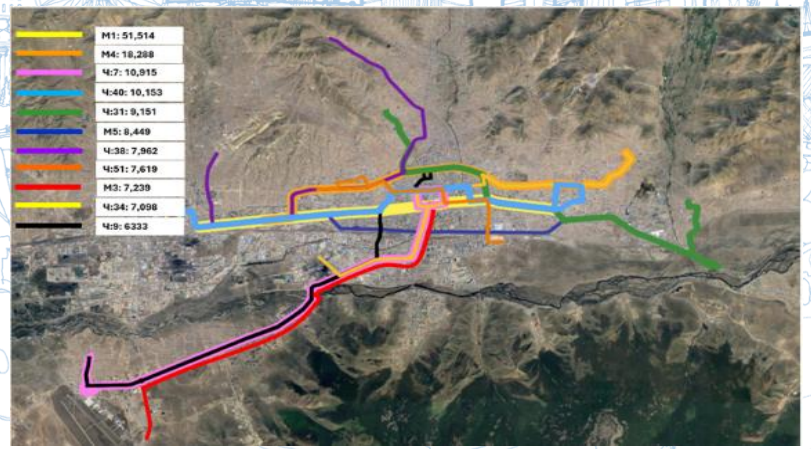
Goal: Integrated actions to realize the vision and three goals.

Key Objective	Strategy
Decentralize spatial development	C1: Promotion of urban decentralization and a 20-minute city
Improve the quality and coverage of Public Transport	C2: Mass transit on high demand corridors using modes appropriate for corridor demand and physical characteristics C3: Expand coverage of the bus network and restructure routes to align with the needs of a 20-minute city
More efficient use of transport infra-structure to move people and goods	C4: Community engagement and citizen participation C5: Institutional reform and capacity building

C1. Promotion of urban decentralization and a 20-minute city, in association with urban development such as TOD and improvement of mobility modes for pedestrians, bicycles and bus users in service quality and travel times.

C2. Mass transit on high demand corridors using modes appropriate for corridor demand and physical characteristics.

C3. Expand bus coverage and restructure routes to connect subcenters and ger-areas with the City Center.

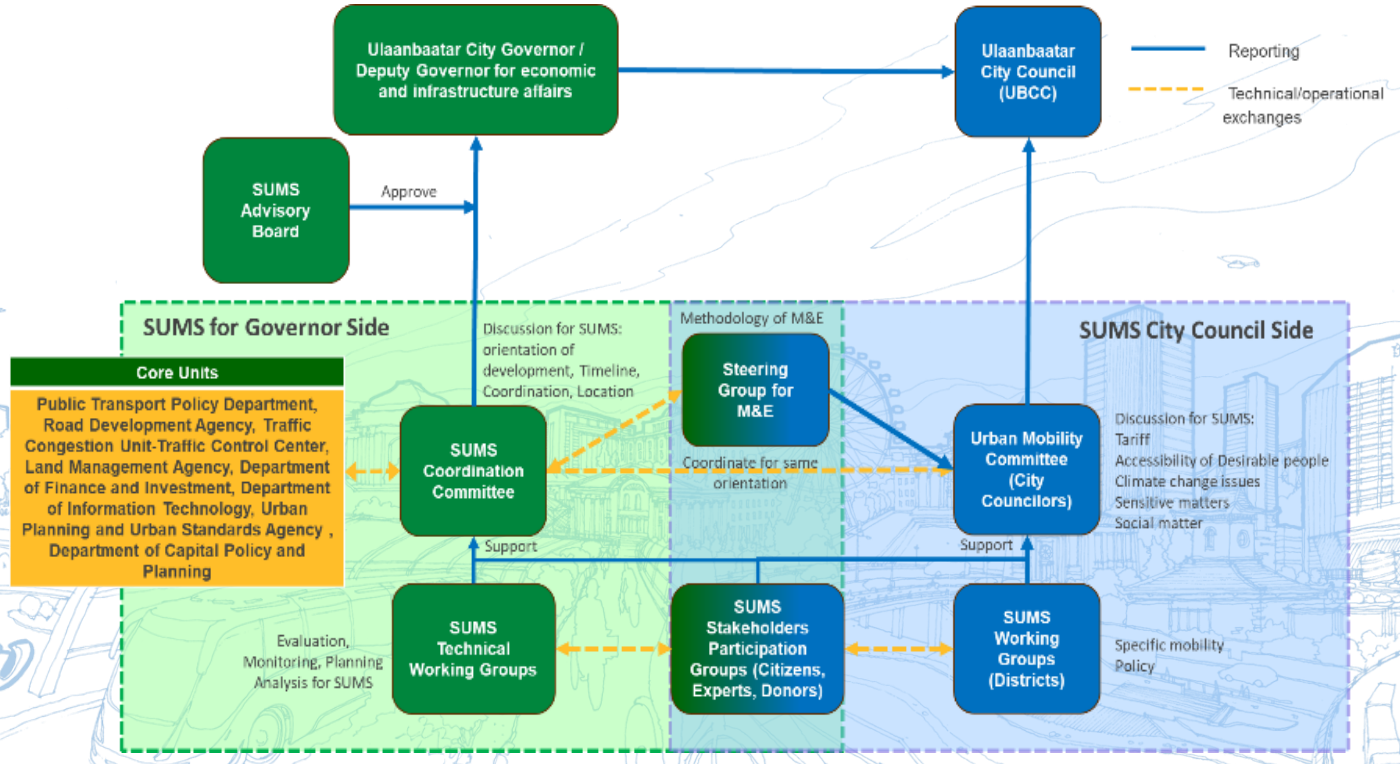


11 Cross-cutting (2/2)

Goal: Integrated actions to realize the vision and three goals.

C4. Community engagement and citizen participation, facilitating the citizen and public feedback from the planning stage, and providing opportunities for collaboration and consensus building.

C5. Institutional reform for capacity building to strengthen urban transport institutions, stakeholder organization, smart transport-based monitoring and analysis, and human resource capacity.



SUMS/P Implementation

12 Phasing and Target States (KPIs)

Short-term Plan (2030)

Enhance Public Transport Services and their Networks with Sub-city Centers Development

2030

KPIs in 2030	
Shar of PT ((%)	**38 %**
Transport Cost	**USD 21 mil.**
CO2 (t)	**2,119** ton
Av. Speed (Km/h)	**7.1 km/h**

Mid-term Plan (2040)

Encourage Sub-city Centers with Road Transport and PT Systems with TDM Polices

2040

KPIs in 2040	
Shar of PT ((%)	**42 %**
Transport Cost	**USD 15 mil.**
CO2 (t)	**1090** ton
Av. Speed (Km/h)	**17.7 km/h**

Long-term Plan (2050)

Keep Executing SUMS/P on New Mobilities, High Speed Rail Systems in associated with Development of Satellite Cities and New IT Technologies.

2050

KPIs in 2050	
Shar of PT ((%)	**46 %**
Transport Cost	**USD 2 mil.**
CO2 (t)	**703** ton
Av. Speed (Km/h)	**21.0 m/h**

13 Conclusion and next steps

- This strategy will serve as a strategic roadmap for Ulaanbaatar to transition to sustainable mobility.
- This strategy will lead to the development of a detailed action plan that identifies specific projects, funding sources, implementation measures, and coordination.
- The implementation of the strategic vision will require long-term, sustained engagement and collaboration between local governments, central government agencies, private sector partners, and the public.
- Only through collaborative and coordinated implementation will we overcome today's traffic problems and leave a more environmentally friendly, more accessible and sustainable city for future generations.

Thanks for your attentions !