



Smart transportation for smart city

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Smart transportation

New mobility and smart transportation models are emerging globally

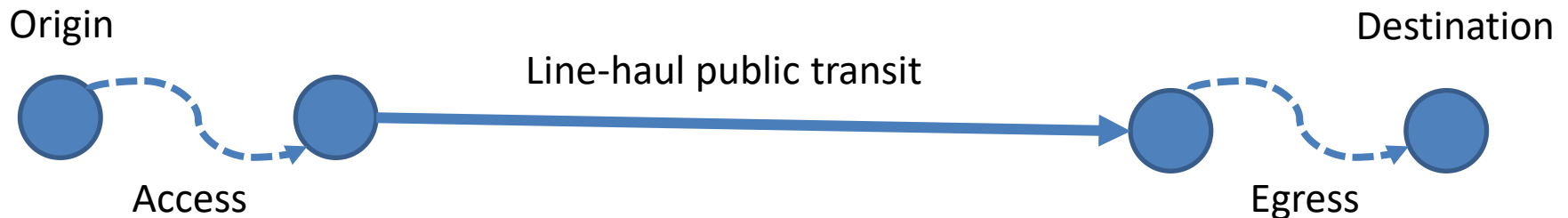
- Bike sharing, car sharing and scooter sharing schemes
- Electric vehicle charging schemes
- The connected car

All these new models provide opportunities for solving **last mile issues** in urban areas

(Wikipedia)

Travel demand for engaging activities

- Travel is derived demand for engaging in activities at the destination



Aging society: decreasing physical condition



Last mile issue: access and egress became more important

MaaS: integrated mobility service

- “Smart transportation” improves the last mile issues



- Public transit use becomes more convenient
 - Transportation system becomes more flexible
- Car can be integrated into mobility system
 - Carsharing, ride-hailing, etc.

Vision of Global Research Institute for Mobility in Society (GREMO)



Design of cooperative intelligence with driver and other traffic participants

SMART

Providing users with best choice considering mind and desire

ACCOMPANYING

Human Centric Mobility (HCM)

DEPENDABLE

Strategy and methodology for design of safety and secure system

ACCESSIBLE

Anybody can move anywhere at anytime without feeling any stress



Research project: empowering an aging society through advanced mobility

Driving Assistance System and Autonomous Cars for safe and reliable mobility

Slocal (slow and local) automated driving®, Driver agent, Dynamic map, Stress-free Traffic management



Empowering an aging society through advanced mobility



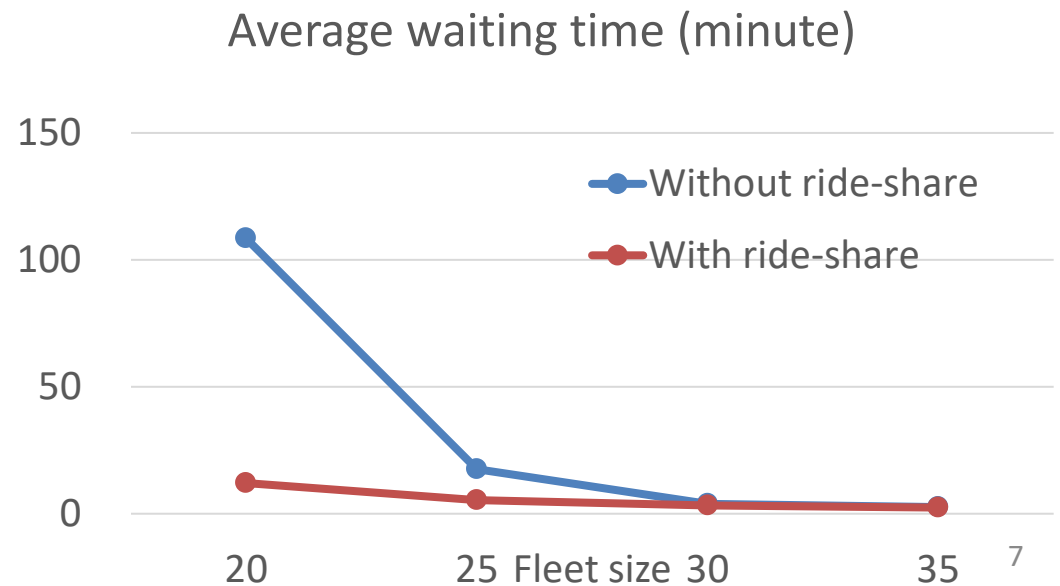
Physical Conditions and Mental Inspiration to stimulate going outside

Activity recommendation, Walking assistance robot, Casual sensing device

The Place and Construction for developing cooperation and self-esteem

Model community building, Social science assessments

Autonomous car sharing system at “old” new-town in suburban area





Graduate Program for Lifestyle Revolution based on Transdisciplinary Mobility Innovation

The only mobility related program
in MEXT WISE program

Features

2020.09~2027.03

Admission from 6 Graduate Schools

Diverse future career plans

Lifestyle related

Cooperation with many private companies

- **Industry-Academia Co-creation Research**

3 Layer Curriculum

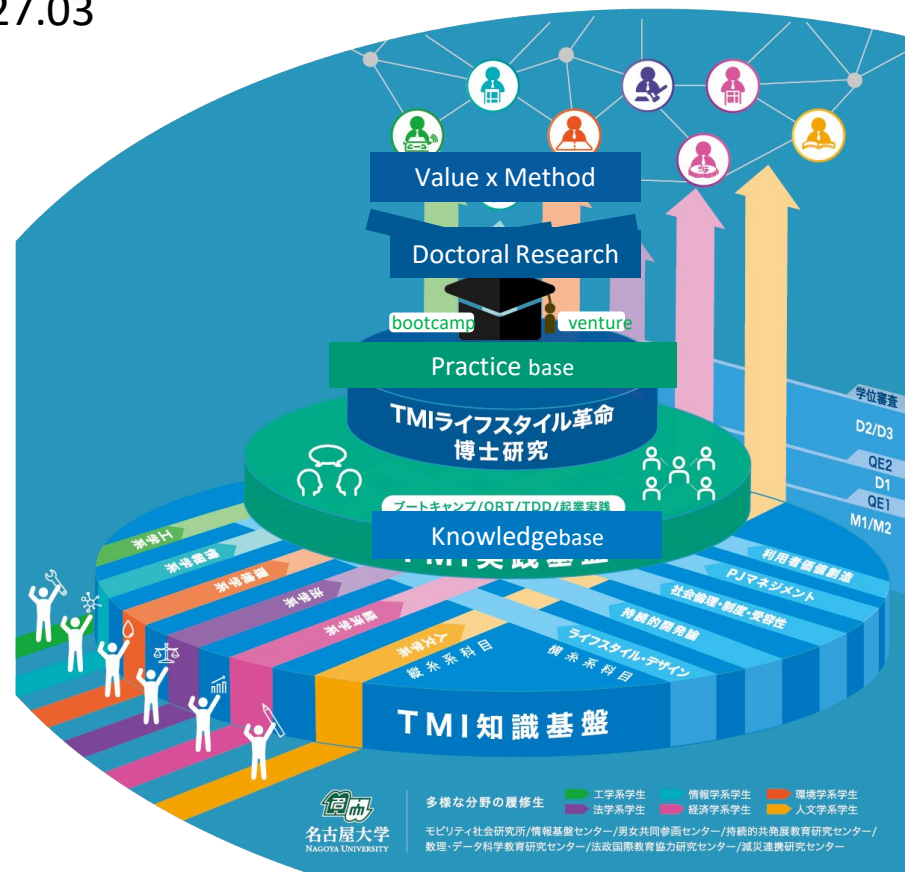
Multidisciplinary Knowledge Base

Media Lectures emphasized

Transdisciplinary Faculty Discussion Lecture
Venture Business Challenge(**Practice Base**)

Doctoral Degree Certification

Achievement of Transdisciplinary Collaboration





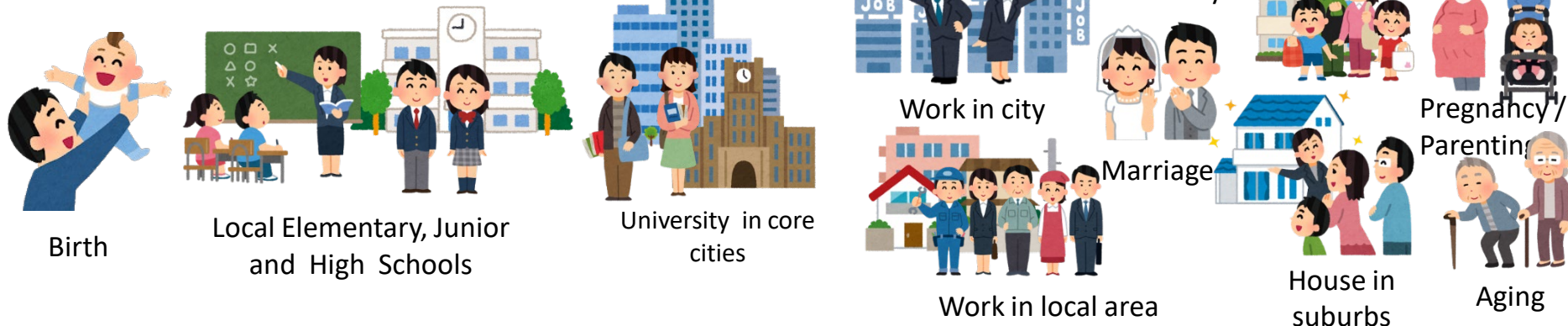
What is Lifestyle Revolution?



Graduate Program for Lifestyle Revolution based on Transdisciplinary Mobility Innovation

Life Stage

Typical Modern Lifestyle



Revolution based on TMI

**Free & Safe Movement of People, Goods and Information
(Elimination of Regional Disparities)**





What is Lifestyle Revolution?



Graduate Program for Lifestyle Revolution based on Transdisciplinary Mobility Innovation

Daily Life

Issues for Elderly



License return



Difficulty to go out



Difficulty to shop

Issues for Disabled



Mobility disability

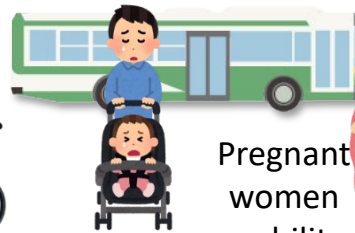


Visually impaired

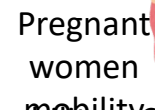


Difficult to move

Child Rearing Issues



Stroller mobility difficulty

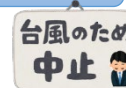


Pregnant women mobility drop/pickup

Issues for Foreigners



Differences in mobility customs



Disaster information lack?



Language problem



Revolution based on TMI

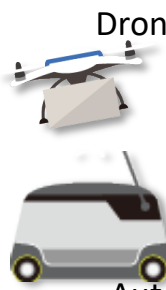
Inclusive • No one left behind (Mobility Disparity Elimination)

Toward a society where everyone can play an active role

Personal Mobility



Mobility support For the vulnerable



Drone Delivery



Automatic parcel delivery (shopping agency)

Flying Car



Autonomous driving that anyone can use

New public transportation for the vulnerable



Appropriate Information presentation



Disaster Status Info.



Summary

- Transport modes be well connected with each other to serve the needs for engaging in the activities at the destination
- Smart transportation leaves no one behind and empowers activities and vitalize the city