

Mobility in Japan 2030

11.304 Site and Infrastructure systems Studio
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Goal:

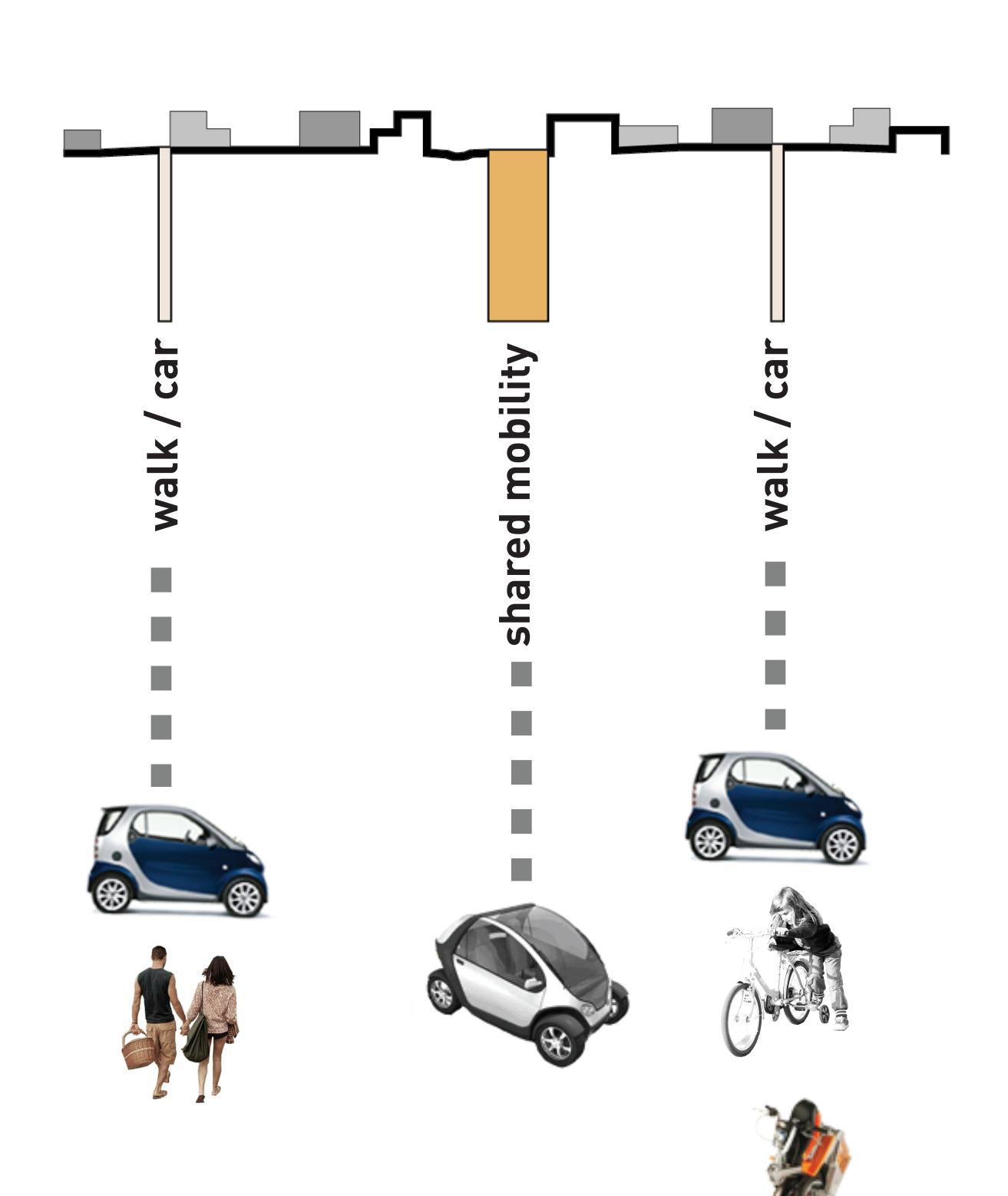
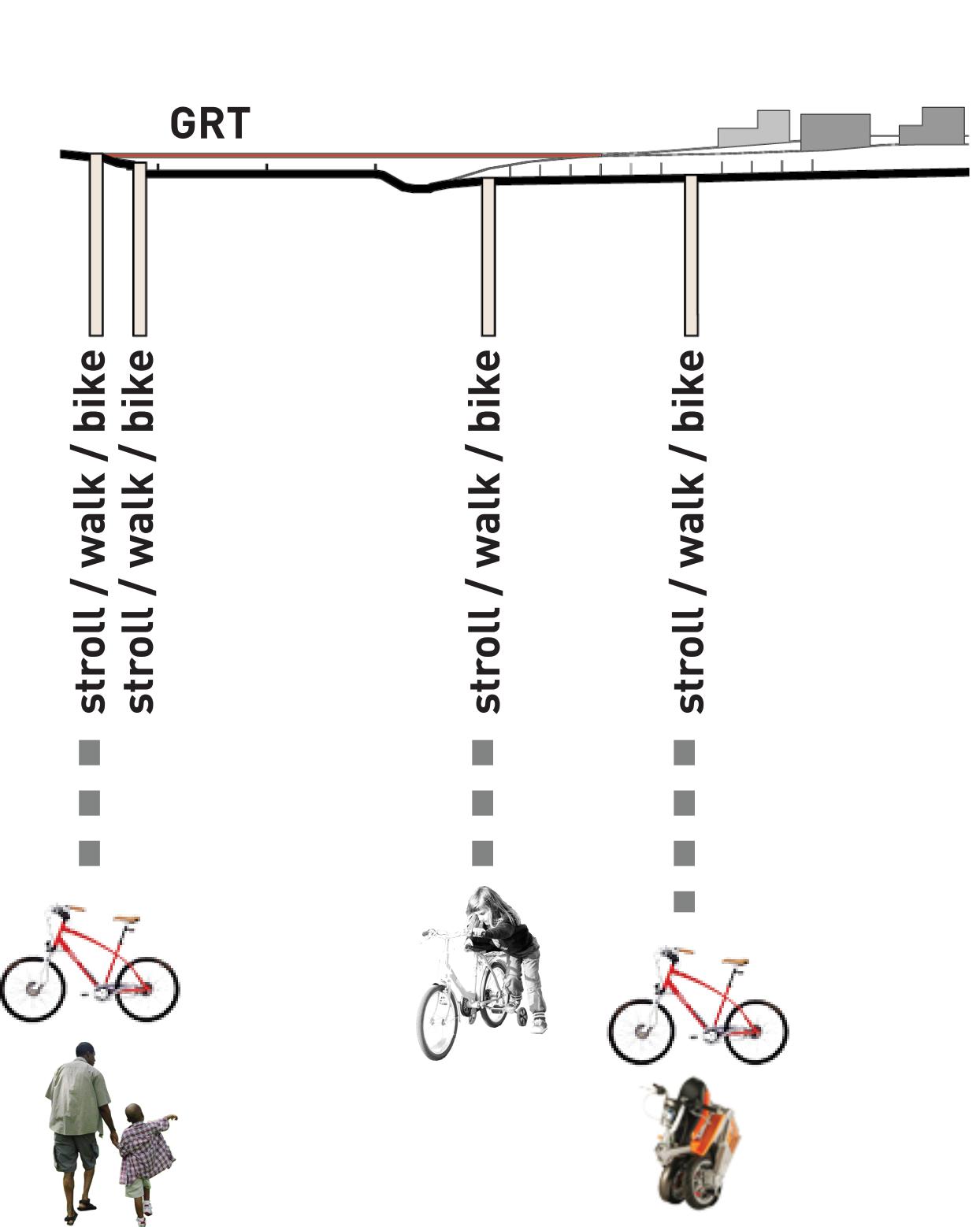
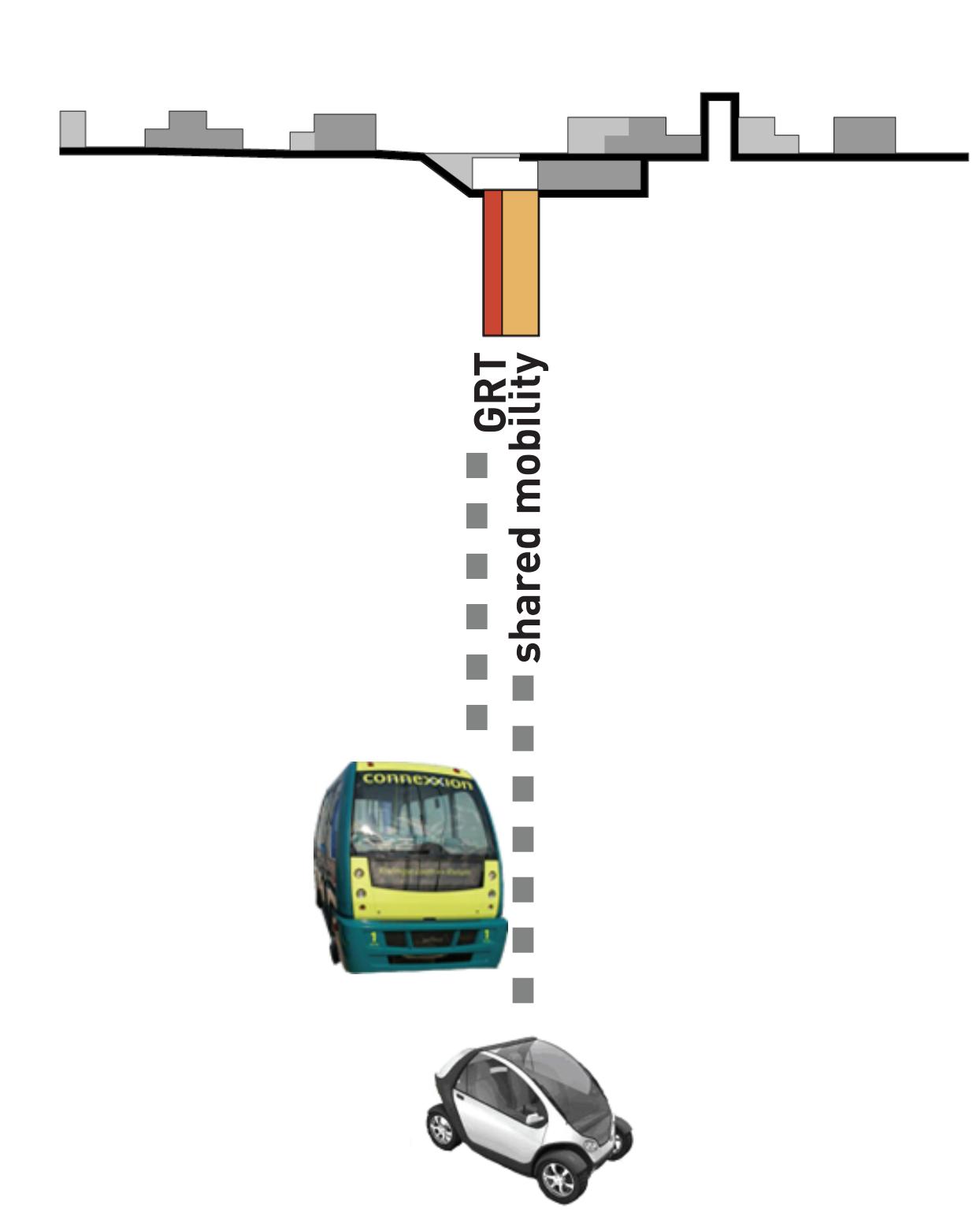
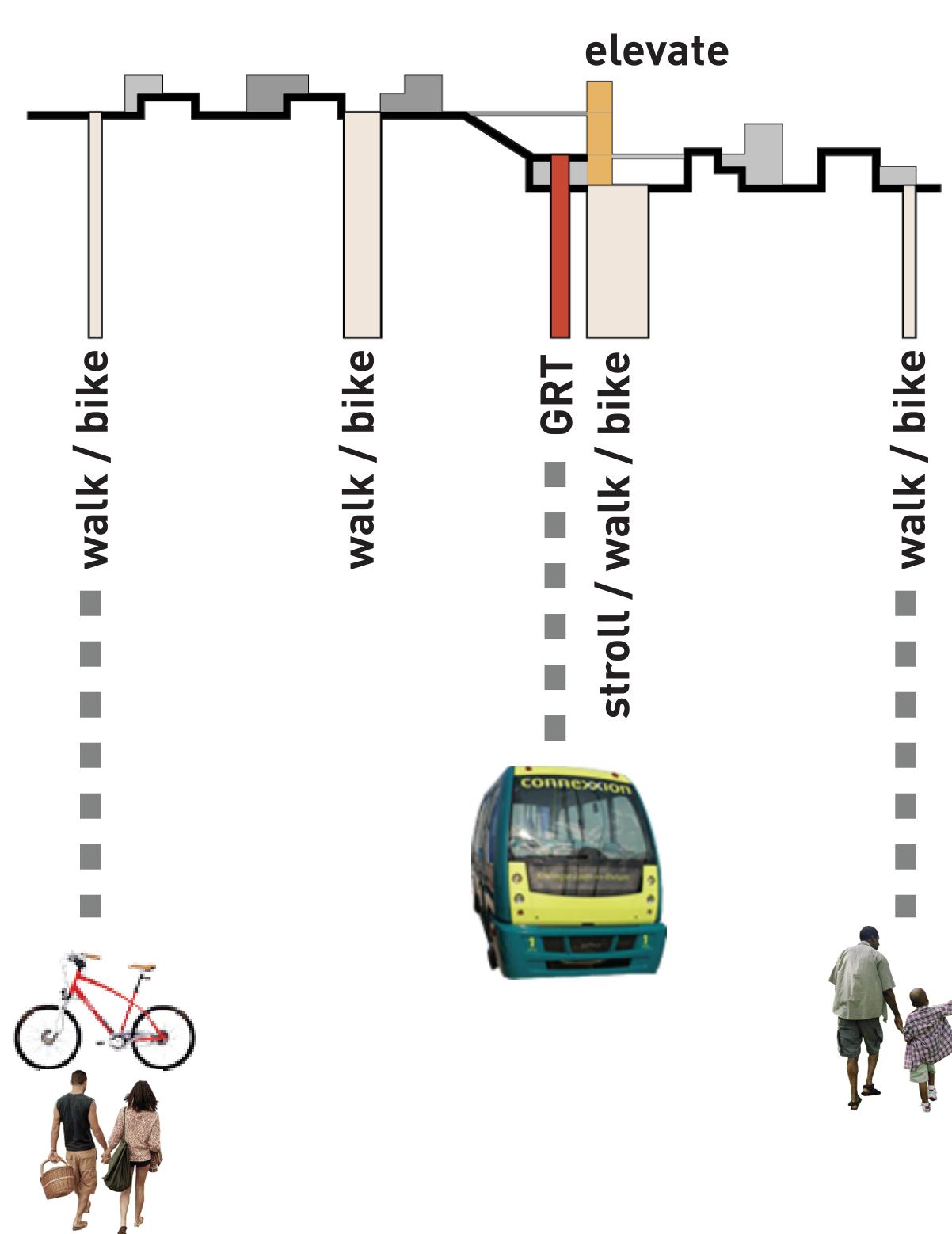
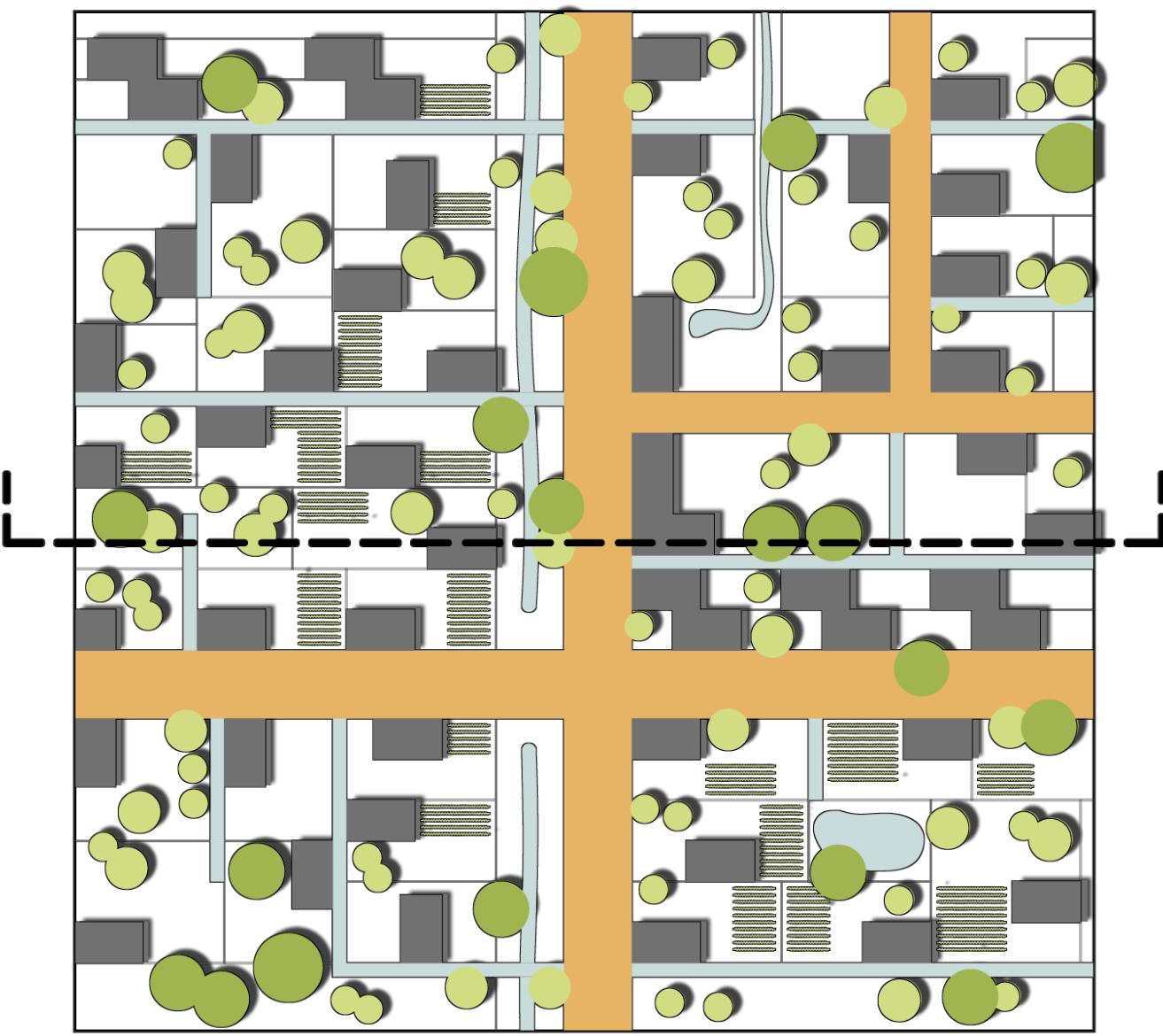
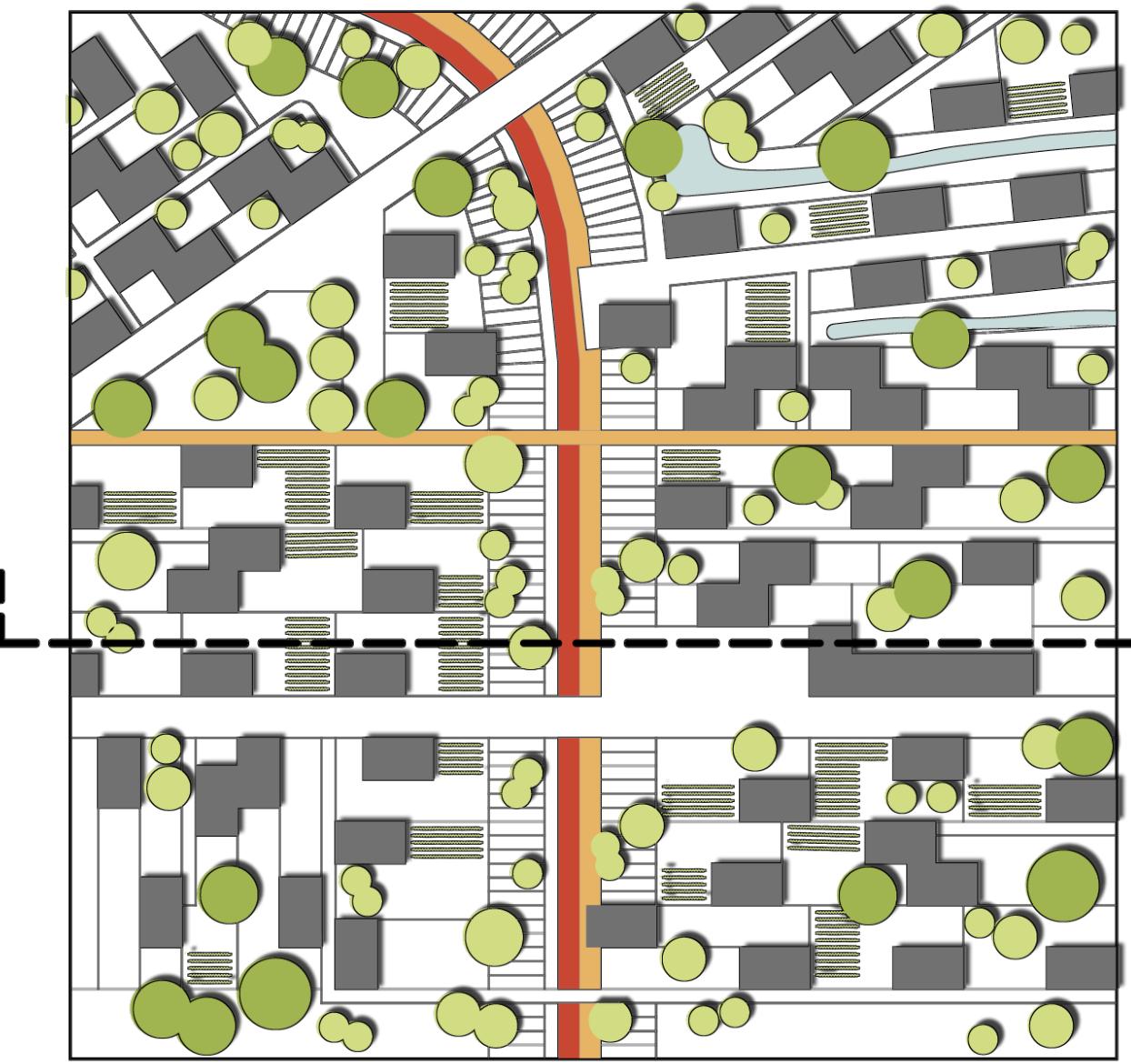
Plan mobility for an eco-friendly, durable, interconnected “suburban” community
connected + loose = urban + natural = ?

Assumptions for mobility 2030
→ limited use of private cars
→ computerized public transportation systems
→ shared mobility
→ bicycles for everyone
→ local group transit

Objectives for suburban [urban natural] mobility
→ create a highly networked neighborhood for different types of mobility
→ create a loose hierarchy of “corridors” corresponding to neighborhood areas
→ relate human mobility patterns to natural systems
→ make use of rigid topographies by inhabiting the limits
→ allow for flexibility in the evolution of transit systems

POTENTIAL 2030 COMMUNITY TRANSIT MIX

Transit Mode	Population Participation
WALK	100%
REGIONAL TRAIN	100%
BIKE/SCOOTER	90%
LIGHT RAIL	50%
B.R.T./ G.R.T.	50%
CAR	10%
SERVICE/ DELIVERY VEHICLE	<5%



living on the slope

+ dense
+ GRT
- car
+ 2-wheel
+ slope
- hierarchy
Mobility is omnipresent and maximum connectivity is the moto. The steep slope, rather than being an obstacle to accessibility, serves as the container for the system of group transit, a small capacity bus that runs very frequently. The bus can be computerized to allow for flexible stopping and response to demand. Staircases and elevators connect the intermediate bus level to the upper and lower levels. They are large enough to accommodate not only pedestrians but also flexible 2-wheel vehicles, such as scooters and bicycles. The community is laid out in walking distance from the group rapid transit.

topography defines us

+ dense
+ GRT
+ car
+ 2-wheel
+ slope
+ hierarchy
This typology reinterprets the current reality of Tama that encourages complete separation between pedestrians and vehicles by taking it to its extreme. In the light of the existence of both a system of Group Rapid Transit and of shared mobility system, these exclusive corridors are used to accommodate the new systems, which are much more flexible than conventional cars. If the need for them to move up the hill is reduced to minimum, then the up-the-slope residential areas can be more efficiently connected through their own system of pathways.

moving on the edge

- dense
+ GRT
- car
+ 2-wheel
+ slope
+ hierarchy
In the presence of a natural element such as a stream, maximum space is allocated for use adjacent to and compatible with it. These include recreation, sports and agriculture. Mobility in the form of a group transit system then serves to connect communities placed at a distance from the stream. At the same time it allows maximum access to the above amenities. The idea is that a mobility corridor does not necessarily imply a hard-edge heavy infrastructure system that is incompatible with sensitive natural environments. Rather, it can be a generator of stimulating landscapes while encouraging an integrated view of human settlements with natural systems.

flat harmony

- dense
- GRT
+ car
+ 2-wheel
- slope
- hierarchy
The future type of car is much lighter, smaller, and adaptable to different needs. Imagine a world where you can use a car but not necessarily own it and care for its maintenance; where cars are electric and can even generate energy; and where your car can be reduced or increased according to your individual or family needs. In such a world cars can go everywhere with no guilt. They represent an extension of the human body, and move in small or large corridors with the same ease, along with bicycles and pedestrians. Here the concept of the shared street is pushed to conceptually move away from the demonization of 4-wheels.