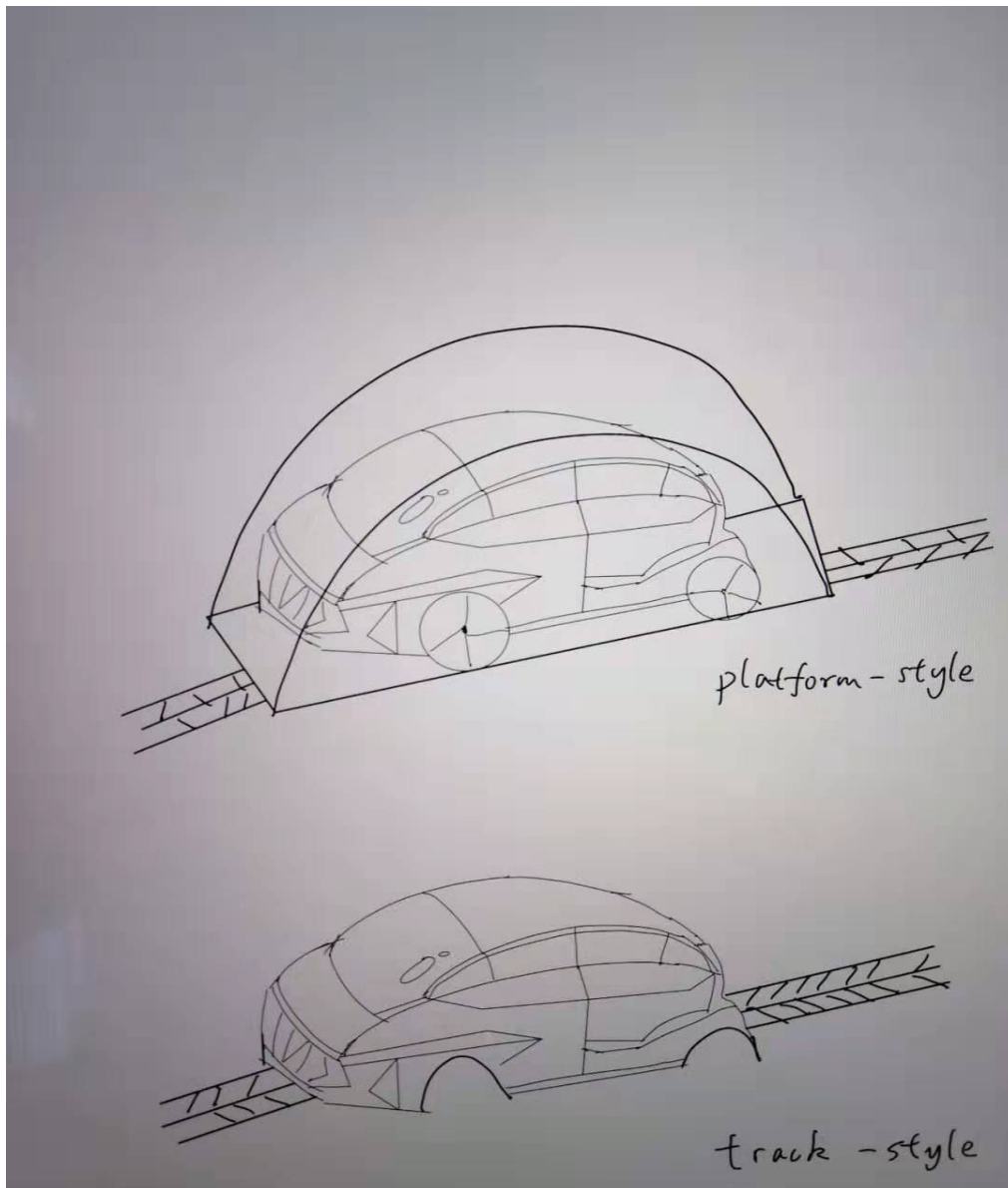


A11-Concept Deliverable & Requirements

Concept 1: Highway track system to cut down on traffic time. Will have customizable pods/cars that hook onto the tracks when entering the highway and when getting off the highway, wheels will deploy and allow the driver to drive normal. System is automated so it can easily move past each other with no traffic and/or accidents.

Concept 2: Highway track system to cut down on traffic time. Similar concepts but the main difference being that cars drive up onto a platform and lock in which is what takes them around. The computerized system that controls it is centralized, then a localized system, then an emergency system. All systems whether public or private are connected



1. Pugh Scoring Matrix

		Reference		Concept 1		Concept 2	
Needs	Wgt	Rating	weighted score	Rating	Weighted Score	Rating	Weighted Score

Ease of Use	5	4	20	4	20	5	25
Fast Commute	5	2	10	4	20	5	25
Safe	5	3	15	5	25	5	25
Private	4	4	16	4	16	4	16
Always Ready	4	3	12	4	16	5	20
Reliable	4	2	8	3	12	4	16
Low Cost	3	1	3	2	6	4	12
Internet Connectivity	1	1	1	4	4	4	4
Customizable	2	3	6	3	6	1	2
Environmental Friendly	2	1	2	3	6	4	8
Total Score			93		131		153
Rank			1		2		1
Continue?							

2. Organizing requirement table

Requirements	Range	Ideal
Fast to learn	1-3 weeks	1 week
Reach downtown in relatively short time	25-55 min	25 min
Reduce traffic accidents rate	20%-40%	40%
The time required for assistance	3min-8min	4min
Possibility of influenced by bad weather	5%-15%	5%

Minimize failure rate when preparing	0.01%-0.08%	0.01%
Reduce fuel cost	18-40 mpg	35 mpg
Have precise GPS guidance system	accuracy within 1-5 meters	0.5 meters
The kind of the vehicles could be supported	5-8	5
Emission minimized Carbon Dioxide	3-8 metric tons	3.4 metric tons

3. Requirement correlation matrix

	Fast to learn	Reach downtown in relatively short time	Reduce traffic accident's rate	The time required for assistance	Minimize failure rate when preparing	Reduce fuel cost	Have precise GPS guidance system	The kind of the vehicles could be supported	Possibility of influenced by bad weather	minimized emission of Carbon Dioxide	wgt
Ease of Use	8		4	1							5
Fast Commute		9				3				2	5
Safety		2	9				4		4		5
Privacy				7			5				4
Always ready		5			3						4
Reliable		3	7		9				4		4
Low Cost						9					3
Internet connect	7	2	3			4	2	1		1	1
Customizable								7			2
Environmental Friendly						6				9	2