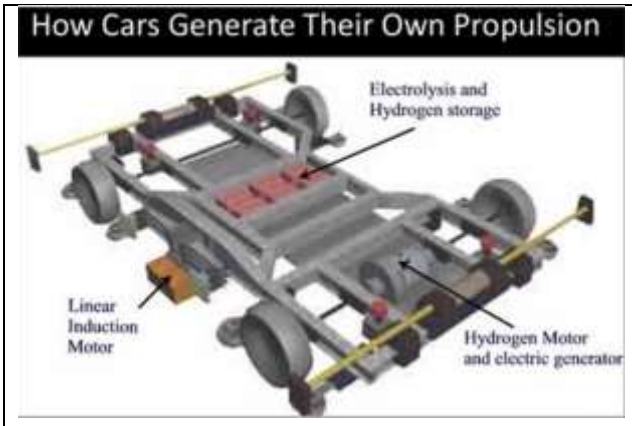
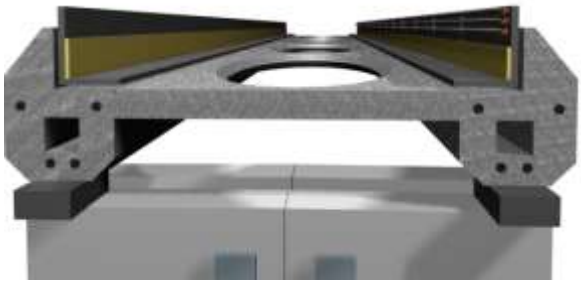
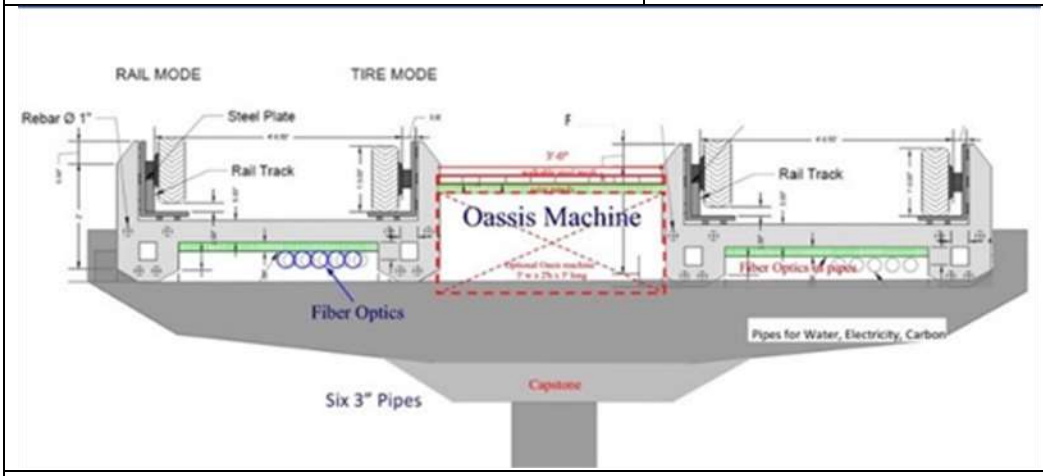
How Our Linear Induction works



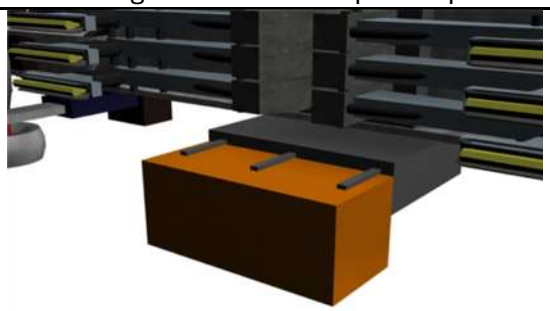
This shows where is it attached to the chassis



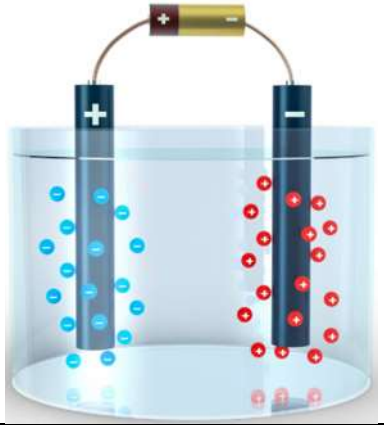
This shows where the reaction plate is located



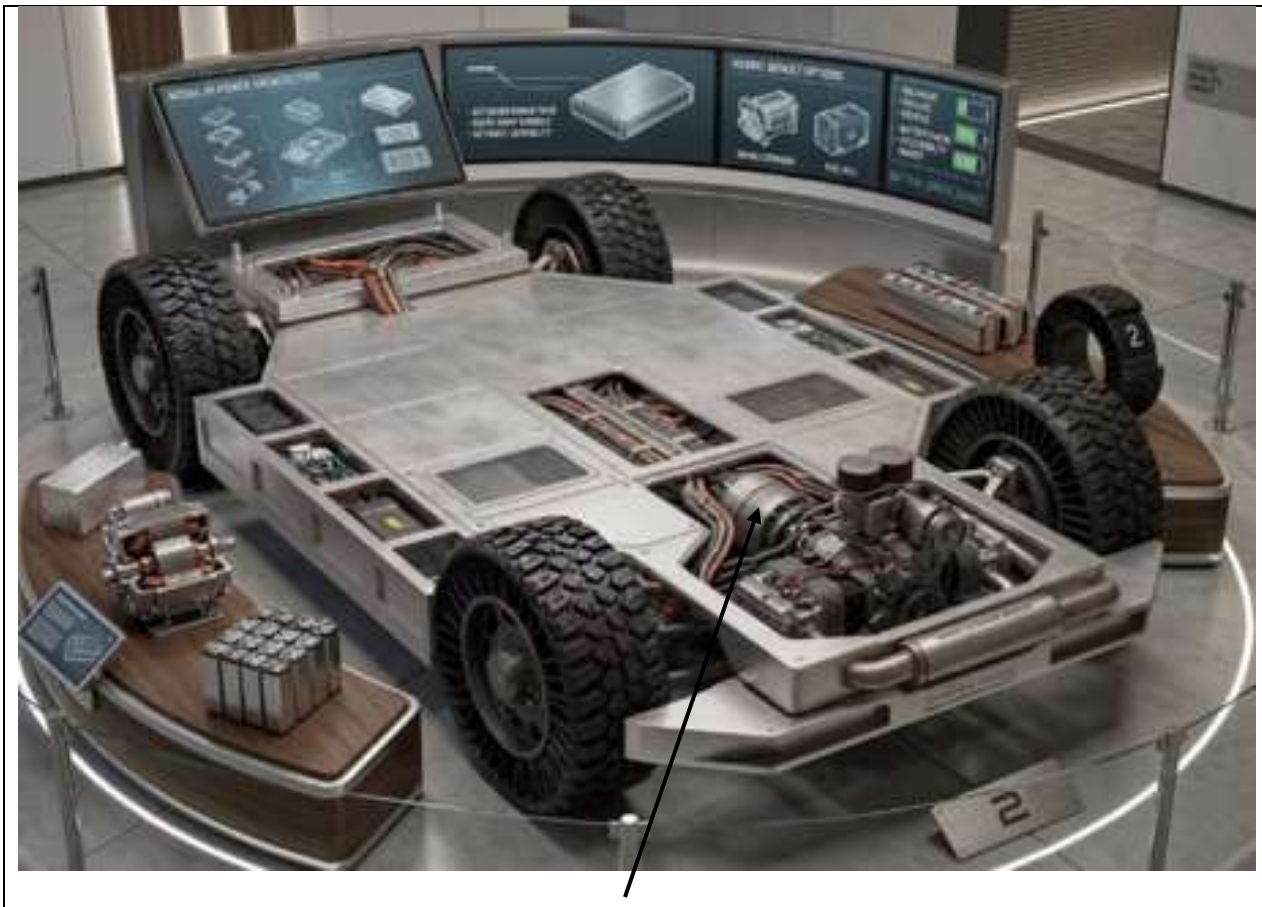
This image shows how we plan to power linear induction though electrolysis at each column



the reaction plate that creates a magnet field



Reaction plate is Power by electrolysis unit



The car also has a electric motor in the drivetrain that generate electricity

How Power Works in a Linear Induction Guideway

1. The guideway provides the propulsive force, not the vehicle's electrical power.

In an LIM system, the guideway contains stator coils. When energized, they create a moving magnetic wave. The vehicle carries a reaction plate (aluminum or copper) that the magnetic wave pushes against. So, the guideway is providing force, not electricity.

2. The vehicle still needs its own onboard electrical supply.

Even though propulsion is handled by the guideway, the vehicle still needs power for:

- AI systems
- Sensors
- HVAC
- Lighting
- Communications

- Safety systems
- Door controls

This power typically comes from small onboard generator, depending on the design batteries, supercapacitors, or a .

3. The guideway's electrical system is isolated from the vehicle.

There is no physical electrical contact between the vehicle and the guideway. This is one of the advantages of LIM/LSM systems: The only interaction is magnetic

- No third rail
- No overhead catenary
- No arcing
- No mechanical wear
- No conductive contact hazards

A Simple Analogy

Think of the guideway as a conveyor belt made of magnetic fields. It moves the vehicle forward, but it doesn't power the vehicle's internal electronics.

🛠 What This Means for Skyways

Our design — with a visible LIM transmitter, induction plate, and tire rail hybrid undercarriage — fits perfectly with this architecture:

• The guideway supplies the moving magnetic field for propulsion.
• It can travel at 150 mph and merge into fast traffic
• The vehicle carries its own low voltage electrical system for onboard functions.
• There is no need for a powered rail or third rail system.
• Safety and maintenance costs drop dramatically.
• The system remains quiet, clean, and weather resilient.
• It can go up or down the steep hills
* By using electrolysis to generate power, we eliminate the high cost of linear Induction

This is exactly why LIM based systems are so attractive for elevated guideways.