

## Technology Options

### Aerial Cable Transportation (Gondolas, Aerial Trams and Funitels)

Description: fully automated transit that uses one or more cables for propulsion and stability in hanging passenger cabins.



Portland Aerial Tram (Portland, Oregon)



Singapore Cable Car (Sentosa, Singapore)



Funitel Hakone (Kanagawa Prefecture, Japan)



Roosevelt Island Tramway, Aerial Tram (NYC, NY)

SYSTEM CAPACITY:	2,000 - 6,000 PEOPLE PER HOUR PER DIRECTION
NOISE:	LOWER
SPEED:	UP TO 22 MPH
EXPANDABILITY:	HARDER
WHERE IT OPERATES:	EXCLUSIVE RIGHT OF WAY
HOW IS IT GUIDED:	SUSPENDED MOVING CABLES

## Automated Transit Network (Personal and Group Rapid Transit)

Description: Transit system featuring smaller automated vehicles operating on a network with specially built guideways for non-stop point-to-point travel.



Vectus PRT (Suncheon Bay, South Korea)



Ultra Global PRT (Heathrow, England)



Zgetthere PRT (Masdar City, Abu Dhabi, UAE)



Zgetthere GRT (Business Park Rivium, Capelle aan den IJssel, the Netherlands)

SYSTEM CAPACITY:	2,000 - 12,000 PEOPLE PER HOUR PER LANE OF TRAFFIC
NOISE:	LOWER
SPEED:	UP TO 25 MPH
EXPANDABILITY:	EASIER
WHERE IT OPERATES:	EXCLUSIVE RIGHT OF WAY
HOW IS IT GUIDED:	SENSORS / RAILS / CURBS



## Automated People Movers (Rubber-tire, Steel-wheel, Monorails, Maglevs)

Description: Fully automated transit systems where vehicles operate on a fixed guideway along a corridor.



Mitsubishi: Crystal Mover APM (Miami International Airport, FL)



Bombardier: Innovia Monorail (Las Vegas, NV)



Hyundai: Rotem Urban Maglev (Incheon, Korea)



Doppelmayr Cable Car: Cable Liner (Oakland, CA)

SYSTEM CAPACITY:	1,500 - 15,000 PEOPLE PER HOUR PER DIRECTION
NOISE:	LOWER (RUBBER WHEELS AND MAGNETIC PROPULSION) / HIGHER (STEEL WHEELS)
SPEED:	UP TO 50 MPH (EXCEPT LOW SPEED MAGLEVS: UP TO 60 MPH)
EXPANDABILITY:	HARDER
WHERE IT OPERATES:	EXCLUSIVE RIGHT OF WAY
HOW IS IT GUIDED:	STEEL RAIL / CABLE / GUIDERAIL

## Autonomous Transit

Description: Automated vehicles on a mapped network and capable of operating in mixed flow and sensing the environment around them.



Navya: Arma (Source: Navya, 12/9/16 press release)



EasyMile: EZ10 (Parc des Expositions – Paris, France)



EasyMile: EZ10 (Swiss Federal Institute of Technology in Lausanne, Switzerland)



Navya: Arma (Source: Navya)

SYSTEM CAPACITY:	2,000 - 12,000 PEOPLE PER HOUR PER LANE OF TRAFFIC
NOISE:	LOWER
SPEED:	UP TO 27 MPH*
EXPANDABILITY:	EASIER
WHERE IT OPERATES:	DEDICATED LANES WITH POTENTIAL FOR MIXED-FLOW TRAFFIC
HOW IS IT GUIDED:	SENSORS AND GPS NETWORK
*Note:	Typical maximum operating speed currently is 15 MPH due to speed limitations operating in mixed traffic and around pedestrians. May have the potential to increase as the technology matures.