

The mobility of the future in our cities

Next Generation: New solutions and opportunities for car-free streets and cars

With a barrier-free, climate-neutral, comfortable and efficient infrastructure.

To describe such a complex system is not easy, therefore the request, if you have any questions, please feel free to send us an e-mail: Initiative-siv@t-online.de

Concept by Dipl. Ing. Jürgen Mülders



Description of the new infrastructure.

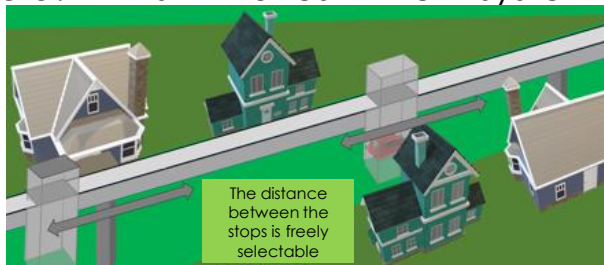
In the future, all traffic will be guided on rails at a height of approximately four meters.

This rail uses the magnetic rail technology, known from the Transrapid.

The company TK-Multi uses the magnetic rail technology for its elevator system and is planned for elevators in buildings of a thousand meters height and more. The elevators can also travel horizontally.

The elevators can swerve, or overtake. Several elevators can travel on one rail without interfering with each other. Everything is computer controlled.

This means that a very large number of people can be distributed over many floors in a short time. In addition, much less space is needed for the elevators. This saved space can now be rented or sold. This makes the system economical.

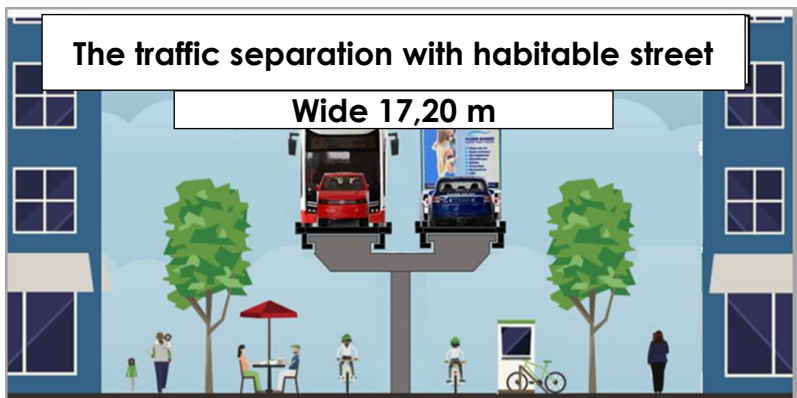


Description of the new infrastructure.

If a large number of people can be distributed over many floors, a large number of people can also be distributed over a large area, with their own corresponding infrastructure.

So these magnetic rails are now being built horizontally at a height of around four meters in many streets as required. The rails are made of prefabricated parts and can be quickly built or extended as required, with switches and crossings.

The cars are either our current cars or new ideas, from small cars and minibuses to trucks and buses. All of them drive fully autonomously with the system controlled.



The stops and cars

The stops are special prefabricated parts consisting of an elevator in a glass shaft about the size of a car. These stops can now be built anywhere as required, even several behind or next to each other. Later extensions are also possible.

In the glass elevator there are two track sections. The cars drive into this elevator and stop. The track with the car goes down to the street. The second track closes this gap and allows the upper passage for the other cars. The exit at the bottom is barrier-free and without time pressure.

The car is now free for the next passenger, or it drives to the next parking lot or parking garage. Public and private vehicles can be requested via requested via an APP be requested.



New use of streets

Today's streets can now be repurposed:
For habitable, ownable, and playable streets,
For pedestrian and bicycle traffic,
For green spaces and gardens.

Only the following cars remain on the roads:
Emergency cars,
Construction trucks and delivery trucks, if applicable,
garbage trucks, if applicable,
Other.

As much traffic as possible is now to be routed via this new infrastructure, and there will always be new ideas for this. Especially in the area of service providers, care services, craftsmen, etc..



www.ottobahn.de



The new infrastructure:

- Is environmentally friendly and low CO2,
- Is safer and faster than today's means of transport,
- Has far fewer traffic fatalities and injuries,
- Can be used from start to finish without changing trains,
- With magnetic technology contactless, without noise and without fine dust.

The cars:

- Are for 1 to about 15 people, up to the bus,
- Have equipment from simple to luxury,
- Are for service providers, craftsmen, etc.,
- Are owned also company cars or public cars,
- Also trucks can be admitted on certain routes.
- Are equipped with chip systems for billing.



Transport trays for today's cars

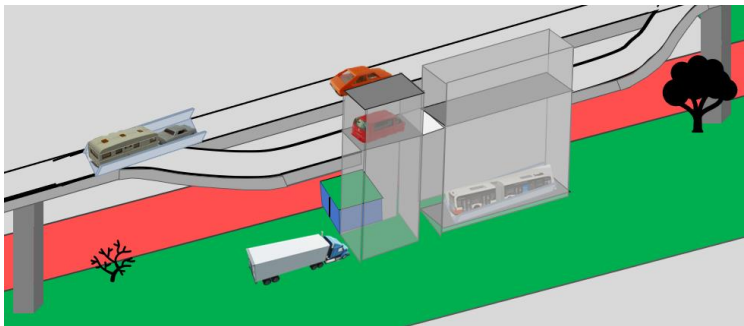
[How CargoBeamer can bring sustainability to Logistics and solve the Gridlock - YouTube](#)

Other benefits of the new infrastructure:

Every front door can theoretically get a stop.
Every street can theoretically be served.
Travel from door to door without changing trains,
Or from start to destination without changing trains.

Driving with endless range,
No refueling, no charging and always available,
Accurate billing of travel costs with chip systems,
Solar cells on roadways and bus stops provide electricity.

This infrastructure can also be used for delivery services and garbage collection and others.



The review

It is an idea from the 70s, the "Cabinetaxi". A video of this test installation from Hagen can be found at Youtube.

This cabin cab is now combined with the magnetic rail technology of the elevator TK-Multi.

Similar systems have already been installed at many airports and the Wuppertal suspension railroad is also one of them.

However, in all systems the stops are very complex and large. The curve radii are also very large. This makes it impossible to install these systems in many streets.



A broad look back at our transportation systems and their infrastructures:

1. beginning of the railroad in 1825:

the world's first public railroad opened on September 27, 1825, and was 39 km long, in England. Today, there are about 1.1 million km worldwide.

2. Start of air traffic 1955:

The first short-haul jet airliner was the Caravelle in 1955. Today, there are approximately 1,650 commercial airports in 177 countries. In 2016, approximately 3.7 billion people flew.

3. Beginning of the automobile in 1886 and 1932:

Carl Benz, applied for a patent for his motor car on January 29, 1886. The first German autobahn was opened on August 6, 1932. Today we have 13,200 km of autobahns in Germany, and about 1.3 billion cars worldwide.

4. Start of high-speed trains started 01.10.1964, the Shinkansen, 320 km/h

Today, there are 56,129 km of high-speed lines worldwide.

A description of the process for a customer:

1. The customer uses the APP to request a public car in which he or she would like to ride alone.
2. The car travels autonomously along the rails and the elevator to the ground-level stop in front of which the passenger is standing. The door opens, the customer gets in, takes a seat. When ready to depart, he says: ready or depart, and the car and elevator doors close. The customer indicates or says his destination. The car goes up.
3. The car travels along the rails to the destination, through intersections and junctions without interruption,
4. The car takes the elevator down at the destination stop, the elevator and car doors open, the passenger gets off at ground level and continues on foot. The doors close when the customer releases the car and then the car drives autonomously to the next destination.
5. The invoice is sent by mail, possibly also as a monthly statement.

The goal is:

1. To equip an entire city, town or village with this technology,
2. To realize the Vision Zero project (no accidental deaths or injuries),
3. To meet the environmental requirements completely, without exhaust fumes, without pollutants with green energy, this also applies to the components of the infrastructure,
4. To promote and support the individuality of each person,
5. To significantly increase the comfort compared to today's vehicles, Making cities and towns more usable for people,
6. To provide more green spaces and livable areas on the roads,
7. Provide streets that are fit for human habitation,
8. Get from start to finish to the destination.



The goal is:

10. That the search for a parking space is fully autonomous,
11. To request the car to the location with the cell phone,
12. That public cars and private cars drive equally in the system,
13. That the cars can drive fully autonomously even without passengers, and multiple use of a car in the family is made possible,
14. That the cars can be used by delivery companies, caregivers, craftsmen, etc., these can also drive routes outside the rail system with batteries,
15. Giving pedestrian and bicycle traffic their own safe place on the road,
16. To replace public buses and trains if necessary,
17. To meet future transportation needs.

Traffic in the cities must change,

1. Cars generate too much environmental pollution,
2. The road space is not enough for all road users,
3. There are too many traffic jams, too much waiting time at traffic lights,
4. Above all, there are too many accidents with deaths and injuries,
5. The constant repairs of the roads are too expensive,
6. There is too little green and recreational space in the cities,
7. The roads are built for cars, but not for people.

Two comments keep coming:

Yes, you can see into the upper apartments, just like you can see into the first floor today.

**Yes, it doesn't look nice.
Just like the driving
and parked cars in the
streets.**



A financing model for the rail system.

What does such a system cost and how is it paid
for?

The travel costs per kilometer used according to
the chip card are not included.

<https://www.universaldesignstyle.com/better-public-transportation-with-vectus-personal-rapid-transit/>



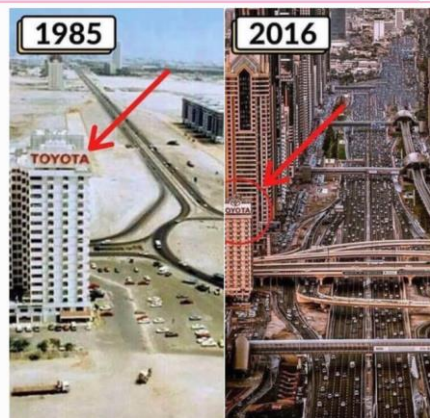
Barrier-free
Stop



For the financing, the costs are calculated in the first 10 years according to the project build-up evenly increasing from 10% to 100%:

1. For the new construction of the rails of the Cabinentaxi-Multi system, approx. 42,000 km are planned in the cities and towns in Germany,
2. EUR 4 million per kilometer of rail is budgeted and will be evenly distributed over the 10-year construction period, i.e. 4,200 km of new rail construction per year.
3. For maintenance and upkeep costs, EUR 500 per kilometer per year is planned.
4. For IT costs, EUR 10 million is budgeted for the first four years, then years, then 7 million annually constant is budgeted.

https://www.kueez.com/de/changes-in-world-over-recent-years?y=naive_one



The counterpart funding, also starting at 10% and increasing to 100% in the 10 following years.

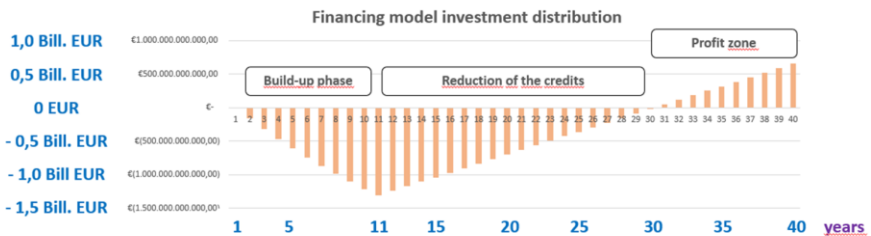
1. Society costs:
50% of accident costs incl. property damage on the basis 2019 from Germany will be rebooked.
2. 70% of the passenger car tax will be rebooked to this project.
3. The CO2 consumption in 2017 was in the transport sector: 165 million tons, of which 75% or 124 million tons were consumed in the cities. The CO2 price per ton increases from 30 EUR to 65 EUR in 8 years, the money is rebooked accordingly.
4. The petroleum tax revenue was 41,000 million EUR in 2019. Of this, 60% will be reclassified for passenger cars in the urban area in the amount of EUR 24,400 million.
5. The funds for public transport in the amount of 11,000 million EUR. Of this amount, 50% is reclassified.
6. Urban congestion costs of approximately EUR 5,100 million will be reclassified.

Society costs from accidents per year:

It will be at the end of the expansion of the approximately 42,000 kilometers after about 10 years in Germany per year:

1,523 fewer traffic fatalities,
23,622 fewer serious injuries and
159,493 fewer minor injuries.

According to these values, there will then be 6,300 million EUR in personal injuries will be prevented.



The investment to build the Cabinetaxi-Multi will be made in the first 10 years.
This already includes the maintenance costs of the finished systems.
From year 31 the investments are balanced.

It's a type of funding

The financing.

The financing is in line with the build-up period of approx. 10 years:

It increases from 0 to about 1.3 trillion EUR in the 10 years.

From the 11th year on, the traffic is almost CO₂ free, fine dust free and accident free.

From the 11th year to the 31st year, the financing decreases continuously to 0 EUR.

From year 31 the system brings profits.

From year 38 on, about 0.5 trillion EUR profit is reached.

What exact financing looks like must now be developed.

This will also be different for each country.



Wir haben da mal 35 Fragen zum 470 Kilometer langen Stau in NRW > se.it

Summary:

1. A new transport infrastructure will be built in Germany in about 10 years, which will be economical after about 35 to 40 years. (approx. 42,000 km).
2. The system is more comfortable, safer, faster, low CO₂, consumes less energy, is environmentally friendly, barrier-free and conserves resources.
3. The CO₂ goals and other environmental goals are achieved, also social goals are achieved.
4. The cars are made of recycled material, light weight and drive fully autonomous.
5. The system is flexible and can be expanded or changed quickly.
6. The streets are greened and become living spaces for people.

[Wettbewerb: BMW i sucht Ideen für Mobilität der Zukunft | Automobilwoche](#)



VWs Roboter-Taxi Sedric: Schaut so die Mobilität der Zukunft aus? (Foto: Thomas Geiger)

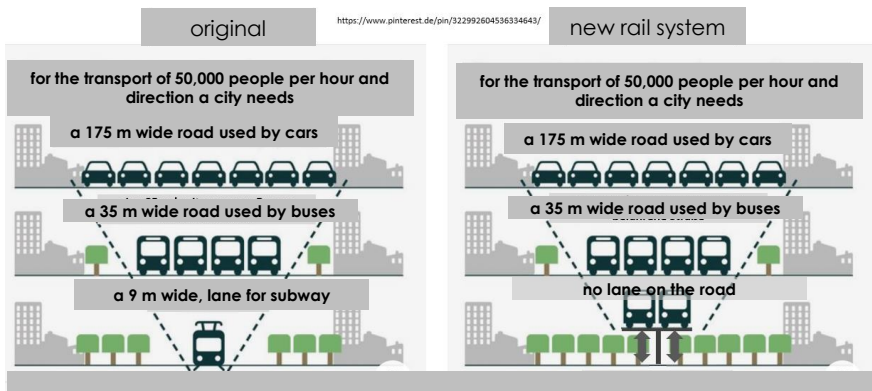
Thank you for your interest

If you have any further questions, please feel free to send an email to:

Initiative-siv@t-online.de

The website with all details:

www.initiative-siv.de



Initiative Rail Individual Traffic
Publisher
Dipl. Ing. Jürgen Mülders
Kannenhofer Weg 48
D-41066 Mönchengladbach
Germany