Another Dimension of Urban Mobility
Ropeway Technology

Motorless vehicles propelled by a steel rope
Ropeway Technology

Cabins are attached to the cable

Station

boarding

alighting

Station

alighting

boarding

Cabins are detached, slow down, passengers alight and board.

Cabins are detached, slow down, passengers alight and board.
Capacity of Ropeways

To transport 10,000 passengers/hour (5,000 in each direction), you need:

- 2,000 cars
- 100 buses
- 1 ropeway
Advantages | A New Level
Advantages | Short Building Phase
Advantages | Safest Means of Transport

10 Million Passengers per hour
Advantages | Low Space Requirements
Advantages | Barrier-free Mobility for All
Main Functions of Urban Ropeways
Advantages | High Attractiveness
Urban Ropeways
Portland | Marquam Hill

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Length</td>
<td>1,027 m</td>
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<tr>
<td>Speed</td>
<td>10.0 m/s</td>
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<tr>
<td>Capacity</td>
<td>1,014 pphpd</td>
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<tr>
<td>Cabins</td>
<td>2</td>
</tr>
<tr>
<td>Cabin size</td>
<td>78 passengers</td>
</tr>
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</table>
Portland | Seamless Integration
Portland | Seamless Integration
Portland | Seamless Integration
Caracas | San Agustín

- Length: 1,721 m
- Speed: 5.0 m/s
- Capacity: 1,200 pphpd
- Cabins: 50
- Cabin size: 8 passengers
Caracas | Mobility in Low-income Districts
Example: Caracas

A densely built up settlement without roads and other transport infrastructure.
Example: Caracas

Conventional road construction would have required the demolition of 30% of existing structures.
Example: Caracas

- Stations built within existing urban fabric.
- Minimum impact on built environment by cable car.
- Multifunctional stations that act as community hubs.
- Better access to work places for residents.
Caracas: Link to Metro (underground trains)
### Caracas | Mariche – Tramo Expreso

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<tr>
<th>Parameter</th>
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<td>Length</td>
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<tr>
<td>Capacity</td>
<td>2,000 pphpd</td>
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<tr>
<td>Cabins</td>
<td>144</td>
</tr>
<tr>
<td>Cabin size</td>
<td>8 passengers</td>
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[Map data ©2015 Google]
The ropeway’s catchment area has a population of 93,000. At peak times, vehicles can only travel along the main road at walking pace and buses are overcrowded. Thanks to the ropeway, the time to get to work in the wider area has been cut by up to two hours.
Caracas | Mobility in Low-income Districts
Caracas | Mobility in Low-income Districts
La Paz | Topography
La Paz | Phase I

- **Línea Roja**
  - Length: 2,349 m
  - Speed: 5.0 m/s
  - Capacity: 3,000 pphpd
  - Cabins: 109
  - Cabin size: 10 passengers

- **Línea Verde**
  - Length: 3,706 m
  - Speed: 5.0 m/s
  - Capacity: 3,000 pphpd
  - Cabins: 165
  - Cabin size: 10 passengers

- **Línea Amarilla**
  - Length: 3,737 m
  - Speed: 5.0 m/s
  - Capacity: 3,000 pphpd
  - Cabins: 169
  - Cabin size: 10 passengers
La Paz | The Largest Ropeway Network

The Línea Roja connects El Alto with La Paz downtown, and it was the first of the three lines to open in May 2014. It achieved the one million trip mark within 28 days.
La Paz | The Largest Ropeway Network
La Paz | The Largest Ropeway Network

The Línea Amarilla was inaugurated in September 2014. It is the longest ropeway connection between El Alto and La Paz.
La Paz | The Largest Ropeway Network
La Paz | The Largest Ropeway Network
Catalyst for development
La Paz: Cable car - A catalyst for development
La Paz: Cable car - A catalyst for development
La Paz: Cable car - A catalyst for development
La Paz | The Largest Ropeway Network
La Paz | Phase II

<table>
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<tr>
<th>Line</th>
<th>Length (meters)</th>
<th>Cabins</th>
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<tbody>
<tr>
<td>Línea Azul</td>
<td>4,934</td>
<td>223</td>
</tr>
<tr>
<td>Línea Naranja</td>
<td>2,648</td>
<td>120</td>
</tr>
<tr>
<td>Línea Morada</td>
<td>4,585</td>
<td>207</td>
</tr>
<tr>
<td>Línea Celeste</td>
<td>3,253</td>
<td>147</td>
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<tr>
<td>Línea Blanca</td>
<td>3,926</td>
<td>177</td>
</tr>
<tr>
<td>Línea Café</td>
<td>955</td>
<td>29</td>
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</table>
La Paz | Phase I and II

9 lines
1,346 cabins
30 kilometers
25 stations
26,000 pphpd
17 operating hours a day
Rio de Janeiro | Providencia

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<td>Length</td>
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<tr>
<td>Speed</td>
<td>5.0 m/s</td>
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<tr>
<td>Capacity</td>
<td>1 000 pphpd</td>
</tr>
<tr>
<td>Cabins</td>
<td>15</td>
</tr>
<tr>
<td>Cabin size</td>
<td>10 passengers</td>
</tr>
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</table>
The ropeway creates a direct connection between Rio’s main train station (Central do Brasil) and the warehouses of Cidade do Samba. It now takes less than five minutes to reach the other side of the hill in comfort and safety.
London | Emirates Air Line

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<tr>
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<tr>
<td>Capacity</td>
<td>2 500 pphpd</td>
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<tr>
<td>Cabins</td>
<td>34</td>
</tr>
<tr>
<td>Cabin size</td>
<td>10 passengers</td>
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As the UK’s first urban ropeway, the new ropeway is firmly integrated into the public transport network for the Greater London area and operates from 7 am to 9 pm.
London | A Ropeway for the City Growth
London | A Ropeway for the City Growth
### Koblenz | Seilbahn Koblenz

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<td>Length</td>
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<td>Speed</td>
<td>4.5 m/s</td>
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<tr>
<td>Capacity</td>
<td>3,800 pphpd</td>
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<tr>
<td>Cabins</td>
<td>18</td>
</tr>
<tr>
<td>Cabin size</td>
<td>35 passengers</td>
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Koblenz | Beating the Traditional Approach

The top-notch 3S ropeway system was used for the first time in the urban environment in Koblenz. For the utmost safety, Doppelmayr implemented its innovative recovery concept on the Koblenz ropeway.
Koblenz | Beating the Traditional Approach
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Koblenz | Beating the Traditional Approach

- Starting point

- Solution

4 min 25 min
### Algeria | Oued Koriche

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<tbody>
<tr>
<td>Length</td>
<td>2,908 m</td>
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<tr>
<td>Speed</td>
<td>6.0 m/s</td>
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<tr>
<td>Capacity</td>
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<tr>
<td>Cabins</td>
<td>72</td>
</tr>
<tr>
<td>Cabin size</td>
<td>15 passengers</td>
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Oued Koriche is the latest of four simultaneously awarded ropeway contracts. The ropeway is an integral part of the city’s public transport system. It supplements the existing infrastructure and impresses with optimal ride comfort.
Algeria | Oued Koriche
Singapore | Jewel Cable Car Ride

- Length: 1,727 m
- Speed: 5.0 m/s
- Capacity: 2,800 pphpd
- Cabins: 93
- Cabin size: 8 passengers
The gondola is more than 1.7 km in length and has three stations. The intermediate station is situated on level 15 of Harbour Front Tower Two. The gondola was planned to ride without interrupting the harbor traffic.
Singapore | Over the Port, through Buildings
Singapore | Over the Port, through Buildings
Another Dimension of Urban Mobility

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