Success factors for urban ropeway systems in Africa, Tools for transport planning and urban development

Findings from the study:
Success factors for urban Ropeway systems in Africa (www.eurist.info)

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Skip a step!
Don’t learn from bad examples!
1,5 Mio. Death/year
1.3 Mio. fatalities by road accidents/year
0,2 Mio. due to diseases attributable to motorized transport. (WHO 2014)

Armed violence accounts for about 525,000 deaths/year
(Geneva declaration; Global burden of armed violence, 2011)
Only the strong survive

Victims of traffic Accidents:

**World:**

- 50% Active Modes + PT

**Africa:**

- 50% Pedestrians
- 10%+X Cyclists
- 10%+X PT
External costs of Individual motorized transport are high!

Only for Berlin:

800,000 €/day
or 290 Million €/year

22,839,741,46 km/day by IMT

[3,501,872 (Pop) * 88.4% (Mobile Pop.) * 3.4 (Av. Trips * 7 km (Av. Trip Distance)) = 73,676,585.4 km / day (Distance Total)]
[73,676,585.4 * 31% (Modal Share IMT) = 22,839,741.46 (Person Km)], [22,839,741.46 * 0.035 € = 799,390 € / day]

Data: UN, Senatsverwaltung Berlin, Umweltbundesamt
22,839,741 km

60 trips to the Moon
Between 1998 to 2008 only Congestion has cost the EU over 1% GDP / year (EU, 2011).

The socioeconomic cost of road traffic injuries is estimated to be about 2% GDP/ year
For EU countries alone, this means about €180 billion EU budget 2004 * 2
Fig. 2: Global city-Growth until and beyond 2014
(http://esa.un.org/unpd/wup/Maps/CityGrowth/CityGrowth.aspx)
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Atlanta

Population: 5.25 million

Urban area: 4,280 km²

7.5 T CO₂/ha/an (public + private transport)

Barcelona

Population: 5.33 million

Urban area: 162 km²

0.7 T CO₂/ha/an (public + private transport)
Public Transport and is the only solution...
...to reclaim the urban space for the people

Accessibility to opportunities

For the whole society

Potential to end the car-dependence

Reclaim the function and liveability of the cities

Lower the green house gas emission of transport

React flexibly on the needs of urban growth

Manage urban density
< 1 Year
A tool for urban development??

Extensions

Circular line

Ampitheatre

etc......
Extending Walking Space
The development potential

- Many City-centres have a HUMAN SCALE
- Without any planning effort behind it
- Proximity does not generate car trips
- Direct public transport links are able to extend walking Space
1km
Mombasa

Fig. 15: Mombasa Island, google Maps
Mombasa

Fig. 16: Likoni Ferry: https://ssl.panoramio.com/photo/10287767
Mombasa

Fig. 15: Mombasa Island, google Maps
Fig. 21: The Lagos Island Ropeway System
http://www.trico-capital.com
Dar es Salaam

(Fig. 25: Recommended Ropeway Dar es Salaam – Kigamboni, Matthias Nuessgen)
Harare
An advanced City is not a place where the poor move about in cars, rather it is where even the rich use public transportation

Enrique Peñalosa, former Mayor of Bogotá, Columbia
Thanks a lot for your attention

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