

# Bus Rapid Transit Systems

## The India Experience

UNESCAP - UNHABITAT

National Capacity Building Workshop on Sustainable and  
Inclusive Transport Development

3-4 July 2014, Vientiane, Lao PDR

Abhijit Lokre  
Associate Professor  
CEPT University

## Structure of the presentation

- What is BRTS?
- BRTS
  - Worldwide
  - India
- India initiatives
  - NUTP
  - JnNURM
- India issues
- Lessons for future

# What is BRTS?

---

## What is BRTS?

*A flexible, rubber-tired form of rapid transit that combines stations, vehicles, services, running ways, and ITS elements into a fully integrated system with a strong image and identity*

(Herbert Levinson et. al., "Bus Rapid Transit. Volume 1: Case Studies in Bus Rapid Transit," - TCRP Report 90, TRB 2003)

*An integrated system of features, services, and amenities that improves the speed, reliability, and identity of bus transit*

(Bus Rapid Transit Practitioner's Guide by Levinson et al., 2007 - TCRP Report 118)

## What is BRTS?

*A flexible, high performance rapid transit mode that combines a variety of physical, operating and system elements into a permanently integrated system with a quality image and unique identity*

(Levinson et al. 2003 )

*A high-quality bus-based transit system that delivers fast, comfortable, and cost-effective urban mobility through the provision of segregated right-of-way infrastructure, rapid and frequent operation, and excellence in marketing and customer service*

(Bus Rapid Transit Planning Guide by Wright and Hook, 2007)

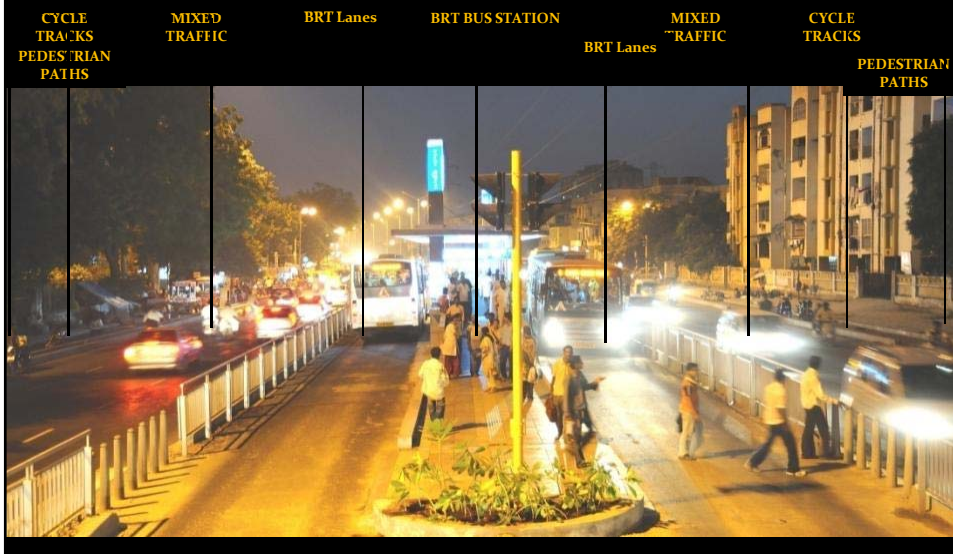
## BRTS features (must have!)

1. Running ways
  - Bus ways or segregated bus lanes
2. Operations plan
  - Flexible routing options
3. Off board ticketing
  - Smart cards
  - Turnstiles, flap gates
4. Modern bus stations
  - Enclosed, safe, comfortable

## BRTS features

5. Brand and identity
  - Corporate identity, logo, symbol
  - Marketing
6. ITS applications
  - Passenger information
  - Vehicle tracking
7. Vehicles
  - Modern, clean buses

## BRTS features



# BRTS

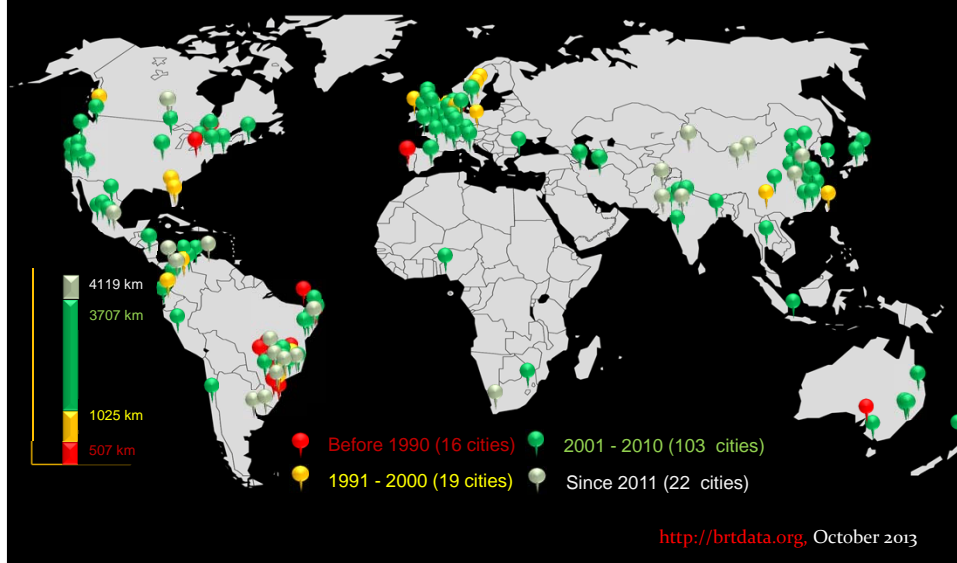
Worldwide

## BRTS status today

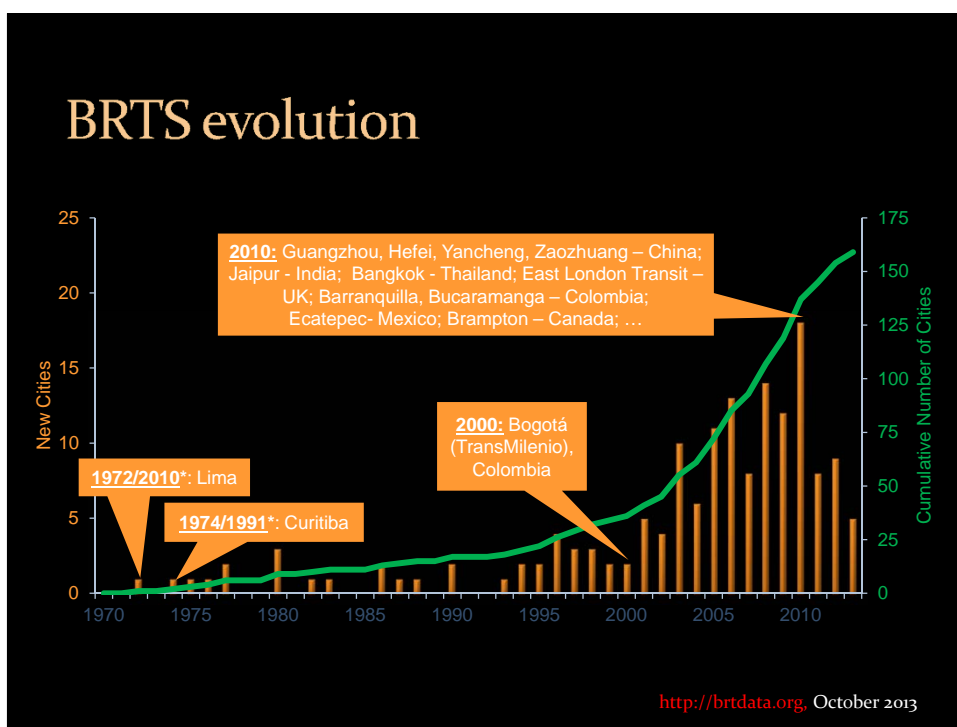
Region	Number of cities	%	Passengers per day	%	Total length in km	%
Africa	3	1.92	238,000	1	62	1.53
Asia	30	19.23	6,275,622	24.5	1037	25.69
Europe	43	27.56	1,656,966	6.46	688	17.04
Latin America	53	33.97	16,326,783	63.66	1347	33.37
North America	20	12.82	819,685	3.19	576	14.27
Oceania	7	4.48	327,074	1.27	326	8.07
World	156	100	25,644,130	100	4036	100

<http://brtdata.org>, October 2013

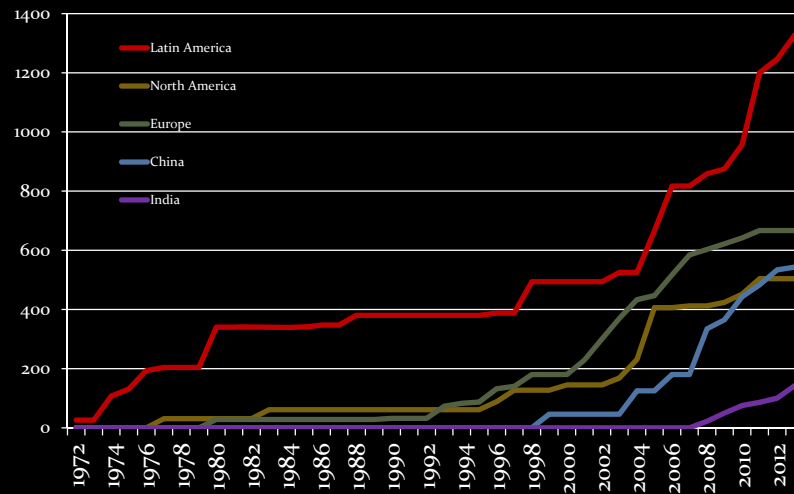
## BRTS evolution



## BRTS evolution



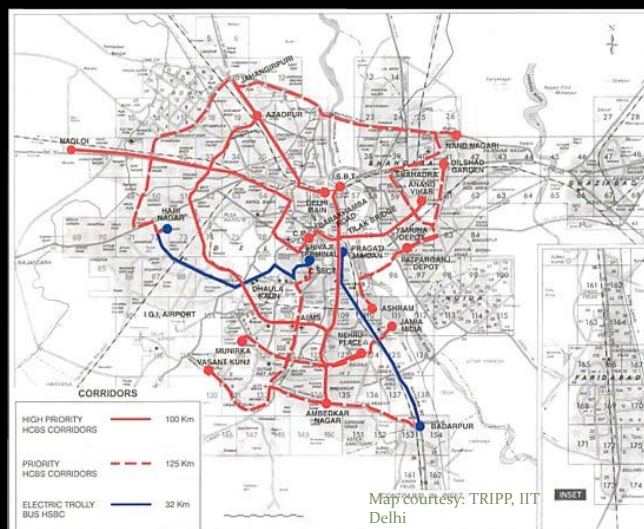
## BRTS growth across regions



# BRTS

India

## Where did it begin?



Delhi

Network of 257 km

City wide coverage

Designed as open system (existing routes use segregated corridor, wherever available)

5.5 km operational in 2008

No addition to network since

## Where did it begun?

- In 2004, the Gujarat government initiated a feasibility study for BRTS in Ahmedabad
- In 2005, CEPT University's feasibility study

预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_5337](https://www.yunbaogao.cn/report/index/report?reportId=5_5337)

