



**MINISTRY OF TRANSPORT**  
**TRANSPORT DEVELOPMENT AND STRATEGY INSTITUTE**

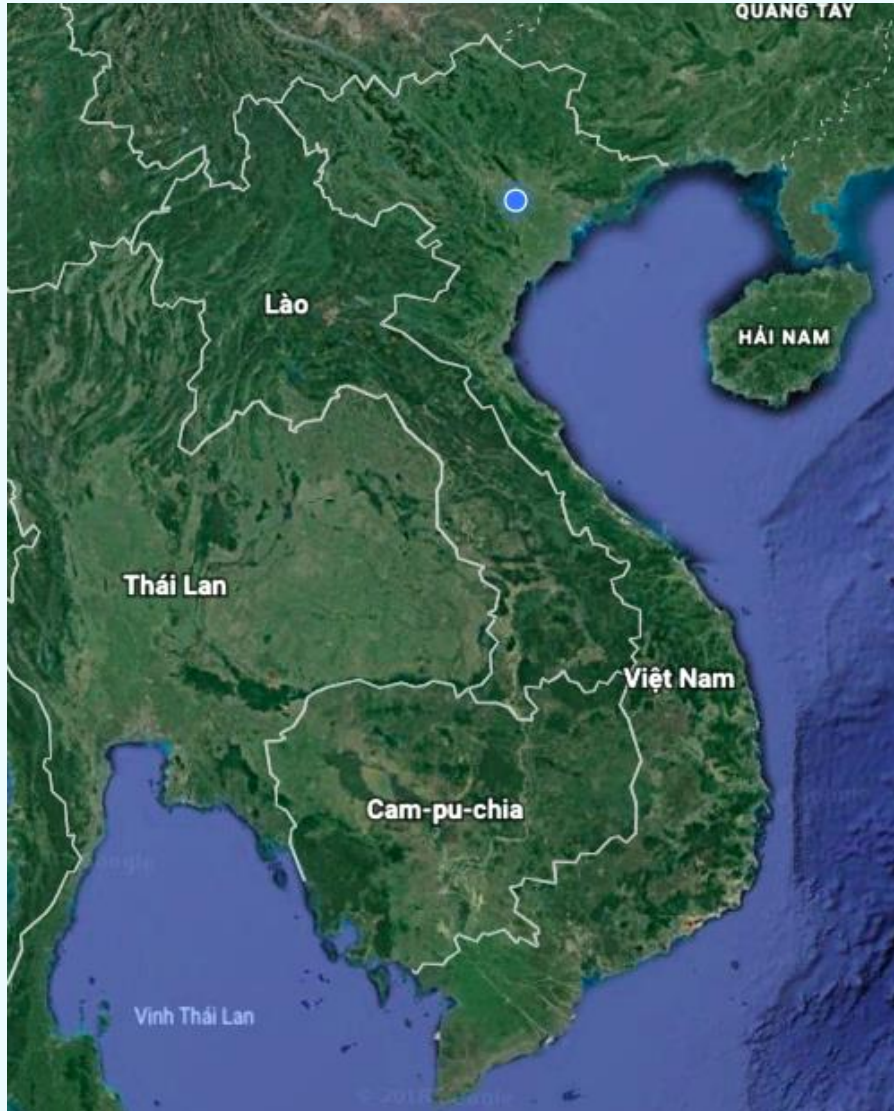


# URBAN PUBLIC TRANSPORT SYSTEM IN VIETNAM

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**Energy Efficiency in Emerging Economies Training Week for Southeast Asia**  
**Jakarta, 16 to 20 July, 2018**

# Vietnam at a glance



- ❖ Population: 93.5 million people
- ❖ Urban population: 32.3 million people
- ❖ Urbanization rate: 34.5%
- ❖ Urban contribution: 70 - 75% of the GDP





# Vietnam at a glance

- There are 788 urban areas in the whole Viet Nam, including 02 special urban areas (Ha Noi, HCMC)



## Several figures:

- ❖ 2.9 million automobiles
- ❖ 46 million motorbikes
- ❖ 492 motorbike/1000 population

- The competitive index of Vietnam transport infrastructures ranked the **67th** of the **138** countries in 2015-2016 period
- The urbanization process grows very fast (**3.4%** per year) resulting in higher and higher traffic demands, and a boom of individual vehicles (i.e. cars, motorbikes) in large urban areas, and severe status of traffic congestion



# Urban Public Transport in Vietnam

Conventional bus



BRT



Metro



River bus





# Urban Public Transport in Vietnam

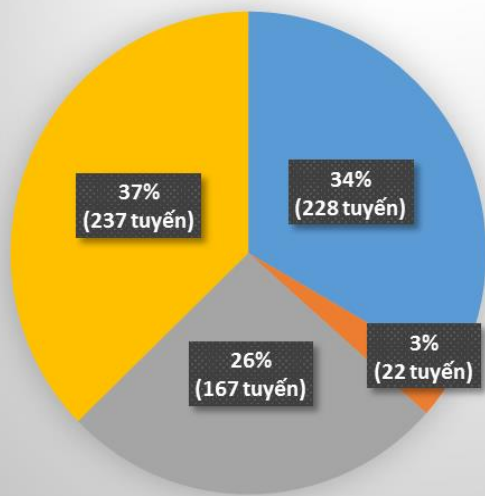
## ❖ Conventional bus

**61/63** provinces have public bus system with total passenger transported: more than **1 billion/year**



Toàn quốc: 684 tuyến

- Hà Nội và TP. Hồ Chí Minh
- Thành phố loại I T.Ư
- Tỉnh có đô thị loại I cấp tỉnh
- Các tỉnh còn lại



Structure of bus routes in cities in 2015

# Urban Public Transport in Vietnam

## ❖ *River bus*

Operating in **Ho Chi Minh City** with **01** route **10,8km**



## ❖ *Metros*

Under construction in **02** cities are **Ha Noi** and **Ho Chi Minh City**





# MRT system in Hanoi



**Hanoi:** ( *Decision 1259/2011/QĐ-TTg*)

## 8 metro lines with 318 km

**Line 2A and 3: under construction**

**Line 2A:** 13.1 km elevated, 12 stations



**Line 3:** 12.5 km (8.5 km elevated, 4 km underground, 12 stations)



# MRT system in HCMC

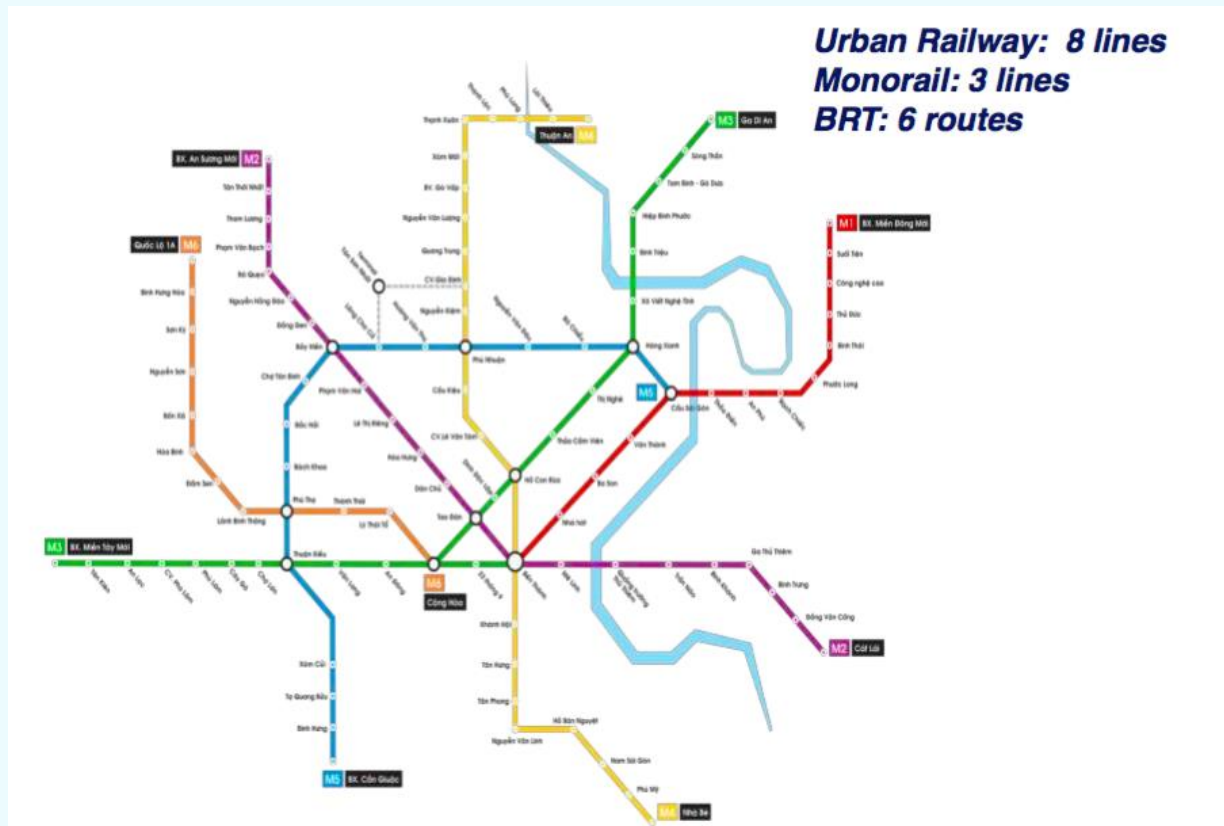
**HCMC:** (*Decision 568/2013/QĐ-TTg*)

**08 metro lines (1, 2, 3a, 3b, 4, 4b, 5, 6)**

**03 tram lines/1 monorail line (T)**

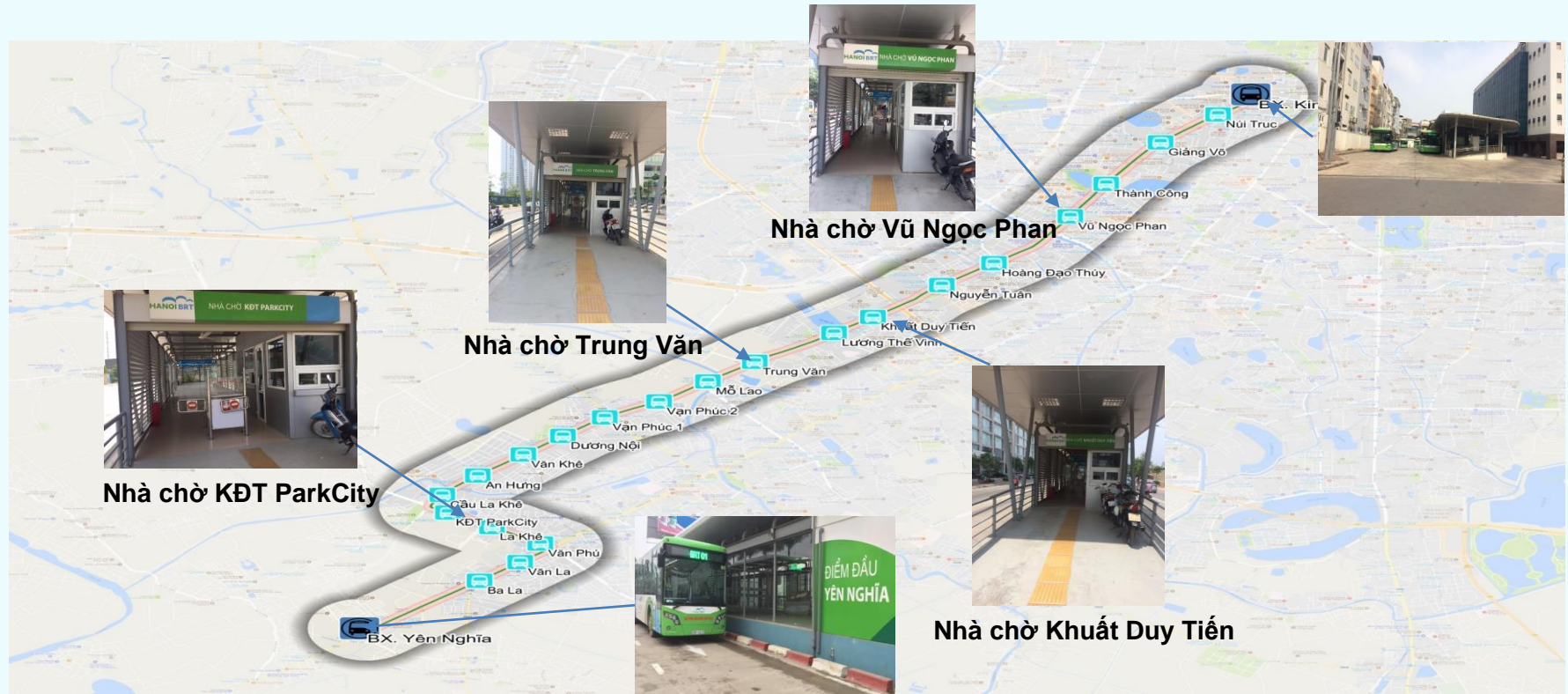
**01 elevated rail line (E)**

**MRT Line 1, 2, 5: Under construction**





# BRT system in Hanoi

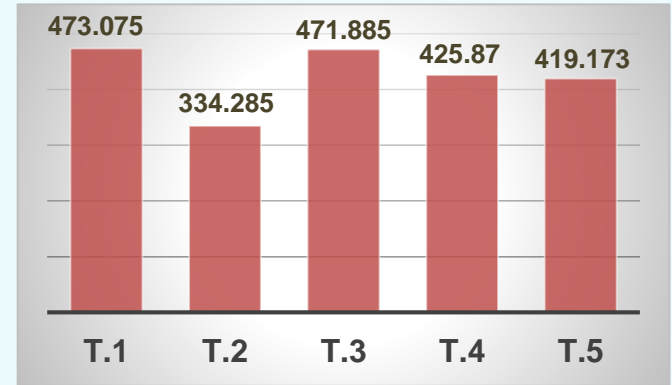


- **Alignment:** Hanoi BRT Kim Ma - Yen Nghia.
- **Total length:** 14.5 km (1 trunk line); 23 stations.
- **Operating speed:** 19.6 km
- **Financed:** World Bank (ODA)
- **Commenced:** 1<sup>st</sup> Jan 2017

# BRT system in Hanoi

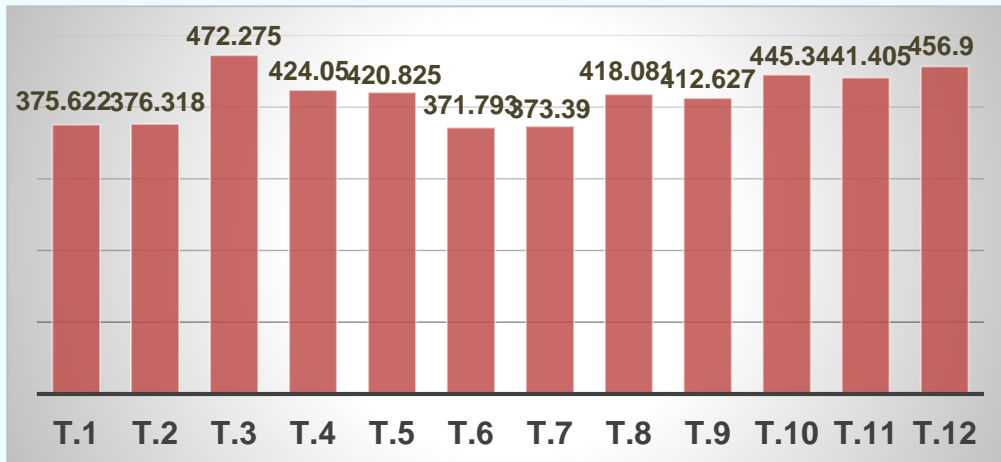
Average number of passenger transported is about **400** thousand passengers/month (conventional bus: about **300** thousand passengers/month).

Unit: passenger



*Passengers transported in first 5 months of 2018*

Unit: passenger



*Number of passengers transported in 2017*



# BRT system in Hanoi

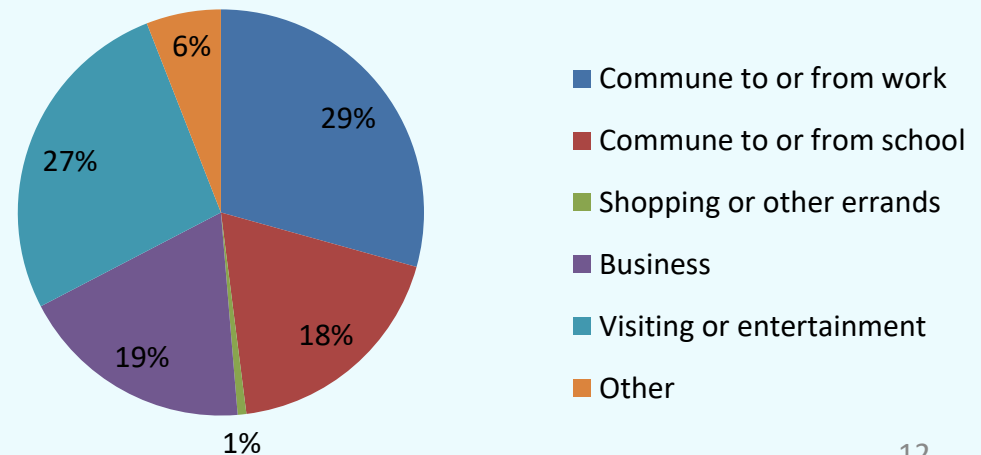


Source: BRT survey report (above) and vnexpress.net (below left) and dtinews.vn (below right).

# Evaluation of BRT system in Hanoi

Survey conducted in Feb 2017 by The World Bank (723 samples)

No.	Type of Vehicle	Without BRT	%
1	Private car	30	4.1%
2	Motorcycle	263	36.4%
3	Bicycle	11	1.5%
4	Motor taxi	35	4.8%
5	Taxi	43	5.9%
6	Bus	333	46.1%
7	Would not make this trip	8	1.1%

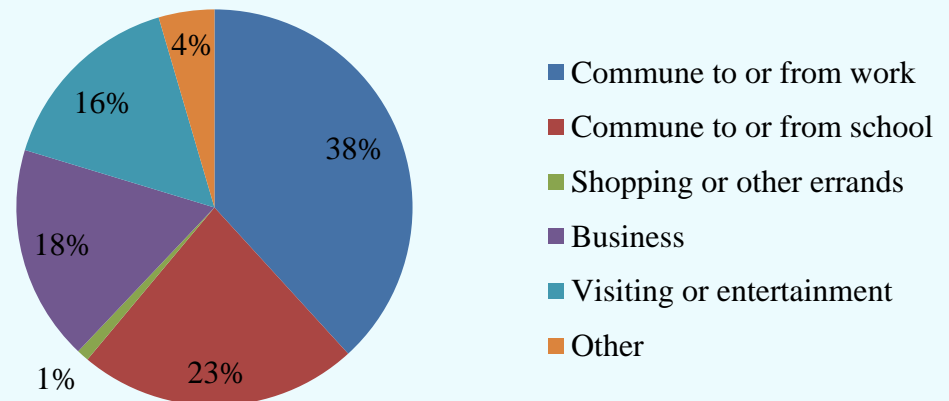




# Evaluation of BRT system in Hanoi

Survey conducted in Sep 2017 by The World Bank (707 samples)

No.	Type of Vehicle	Without BRT	%
1	Private car	38	5.4%
2	Motorcycle	244	34.5%
3	Bicycle	28	4.0%
4	Motor taxi	40	5.7%
5	Taxi	36	5.1%
6	Bus	306	43.3%
7	Would not make this trip	12	1.7%

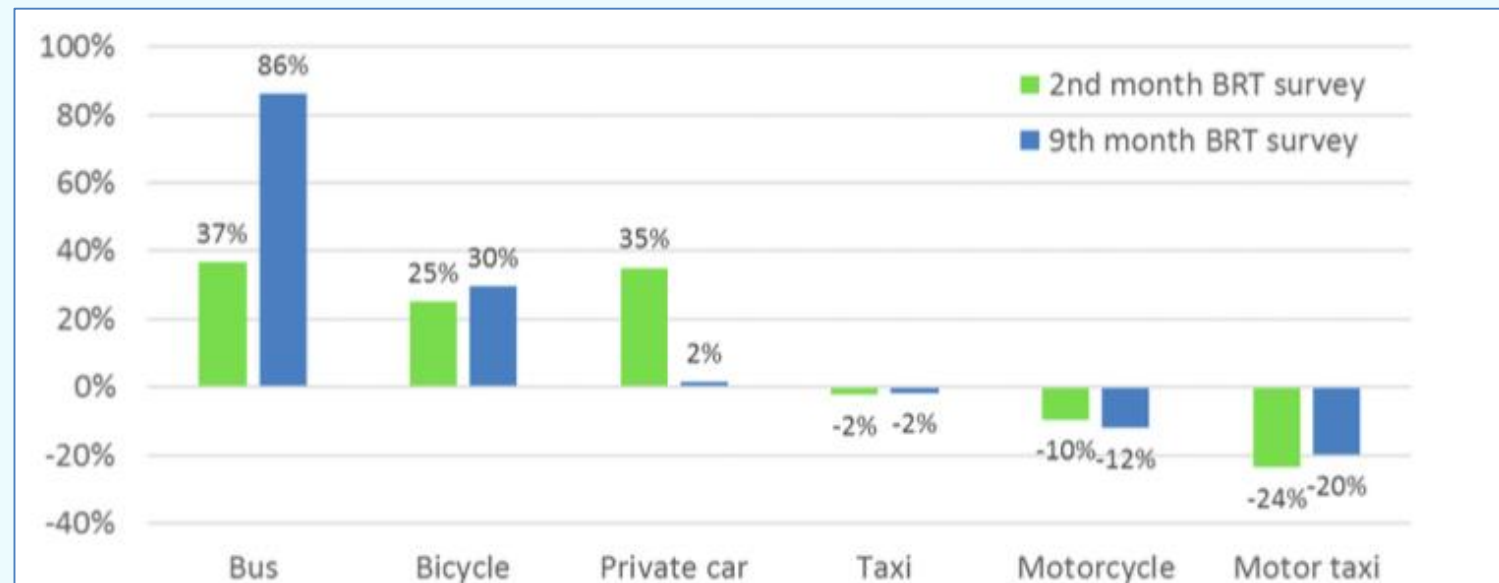


# Evaluation of BRT system in Hanoi

## Benefit Comparison of Female and Male Passengers on Hanoi BRT (9<sup>th</sup> Month BRT Survey)

	Alternative Travel Time (minutes)	Travel Time with BRT (minutes)	Average Time Saved (minutes)	Are You Satisfied with BRT Services?	Will You Recommend Others to Use BRT?
Female	40.0	35.4	4.5	4.51	4.41
Male	34.3	33.0	1.4	4.44	4.33

## Time Savings for BRT Riders Shifted from Different Modes





# BRT development orientation in Vietnam

No.	City	Decision	Plan
1	Hanoi	519/QD-TTg, 31/03/2016	11 routes
2	Ho Chi Minh	568/QD-TTg, 08/04/2013	6 routes
3	Hai Phong	29/NQ-HDND, 08/12/2017	4 routes
4	Da Nang	5030/QD-UBND, 28/7/2014	4 routes
5	Can Tho	3522/QD-UBND, 24/11/2015	Pilot 1 route

# BRT development orientation in Hanoi

BRT line	Alignment	Period	Length (km)
1	Kim Ma - Le Van Luong - Yen Nghia	2016 - 2020	14 km
2	Ring road 3 from Mai Dich - Duong Xa (second phase MRT line 8)	2016 - 2020	25 km
3	Ring road 2,5 and NH 5 extended (MRT line 4)	2016 - 2020	54 km
4	Ngoc Hoi - Phu Xuyen (along old NH 1)	2020 - 2030	27 km
5	Son Dong - Ba Vi (along Ho Tay - Ba Vi)	After 2030	20 km
6	Phu Dong - Bat Trang - Hung Yen	2020 - 2030	15 km
7	Gia Lam - Me Linh (along ring road 3)	2020 - 2030	30 km
8	Me Linh - Son Dong - Yen Nghia - Ngoc Hoi - NH 5 - Lac Dao (along ring road 4)	2020 - 2030	53 km
9	Ba La - Ung Hoa (along NH 21B)	2020 - 2030	29 km
10	Ung Hoa - Phu Xuyen	2020 - 2030	17 km
11	Son Tay - Hoa Lac - Xuan Mai	2020 - 2030	32 km
Total			316 km



# BRT development orientation in Ho Chi Minh

BRT line	Alignment	Length
1	Vo Van Kiet Boulevard - Mai Chi Tho	20.5 km
2	Along Nguyen Van Linh from West Bus Terminal to Phu My Bridge	24.0 km
3	Along ring road 2 from An Suong to New West Bus Terminal	19.0 km
4	Along Tan Son Nhat - Binh Loi (after operation) from Kha Van Can to Chien Thang	14.5 km
5	Along Thoai Ngoc Hau - Inner ring road - extend to Nguyen Van Linh	8.7 km
6	Along Quang Trung, along alignment of Monorail 3	8.5 km
	<b>Total</b>	95.2 km



**Thank you very much!**  
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