

Location Information System and Traffic Observation System for Urban Transport Improvement in Vientiane Lao PDR

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Needs of Laos for Development

- Enhancement of public transportation use in urban area which have high population and industry accumulation.
- Mitigation of traffic congestion which is caused by car number increase.
- Formulation of traffic planning and urban planning based on accurate data.

Contents of the Survey

- Real time bus operation location data collection provision by installing the GPS device .
- Traffic flow monitoring by installing traffic monitoring system on bus routes.
Provision of traffic congestion information to road user through smart phone.
- Suggest a plan for bus effective operation and urban traffic control to Bus enterprise and transport policy decision makers.

Suggested technology and products



Name of the technology and products

- ① Bus location system by using smart phone GPS system
 - ✓ Bus location system by using smart phone
 - ✓ Reduce primary cost and operation cost.
- ② Traffic monitoring system by using Wi-Fi packet sensor Monitor which receive smart phone information (Wi-fi packet) installed at intersections
 - ✓ Based on the accumulated data, traffic flow will be analyzed.

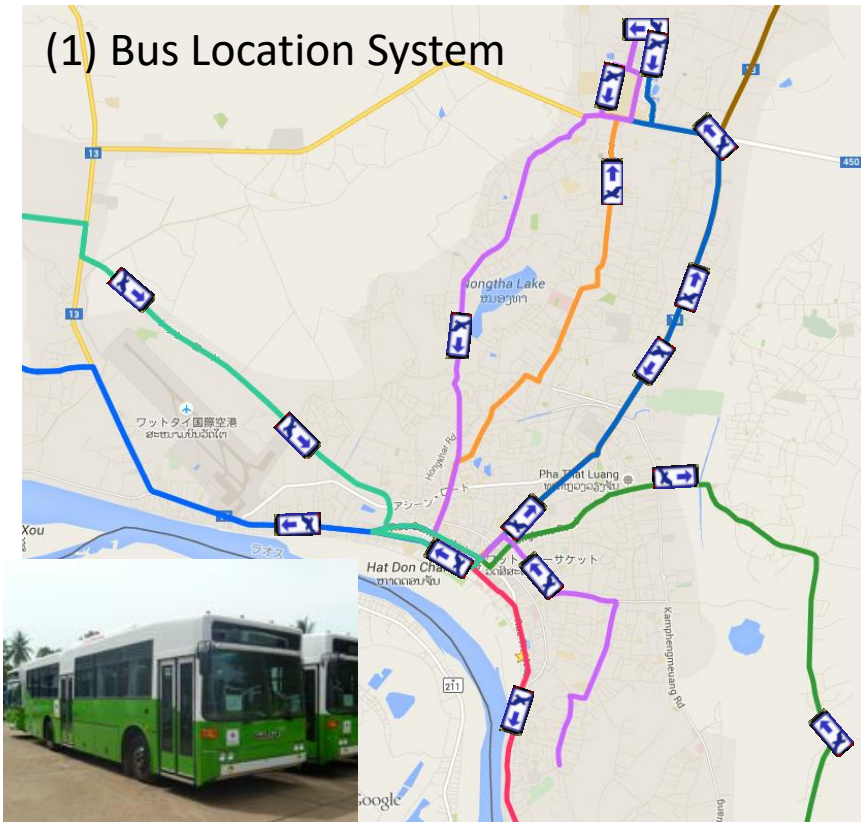
Expecting Outcome for Laos

- Realization of effective bus operation plan.
- Establishment of sustainable traffic management and control system by using data obtained from the applied system.

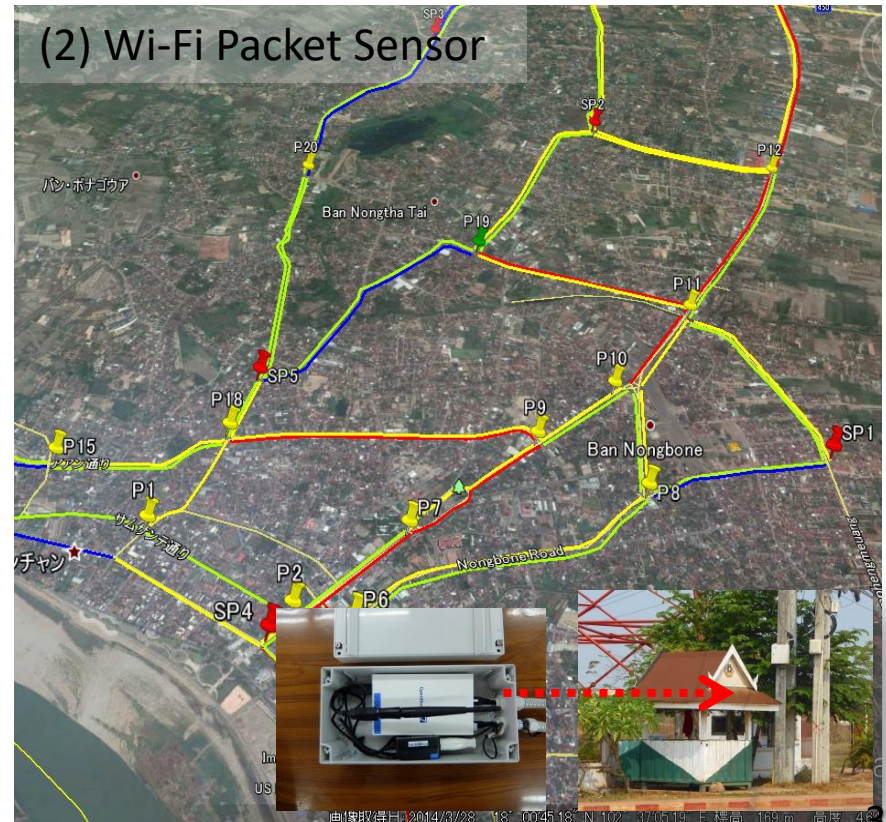
ITS by Two Products

- Mitigate traffic congestion in the Vientiane urban area by using two systems
 - (1) Public bus location system
 - (2) Traffic survey system utilize Wi-Fi Packet Sensors

(1) Bus Location System



(2) Wi-Fi Packet Sensor

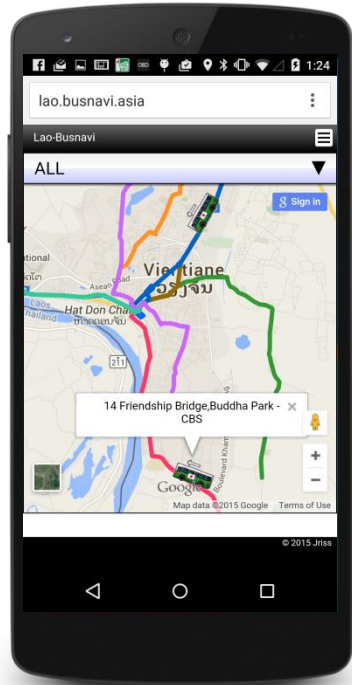


BUS LOCATION SYSTEM

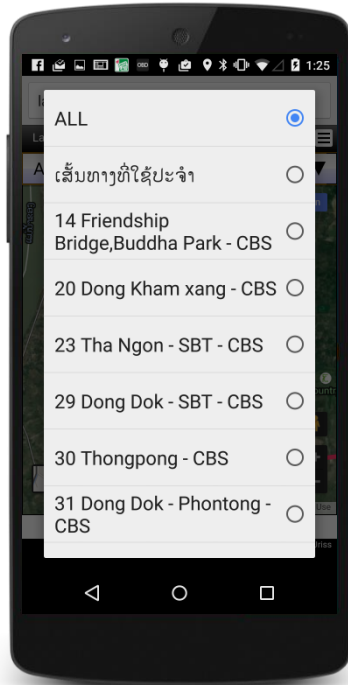
<http://lao.busnavi.asia/>

Bus operate with just Smartphone

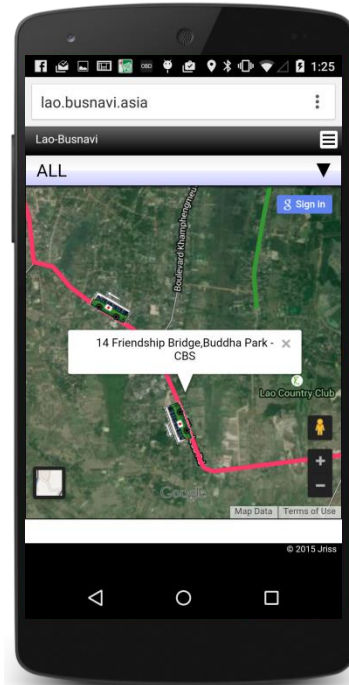
- In-vehicle terminal is equipped to the all buses under the support of VCSBE
- No trouble in operation and stable movement is confirmed



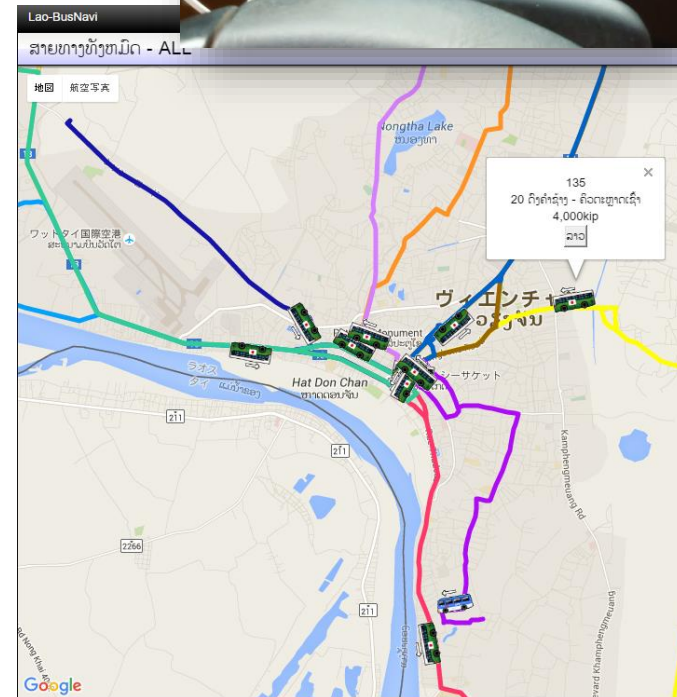
All route are shown according to a color
Click a certain bus, route is displayed



Select route, it is shown



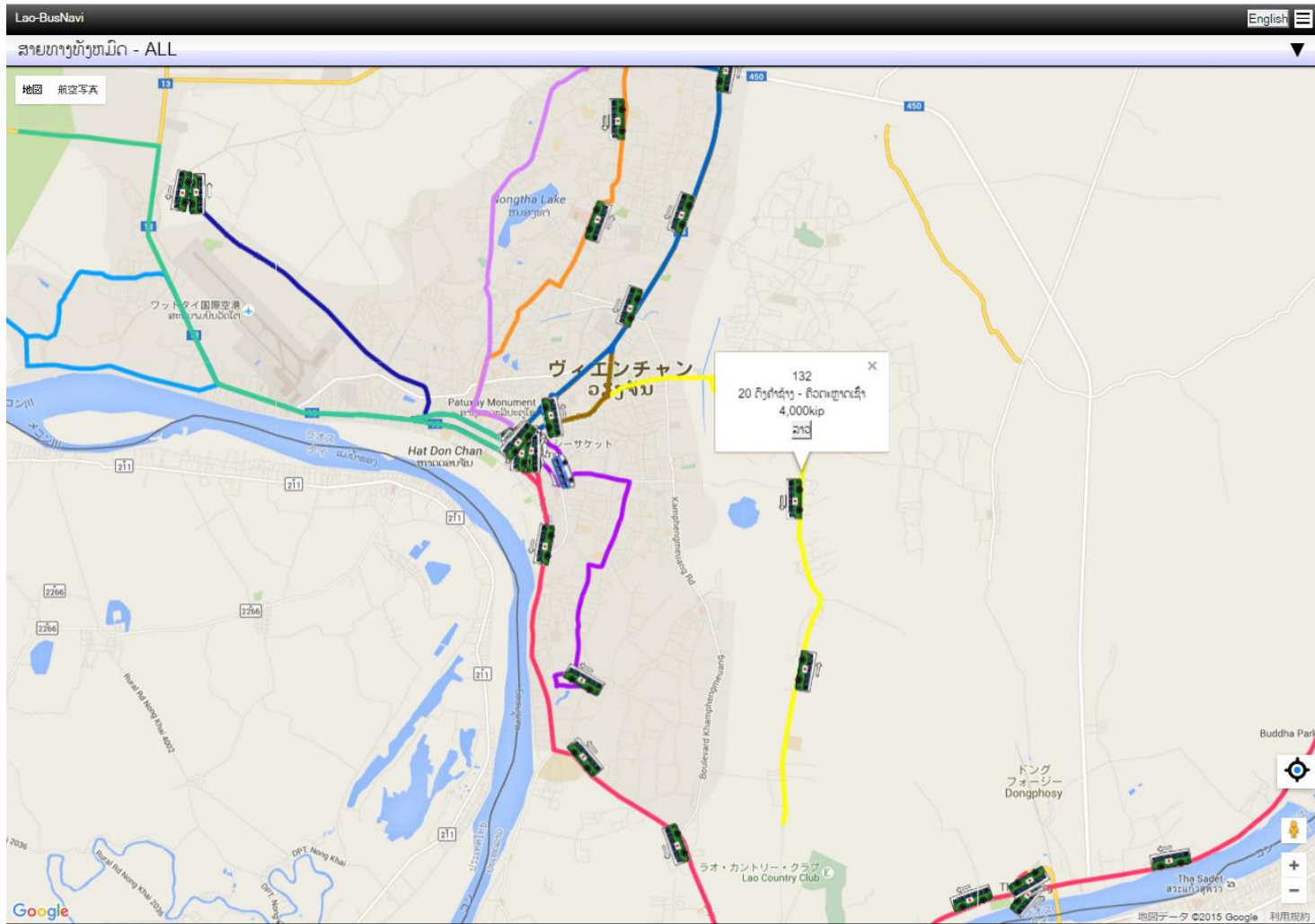
It appears on the aerial photo



Monitoring of bus is available by browser of PC

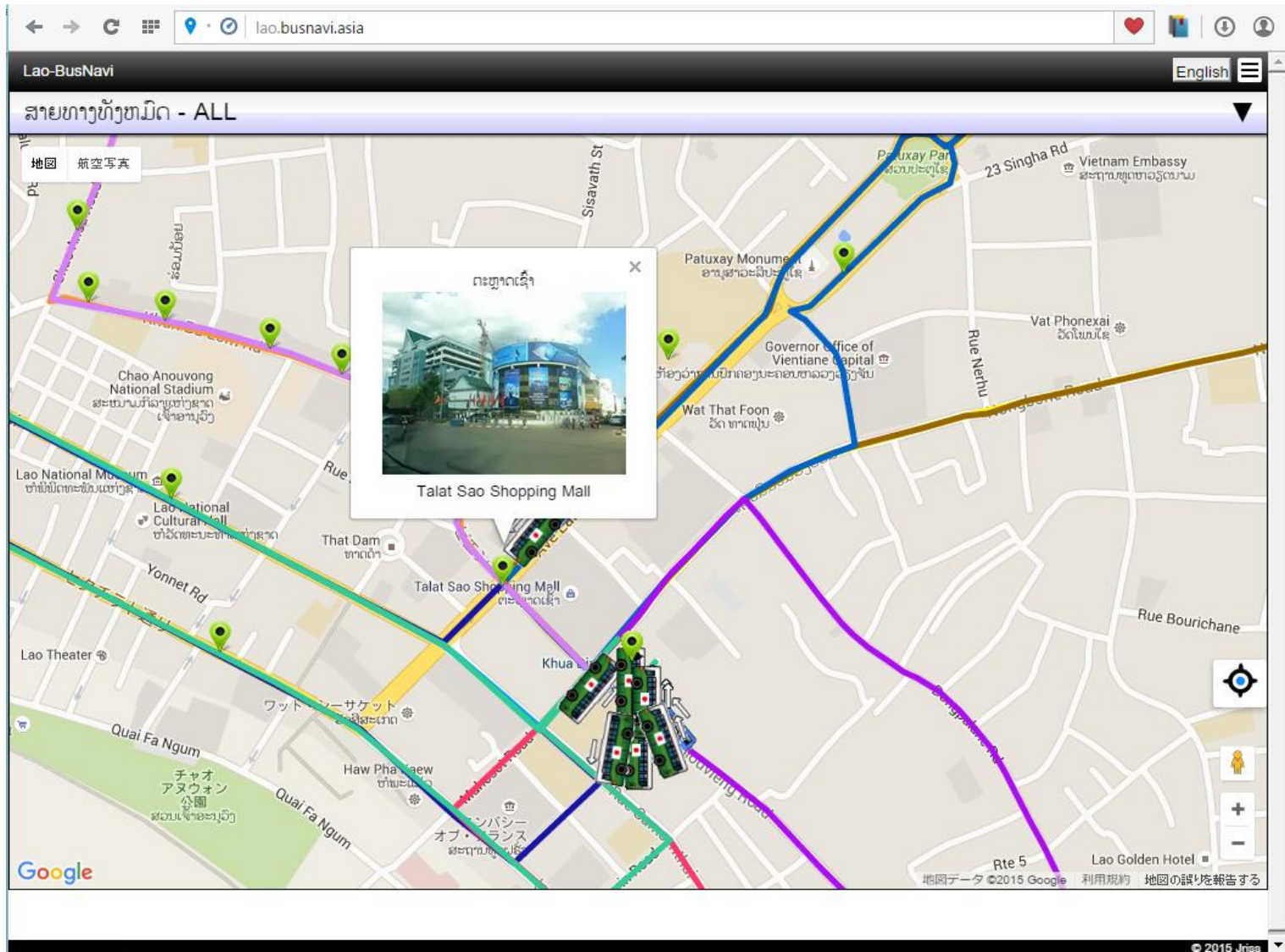
To Check the Position of All Buses

- Updated every one second
 - Bus Stops information , Fare of each line , Rote name are popped up on click.

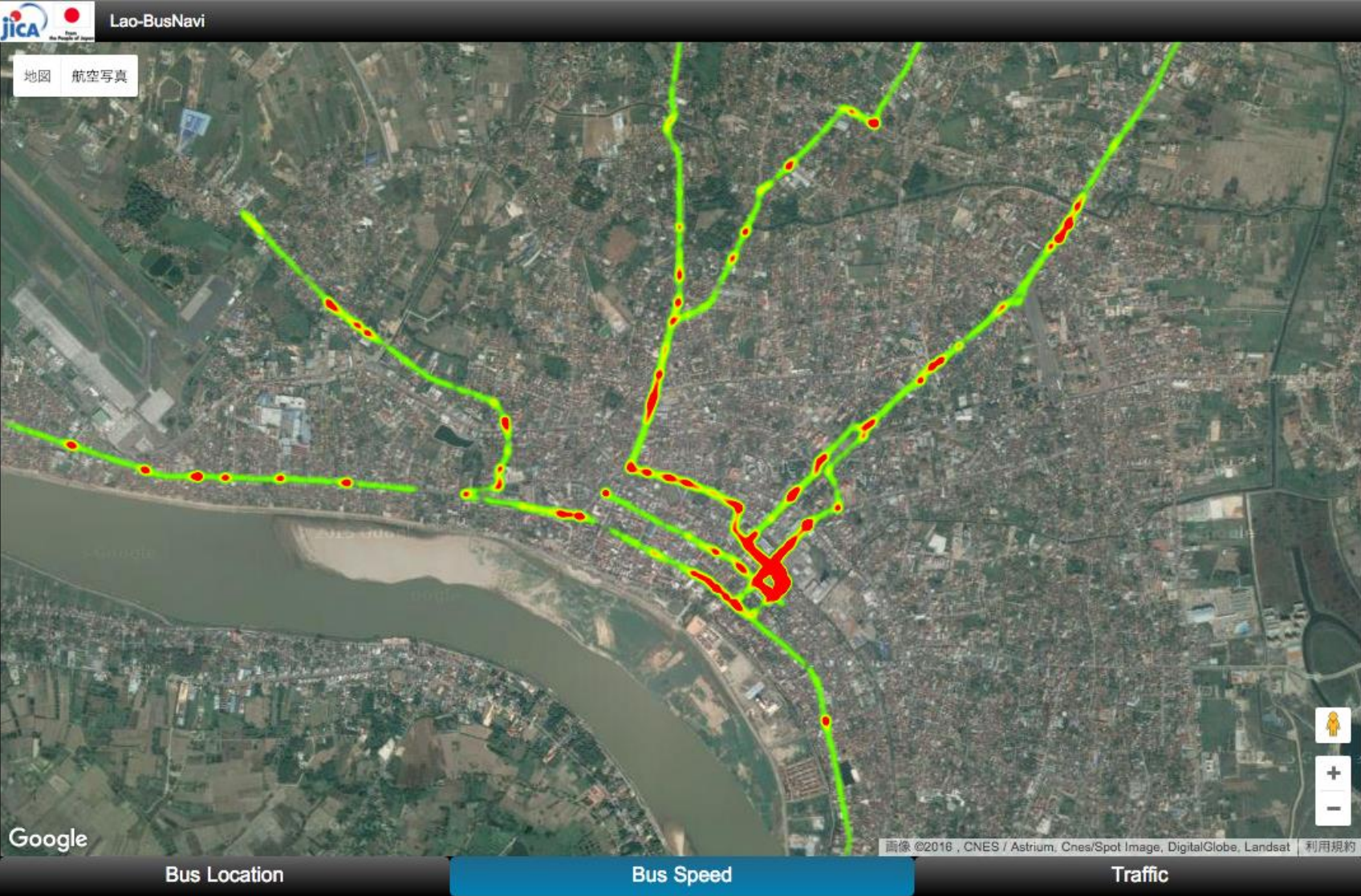


Bus Stop Information

- Pictures of Bus Stop , Facilities surrounding Bus Stops are informed



Congested Section by using Bus Probe



Monitors for Bus Users in CBS



Publicity of Bus Location System in Bus

Lao Telecom bears Communication Cost

ທ່ານສາມາດຮູ້ຕໍາແໜ່ງບໍລິການລົດເມຜ່ານໂທລະສັບມືຖືຂອງທ່ານໄດ້ແລ້ວ! **laobusnavi**

Get the BUS LOCATION via Your Smartphone!

1. ແຜ່ນສັບສະຫຼັບຂອງລົດເມມີຕຳແໜ່ງ
Bus position in real time

2. ແຜ່ນສັບສະຫຼັບຂອງທ່ານໂທລະສັບມືຖື
Bus routes identified by a color code

3. ສາມາດປຸງປຸງເປັນແຜ່ນສັບສະຫຼັບ
Switch to an aerial view

<http://lao.busnavi.asia>

ປະຫຍັດ, ສະດວກສະບາຍ, ສະອາດ, ປອດໄພ, ເປັນມິດກັບສິ່ງແວດລ້ອມ, ຫຼຸດຜ່ອນການຈະລາຈອນຕິດຂັດ ແລະ ການເກີດອຸບັດຕິເຫດຕາມທ້ອງຖະໜົນ ພຽງແຕ່ທັນມານຳໃຊ້ລົດເມສາທາລະນະ.

ທ່ານສາມາດຮູ້ຕໍາແໜ່ງບໍລິການລົດເມຜ່ານໂທລະສັບມືຖືຂອງທ່ານໄດ້ແລ້ວ! **laobusnavi**

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ລາວ ໂທລະສັບ
LAO TELECOM

Lao-BusNavi English

ສາຍທາງທັງຫມົດ - ALL

地図 航空写真

Patunay Monument ສາຍທາງສາຍລືມະຫາຊາດ

Hat Don C ຫ້າດອນຈາງ

Bus Location Bus Speed Traffic

Powered by LAO TELECOM
Vientiane Urban Transport Improvement Survey © 2015 Jriss

Wi-Fi Packet Sensor

27 Sensors installed at Major Cross Section



Travel Speed by Wi-Fi Packet Sensor

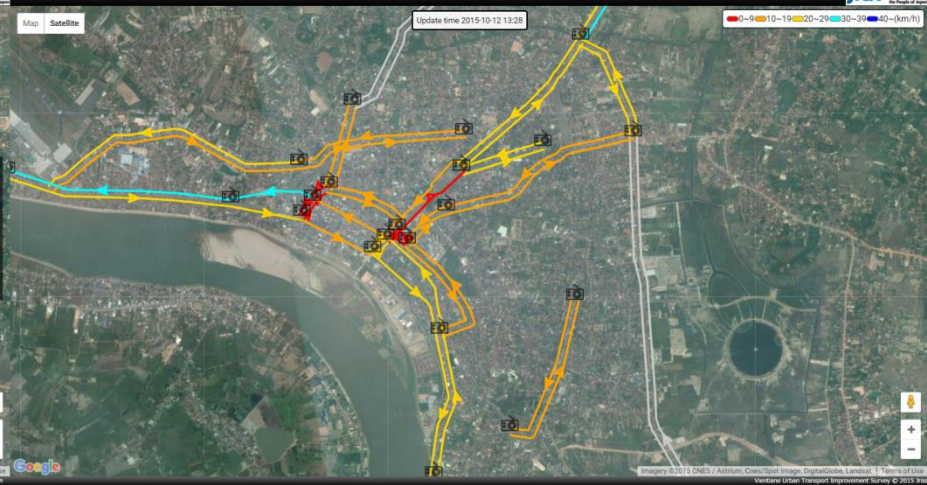


Real-time Monitoring

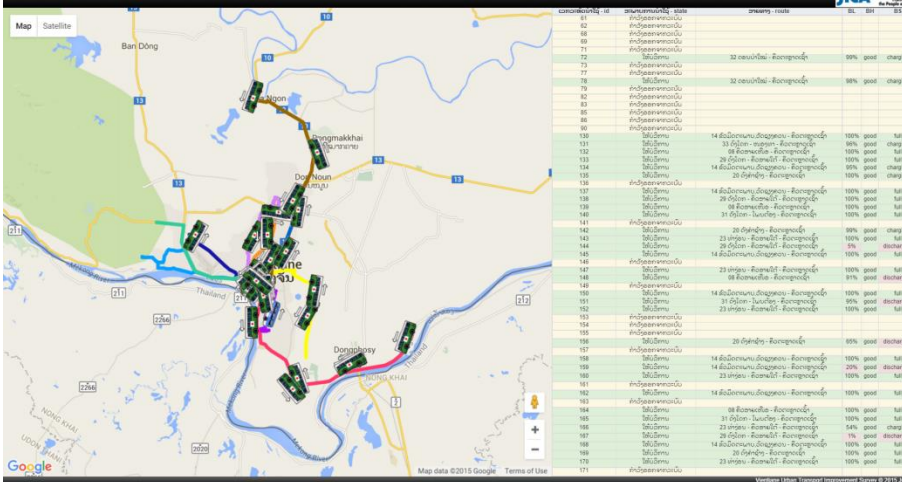
Bus Speed and Stagnation



Travel Speed by Packet Sensor System



Status of Bus & Smartphone



Distribution of BUSNAVI User

