

ALL ABOARD!

Adequacy of public transport for
garment workers in Bengaluru.



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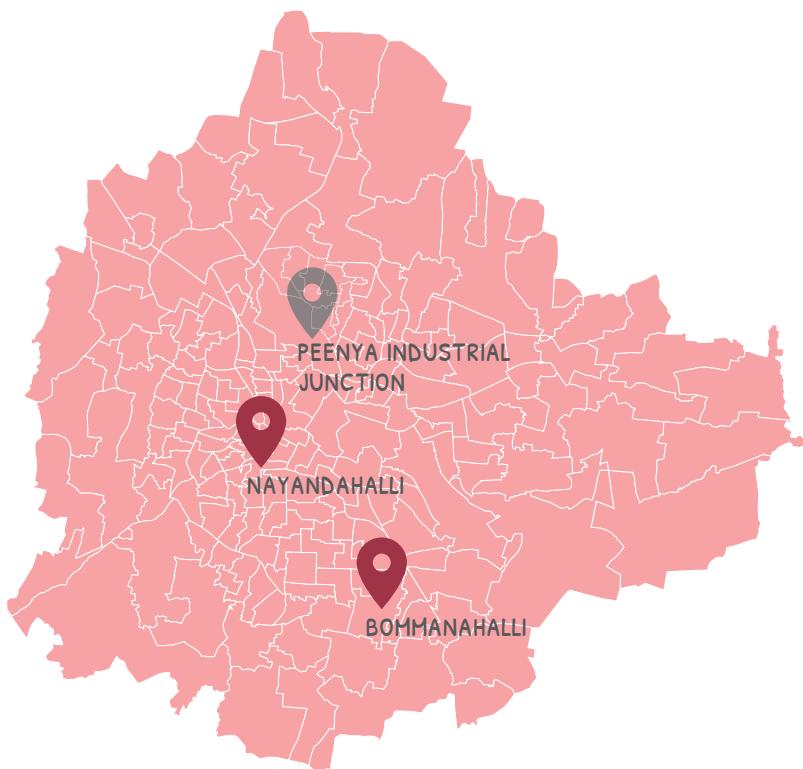


In this publication, we present visualisations based on research undertaken by Fields of View as part of the project 'Joint Road Forward'. The project is a collaboration between Fields of View, International Institute of Information Technology, Bangalore, TU Delft, and KTH Royal Institute of Technology, Stockholm, Sweden. Our efforts in this project have been supported by The Netherlands Organisation for Scientific Research (NWO).

A NOTE

The following publication is part of Fields of View's efforts to make policy research accessible using visualisations and comic books. All details presented in this publication are faithful to the research undertaken at Fields of View, and sources of all the data presented are indicated wherever applicable.

HOW AFFORDABLE, AVAILABLE, AND ACCESSIBLE IS THE
PUBLIC BUS SERVICE FOR PEOPLE WHO WORK IN GARMENT
FACTORIES IN BENGALURU? A STUDY.



Out of the three major garment clusters in Bengaluru, our study focused on two hubs, Nayandahalli and Bommanahalli.

WHO WORKS IN THE GARMENT INDUSTRY?



85-90%

OF THE PEOPLE WHO WORK IN THE
GARMENT INDUSTRY ARE WOMEN

The two chosen hubs alone employ an estimated 1,05,000 workers. Around a lakh workers go to Bommanahalli and around 5,000 go to Nayandahalli.

IS THE PUBLIC BUS SERVICE FULFILLING THE NEEDS OF PEOPLE WHO WORK IN GARMENT FACTORIES?



7.5 KM

AVERAGE DISTANCE GARMENT
FACTORY WORKERS WALK TO
AND FRO ON A DAILY BASIS

**45 TO 60
MINUTES**

TIME TAKEN TO TRAVEL TO
THE PLACE OF WORK WHICH IS
3-4 KM AWAY (APPROX.).

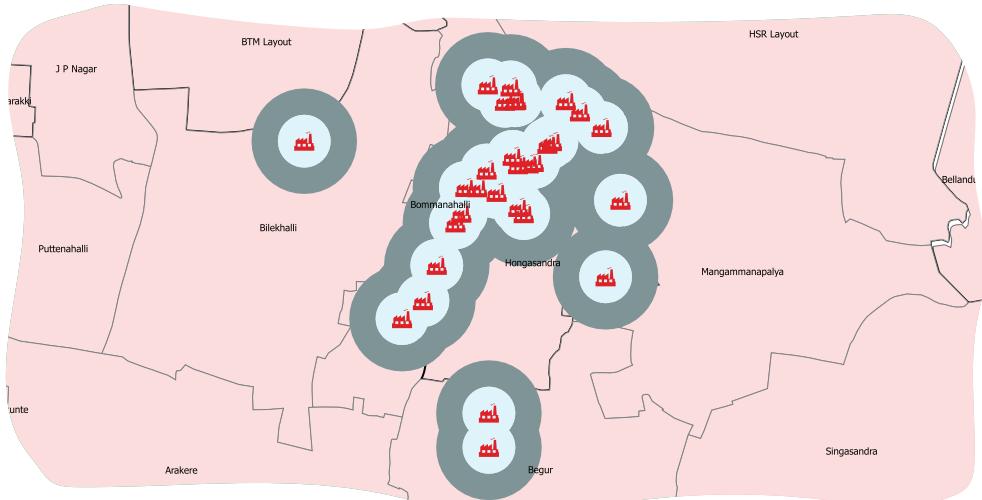
In order to explore whether the public bus service fulfills the need of garment factory workers, we look at three dimensions related to the service: accessibility, availability, and affordability.

ACCESSIBILITY

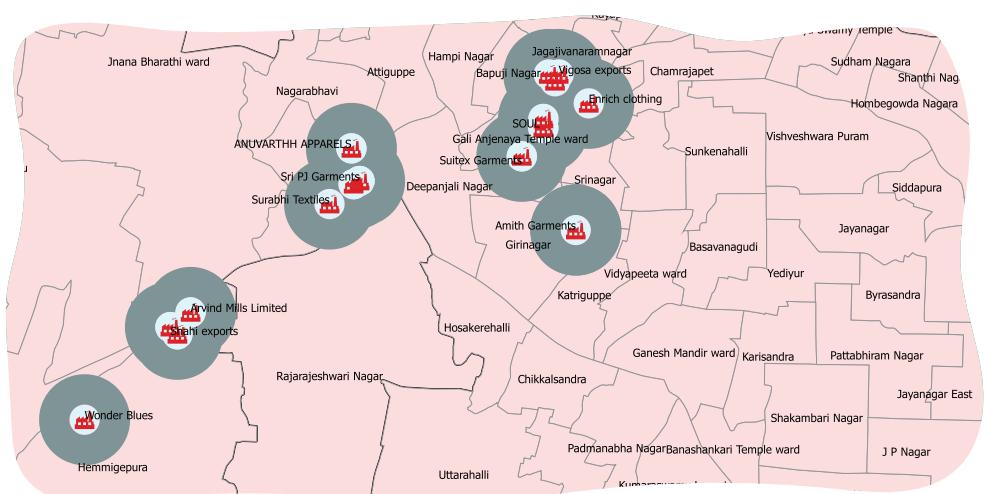
How MUCH DO YOU NEED TO WALK TO REACH A BUS STOP?

The answer to this question determines accessibility. A bus stop at a distance of up to 400 meters is considered highly accessible; and 400 - 800 meters is considered to provide medium accessibility.

BOMMANAHALLI



NAYANDAHALLI



GARMENT FACTORIES

HIGH
ACCESSIBILITY

MEDIUM
ACCESSIBILITY

LET US SEE A COMPARISON OF THE TWO GARMENT CLUSTERS WITH RESPECT TO ACCESSIBILITY

ACCESSIBILITY OF A REGION

(NUMBER OF ACCESSIBLE BUS STOPS IN THE REGION / TOTAL NUMBER OF WORKERS)

0-400 METERS (HIGH ACCESSIBILITY)

* PER GARMENT WORKER

BOMMANAHALLI



0.00022

NAYANDAHALLI



BETTER BUS STOP
ACCESSIBILITY*

0.002

400M-800M (MEDIUM ACCESSIBILITY)

* PER GARMENT WORKER

BOMMANAHALLI



0.00018

NAYANDAHALLI



BETTER BUS STOP
ACCESSIBILITY*

0.005

The data shows that Bommanahalli has a considerably lower number of accessible bus-stops per garment worker, despite being the place of employment for nearly 1,00,000 workers.

AVAILABILITY

Garment factory workers have to be in the factory on time, else they end up losing wages. Therefore, during peak times, 'schedule availability', which indicates how many buses of a particular service are run during a particular period of time, is a useful metric. Another metric is 'route availability', which indicates number of different destinations you can potentially reach from a hub.

ROUTE AVAILABILITY

0-400 METERS (HIGH ACCESSIBILITY)

* PER GARMENT WORKER

BOMMANAHALLI



0.00137

NAYANDAHALLI



BETTER ROUTE
AVAILABILITY*

0.0396

400M-800M (MEDIUM ACCESSIBILITY)

* PER GARMENT WORKER

BOMMANAHALLI



0.00146

NAYANDAHALLI



BETTER ROUTE
AVAILABILITY*

0.051

The data shows that Bommanahalli has lower route availability. Increasing the number of destinations that workers could go to from Bommanahalli could increase usage of buses.

Next, let us look at what is the peak hour schedule availability along highly accessible bus stops across both hubs.

SCHEDULE AVAILABILITY

MORNING PEAK HOURS (8-10AM)

* PER GARMENT WORKER

BOMMANAHALLI



0.00543

NAYANDAHALLI



BETTER SCHEDULE
AVAILABILITY*

0.274

EVENING PEAK HOURS (7-10PM)

* PER GARMENT WORKER

BOMMANAHALLI



0.00436

NAYANDAHALLI



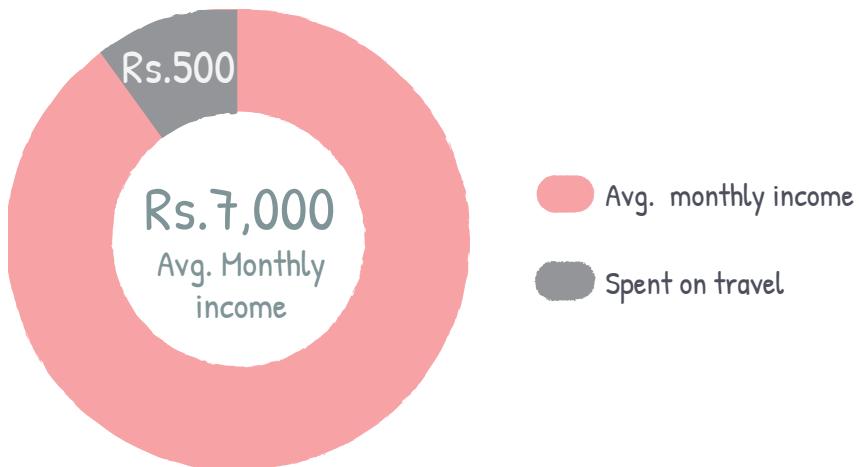
BETTER SCHEDULE
AVAILABILITY*

0.2088

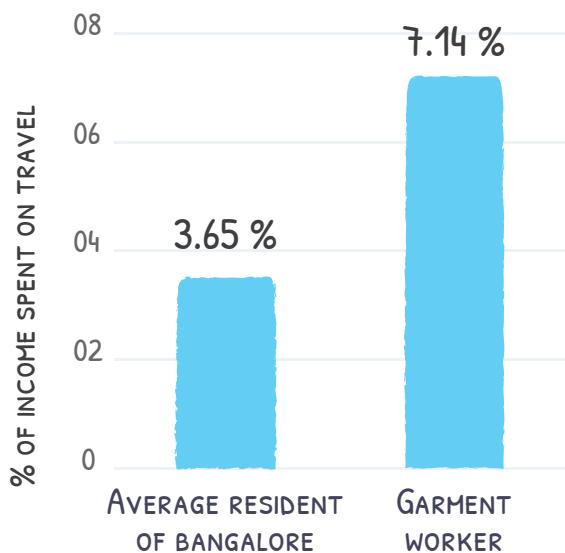
The data shows relatively lower available schedule per garment worker in Bommanahalli hub.

HOW MUCH DO YOU PAY FOR PUBLIC TRANSPORT DETERMINES THE AFFORDABILITY OF THE SERVICE.

HOW MUCH OF THEIR INCOME WOULD A GARMENT WORKER SPEND ON TRAVEL?



AS SHOWN, A GARMENT WORKER SPENDS A GREATER PERCENTAGE OF THEIR INCOME ON TRAVEL AS COMPARED TO AN AVERAGE RESIDENT OF BENGALURU

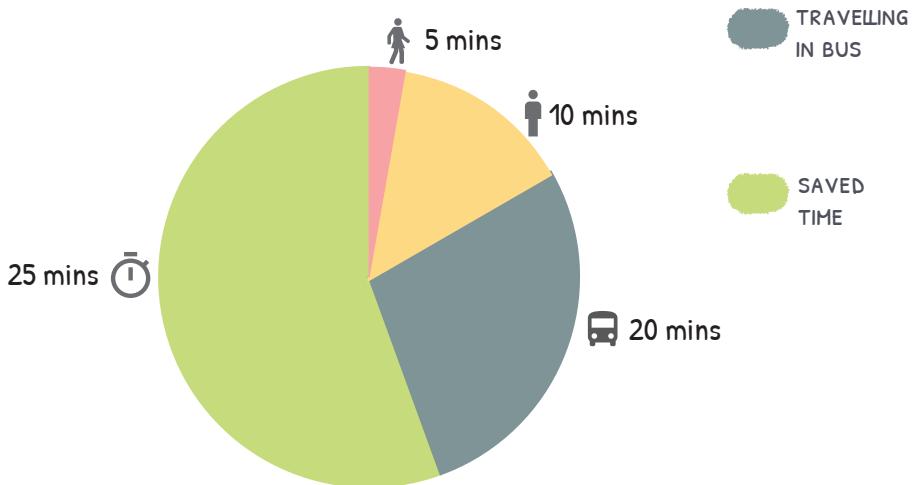


POSSIBLE SAVING FOR GARMENT WORKERS IF THEY USE BUS SERVICE

CURRENT SCENARIO (WALKING 3-4 KM IN EACH WAY)



DESIRED SCENARIO (WALKING 400M IN EACH WAY)



THEY CAN SAVE APPROXIMATELY 50 MINS
PER DAY IN THE DESIRED SCENARIO.

In Bengaluru, a majority of the workers employed in garment factories are women. For them to reach their place of livelihood and other needs, access to affordable, available, and accessible public transport is imperative.

Our research shows that in the two garment factory hubs, Nayandahalli and Bommanahalli, the accessibility and affordability of public transport can be improved so that more people working in garment factories can access public bus service. At the same time, there needs to be more affordable public transport options for garment workers.

Thus, for the Indian context, needs and preferences of diverse sets of people, especially vulnerable and marginalised groups, has to be included in the transport planning process. What can we then do to make public transport more equitable?

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DATA FOR GARMENT EMPLOYEES

SOURCE: Garment and Textile Workers Union, 2019



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