

**MICRO PROJECT PROPOSAL 7:*****Developing a Pedestrian Master Plan for the City of Varanasi***

Format for submitting projects under Project Varanasi. (Do not change the serial no and headings of the items. If the headings are not relevant to your project then say so. The proposal document must not exceed 5 pages.)

1	Project type (Strike off those not applicable, refer to the policy document for project types)	(i) Technology Development or Prototype Development.
2	Title of the Project	<b>Developing a Pedestrian Master Plan for Varanasi</b>
3	Duration of the project	<b>1.5 years</b>
4	Total Cost	<b>25 lacs</b>
5	Name address and phone numbers of PIs and Co-PI's	<p><b>PI: Dr. Arkopal Goswami</b>  Assistant Professor  Ranbir and Chitra Gupta School of Infrastructure Design and Management  IIT Kharagpur  Cell No.--- 9928036618</p> <p><b>CO-PI: Prof. Joy Sen</b>  Professor  Department of Architecture and Regional Planning  IIT Kharagpur</p> <p><b>RS Team: Dipanjan Nag, Sunny Bansal</b></p>

**6. General Description of the project:**Introduction

India's large pedestrian volume necessitates projects that focus exclusively on improving the walking environment. Nationwide, footpaths are often not built to standards, and are almost an afterthought in majority of the road infrastructure projects. The technological advancements have also focused on the automobile with in-vehicle navigation systems, automated signal systems, and others aiming to improve vehicular movement. An increased focus in improving public transport options in many congested urban areas along with strategies to curb automobile movement is a welcome move, as it helps reduce the emission of toxic gases and improve air quality. Such initiatives will realize their maximum potential when

augmented with an interconnected smart pedestrian network. The proposed pedestrian master plan will not only provide for an interconnected sidewalk network, but will also link it to the other modes of transport, for example, provide last-mile connectivity from metro rail stations, which will improve the overall level of service offered by the transportation system of a city.

### Aim & Objective

The aim of the project is to document and enhance the pedestrian infrastructure in the city of Varanasi. As such, the objectives of the project are:

- (1) Determining the existing pedestrian level of service
- (2) Measuring the volume and flow characteristics of pedestrians along the existing network
- (3) Forecasting the pedestrian infrastructure needs and demand

### Project Scope

The project will be carried out in the following 4 areas of the city of Varanasi –

- (a) Ghat area – Dashashwamegh Ghat to Assi Ghat
- (b) Railway Station area – including bus station
- (c) Airport area
- (d) Central business district (Chowk area)

### **7. General Description of experience/ expertise of team on such/ similar projects:**

The investigators of the project have extensive experience in transport planning projects, including pedestrian and non-motorized travel, and have been involved in ongoing and prior Varanasi oriented projects.

### **8. Deliverables (The deliverables are to be described in each section. If there is no deliverable in a particular section then say the same clearly.):**

- (a) Prototype – Pedestrian map of the ghat area in Varanasi.
- (b) Process Prototype – Developing the pedestrian master planning process that can be extended to any other parts of the city of Varanasi or any other city in India.
- (c) Design/ Technical Document – Pedestrian Master Plan
- (d) Software – -Nil-
- (e) Document (audio, visual, write ups web sites etc)
  - (i) Pedestrian maps, and
  - (ii) Pedestrian Navigation Application
- (f) Any other – -Nil-