

## CONCEPT NOTE

### Theme and Title of Solution

#### Title of Solution

(50 words)

*Design of Surroundings Around Foot Over Bridges (FOBs):  
Transforming FOB Surroundings: Safe, Accessible, and Aesthetic Urban Spaces*

### Theme of Solution (Multiple Selection, select at least 1 theme [Double Click the Check Box and select "Default Value" as "Checked"])

- ☐ Enhancing FOB Utilization
- ☒ Design of Surroundings around FOB
- ☐ Pedestrian Only - FOB Solutions
- ☐ Mixed-Mode FOB Solutions

### Problem Identification

[Briefly outline the road safety issues and challenges faced by Vulnerable Road Users while crossing the multilane highways]

#### Challenges in Current FOBs Solutions for Pedestrian Crossings

(On the right side are reference questions to guide the process. These are for reference only; you are encouraged to derive your own observations.)

125 words

(25% Weightage)

*The areas around FOBs often lack proper urban design, making them unappealing and unsafe for pedestrians. Issues include poorly lit surroundings, inadequate pathways, absence of greenery, and a lack of integration with pedestrian and cyclist needs. These factors discourage FOB use, particularly among vulnerable groups like the elderly, disabled, and children.*

#### Challenges in Current Road User Behaviour for FOB utilizations

(On the right side are reference questions to guide the process. These are for reference only; you are encouraged to derive your own observations.)

125 words

(25% Weightage)

*Many pedestrians avoid FOBs due to inconvenience, time constraints, and poorly maintained or intimidating access points. Insufficient awareness of safety benefits and prioritization of shortcuts over safety exacerbate this behaviour, making road safety a persistent issue.*

### Proposed Solution

(50% Weightage)

#### Categorization of Solution (Select either of 1 theme [Double Click the Check Box and select "Default Value" as "Checked"]):

☐ Engineering-Based Solution - (If selected, describe technical/structural modifications or innovations proposed in the Solution Section)

☒ Behavioral-Based Solution (If selected, describe strategies aimed at changing user habits or promoting awareness through enforcement/engineering strategies in the Solution Section)

#### Solution (250 words [Includes of Key Features, Challenges, Impact])

To enhance the surroundings around FOBs and encourage their utilization, the design should integrate safety, functionality, and aesthetics. Interactive signage and wayfinding systems can guide pedestrians effectively, offering real-time information such as weather updates, safety reminders, and nearby facilities. The addition of green spaces, such as vertical gardens and small urban parks beneath the FOBs, can improve air quality and create inviting environments. To promote community engagement, spaces around FOBs can feature artistic elements like murals, reflecting local culture and identity, while thematic zones—such as fitness areas, children's play zones, or open-air reading corners—offer multifunctional benefits. Safety can be further enhanced by creating designated waiting zones equipped with shelters, benches, and security systems such as surveillance cameras and motion-detection lighting. FOBs should connect seamlessly with public transport options like bus stops or metro stations and include bicycle docking stations to encourage multimodal transport. Adding shaded pathways, escalators, or elevators ensures accessibility for all users, including the elderly and disabled. The inclusion of small kiosks or pop-up markets can attract foot traffic, turning underutilized areas into vibrant spaces. Additionally, incorporating water features like fountains or mist sprayers can provide cooling effects, improving comfort in hot weather. To maintain these spaces, proper waste management systems, regular cleaning, and maintenance schedules should be implemented. Public-private partnerships and community awareness campaigns can support these initiatives, ensuring long-term success. These interventions aim to transform the areas around FOBs into safe, functional, and attractive urban spaces that motivate pedestrians to choose the safer option of crossing.

#### Key Features

**Safety Enhancements:** Improved lighting, clear signage, and surveillance systems.  
**Aesthetic Upgrades:** Landscaping, murals, and decorative elements to make the space inviting.  
**Functional Spaces:** Adding seating areas, cycle stands, and small commercial kiosks.  
**Accessibility:** Barrier-free pathways and ramps for universal access.

#### Challenges

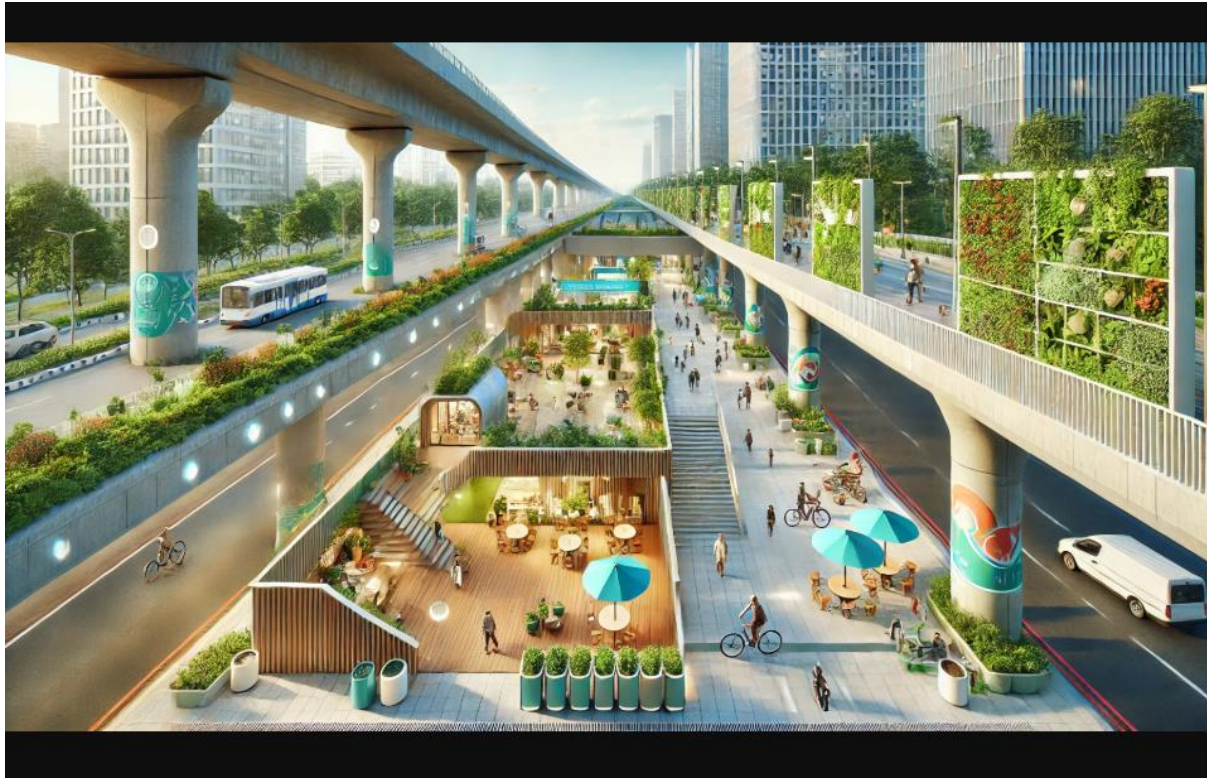
**Technical Constraints:** Limited space and existing infrastructure may pose challenges. Mitigation includes modular designs adaptable to site conditions.  
**User Acceptance:** Resistance to change can be countered through awareness campaigns and pilot projects.  
**Financial Feasibility:** High costs can be addressed through public-private partnerships.

#### Impact

**Short-term:** Increased safety and FOB usage.  
**Long-term:** Reduced accidents and integration of FOBs into urban aesthetics and functionality.

## Supporting Documents - (No Text – Only Images)

[Enclose any additional documents, e.g., concept diagrams, drawings, research data below]



### Survey Data: Challenges and Solutions Around FOBs

Objective: To identify current issues and preferences regarding FOB usage and surrounding design improvements.

Sample Size: 500 participants (mix of pedestrians, cyclists, and local residents).

Location: Urban areas with FOBs in high-traffic zones.

### Key Insights from the Survey

1. A significant percentage of users prioritize safety and aesthetics in their decision to use FOBs.
2. Functional upgrades like shaded pathways and escalators have strong support.
3. Addressing jaywalking requires a combination of behavioural and environmental changes.

| Category                  | Observation                                     | Percentage/Count |
|---------------------------|---|------------------|
| Reasons for Avoiding FOBs | Poor lighting and unsafe surroundings           | 42%              |
|                           | Lack of accessibility for elderly/disabled      | 26%              |
|                           | Inconvenience due to long detours               | 18%              |
|                           | Poor maintenance (dirty, damaged pathways)      | 14%              |
| Desired Improvements      | Better lighting and surveillance cameras        | 65%              |
|                           | Green spaces and aesthetically pleasing designs | 58%              |
|                           | Shaded pathways and ramps for easier access     | 48%              |
|                           | Small kiosks or shops for convenience           | 35%              |
|                           | Additional seating areas                        | 28%              |
| Factors Encouraging Use   | Direct connectivity with public transport       | 62%              |
|                           | Availability of escalators and elevators        | 54%              |
|                           | Clear and vibrant signage                       | 39%              |

| Metric                           | Data Observed               |
|----------------------------------|-----------------------------|
| Average daily pedestrian count   | 1,200 pedestrians/day       |
| Percentage using FOBs            | 58%                         |
| Percentage jaywalking            | 42%                         |
| Peak usage hours                 | 8:00–10:00 AM, 5:00–7:00 PM |
| Cyclist traffic around FOB zones | 20 cyclists/hour            |