

CONCEPT NOTE

Theme and Title of Solution

Title of Solution

Enhancing Foot Over Bridge (FOB) Utilization through Behavioral, Structural, and Situational Improvements

Theme of Solution

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

Problem Identification

Challenges in Current FOBs Solutions for Pedestrian Crossings

Foot Over Bridges (FOBs) are designed to improve pedestrian safety, yet they are underutilized due to accessibility, location, and design inefficiencies. Many FOBs lack ramps, escalators, or proper lighting, making them inconvenient for the elderly, differently-abled individuals, and children. The positioning of FOBs does not always align with high pedestrian demand areas, discouraging use. Additionally, in areas of high traffic density, poorly designed FOBs fail to provide a seamless pedestrian experience, leading to jaywalking and increased accident risks.

Challenges in Current Road User Behaviour for FOB utilizations

Many pedestrians prefer crossing at grade level rather than using FOBs due to time constraints, inconvenience, or lack of awareness regarding safety risks. Behavioral patterns indicate that people often prioritize shortcuts over safety, especially when FOBs require additional effort (such as climbing stairs). There is also insufficient public awareness regarding the benefits of using FOBs. Without behavioral interventions and strategic incentives, persuading pedestrians to use FOBs remains a challenge.

Proposed Solution

Categorization of Solution

- ☐ Engineering-Based Solution
- ☒ Behavioral-Based Solution

Solution

The solution is a **multi-faceted approach** combining **awareness strategies, behavioral incentives, and engineering modifications** to make FOBs more attractive, accessible, and widely used.

- Gamification & Incentives for FOB Usage**
 - Implement **QR code-based reward systems** where pedestrians earn points for using FOBs, redeemable for public transport discounts.
 - Launch interactive **mobile apps** that track FOB usage and offer benefits to regular users.
- Structural & Design Improvements**
 - Install **escalators, ramps, and elevators** to improve accessibility, especially for senior citizens and differently-abled individuals.
 - Improve **lighting and security** (CCTV cameras, emergency helplines) to make FOBs safer at night.
 - Use **wider pathways, covered walkways, and shaded areas** to make FOBs more comfortable, especially in extreme weather.
- Strategic Placement & Connectivity Enhancements**
 - Conduct studies to **relocate or add FOBs** in high-pedestrian-density areas.
 - Implement **zebra-free zones**, where road crossings at specific locations are blocked.
 - Synchronize **traffic lights** to make jaywalking less convenient and encourage FOB use.
- Awareness & Community Engagement**
 - Run **digital and on-ground campaigns** to educate people on road safety risks associated with jaywalking.
 - Conduct **interactive workshops in schools and workplaces** to promote FOB usage.

Key Features

- QR-Based Reward System: Incentivizes pedestrians to use FOBs through point collection and public transport discounts.
- Structural Enhancements: Introduction of ramps, escalators, lighting, and security measures for safety and accessibility.
- Strategic Placement: Relocating FOBs closer to pedestrian hotspots and integrating them with public transport hubs.
- Traffic Flow Optimization: Synchronizing signals to discourage road-level crossings and encourage FOB usage.
- Public Awareness Initiatives: Campaigns, workshops, and community participation programs to shift behavior toward safer practices.

Challenges

- Technical Constraints:** Upgrading FOBs with ramps and escalators requires funding; collaboration with private investors and smart city initiatives can address this.
- User Acceptance:** Changing pedestrian habits may take time; engaging communities through gamification and behavioral nudges will ease adoption.
- Financial Feasibility:** Public-private partnerships and CSR (Corporate Social Responsibility) initiatives can help in funding the implementation of accessibility features and security improvements.

Impact

Short-Term: Increased awareness and improved accessibility leading to higher FOB usage, reducing pedestrian accidents.

Long-Term: Establishing a culture of safe pedestrian habits, improved urban mobility, and reduced traffic disruptions due to jaywalking.

Supporting Documents

