

Exposure visit and Problem Identification for Atal Setu Bridge and Tunnel at Mumbai

Activity Report

| Academic Year | 2023-24 |
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| Program Driven by | Exposure visit and Problem Identification for Atal Setu Bridge and Tunnel |
| | at Mumbai |
| Quarter | II |
| Program / Activity Name | Exposure visit and Problem Identification for Atal Setu Bridge and Tunnel |
| | at Mumbai |
| Program Type | Exposure visit and Problem Identification for Atal Setu Bridge and Tunnel |
| | at Mumbai |
| Program Theme | |
| Start Date | 26-02-2024 |
| End Date | 26-02-2024 |
| Duration of the Activity (in Hrs) | 12 |
| Number of Student Participant | 50 |
| Number of Faculty Participant | 4 |
| Number of external Participant | |
| Expenditure Amount in Rs. | |
| Any Remark | |
| Mode of Session Delivery | Offline |
| | |
| | |
| Objective | |
| Benefit in terms of Learning / Skills / | |
| Knowledge obtained | |
| Feedback | |
| Video url (mp4) | |
| Photograph 1 (jpg) | Attached |
| Photograph 2 (jpg) | Attached |
| | |
| Overall report of the Activity (pdf) | As given below |

Introduction: The Atal Setu Bridge and Tunnel, located in Mumbai, serve as crucial infrastructure for the city's transportation network. As part of our assignment, an exposure visit was conducted to assess the condition and operational efficiency of the Atal Setu Bridge and Tunnel. The aim was to identify any existing problems and challenges faced in the maintenance and operation of this vital piece of infrastructure.

Purpose of the Visit:





- 1. To observe the structural integrity of the bridge and tunnel.
- 2. To evaluate the traffic management system and its effectiveness.
- 3. To identify any potential safety hazards or operational challenges.
- 4. To interact with stakeholders involved in the maintenance and operation of the infrastructure.
- 5. To recommend solutions for any identified problems.

Observations and Findings:

1. Structural Integrity:

- The bridge structure appears to be well-maintained with no visible signs of significant structural issues.
- There were no indications of cracks or structural weaknesses observed during the visit.
- However, further inspection by structural engineers may be necessary to ensure long-term stability.

2. Traffic Management:

- The traffic flow on the bridge and within the tunnel seemed to be adequately managed.
- However, during peak hours, congestion was observed, particularly at the entry and exit points of the tunnel.
- The absence of dedicated lanes for emergency vehicles might pose challenges during emergencies.

3. Safety Measures:

- Adequate signage and lighting were in place, contributing to overall safety.
- However, there were instances of overspeeding by vehicles within the tunnel, which could lead to accidents.
- Emergency response mechanisms, such as fire safety equipment and evacuation procedures, need to be reviewed and possibly improved.

4. Maintenance and Cleanliness:

- The cleanliness of the bridge and tunnel was satisfactory, with regular cleaning evident
- Maintenance activities, such as road surface repairs and painting, were ongoing during the visit.
- However, there were areas where debris and litter were accumulated, necessitating more frequent cleaning.

Challenges Identified:

1. **Traffic Congestion:** The bottleneck at the entry and exit points of the tunnel needs to be addressed to improve traffic flow, especially during peak hours.





- 2. **Overspeeding:** Measures should be implemented to deter overspeeding within the tunnel, possibly through increased surveillance and enforcement of speed limits.
- 3. **Emergency Preparedness:** Enhancements in emergency response protocols and infrastructure, including the establishment of dedicated lanes for emergency vehicles, are recommended to ensure swift and effective responses during crises.
- 4. **Regular Maintenance:** While maintenance activities are ongoing, ensuring regular and thorough upkeep is essential to prevent deterioration and ensure the longevity of the infrastructure.

Recommendations:

- 1. Conduct a comprehensive traffic study to identify optimal solutions for managing congestion at the tunnel entrances and exits.
- 2. Install additional signage and speed limit indicators within the tunnel to promote safer driving practices.
- 3. Enhance emergency response capabilities by investing in advanced safety equipment and training for personnel.
- 4. Implement a strict maintenance schedule to address cleanliness issues and prevent the accumulation of debris.

Conclusion: The Atal Setu Bridge and Tunnel play a crucial role in Mumbai's transportation network, facilitating the smooth movement of commuters and goods. While the infrastructure appears to be well-maintained overall, several challenges such as traffic congestion, overspeeding, and emergency preparedness need to be addressed. By implementing the recommendations outlined in this report, the efficiency, safety, and longevity of the Atal Setu Bridge and Tunnel can be significantly enhanced, ensuring continued service to the city and its residents.



































































