World Academy of Science, Engineering and Technology International Journal of Environmental and Ecological Engineering Vol:16, No:01, 2022

Furnishing Ancillary Alternatives for High Speed Corridors and Pedestrian Crossing: Elevated Cycle Track, an Expedient to Urban Space Prototype in New Delhi

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Abstract: Delhi, the National Capital, has undergone a surge in development rate, consequently engendering an unprecedented increase in population. Over the years the city has transformed into a car-centric infrastructure with high-speed corridors, flyovers and fast lanes. A considerable section of the population is hankering to rehabilitate to the good old cycling days, in order to contribute towards a green environment as well as to maintain their physical well-being. Furthermore, an extant section of Delhi's population relies on cycles as their primary means of commuting in the city. Delhi has the highest number of cyclists and second highest number of pedestrians in the country. However, the tumultuous problems of unregulated traffic, inadequate space on roads, adverse weather conditions stifle them to opt for cycling. Lately, the city has been facing a conglomeration of problems such as haphazard traffic movement, clogged roads, congestion, pollution, accidents, safety issues, etc. In 1957, Delhi's cyclists accounted for 36 per cent of trips which dropped down to a mere 4 per cent in 2008. The declining rate is due to unsafe roads and lack of proper cycle lanes. Now as the 10 percent of the city has cycle tracks. There is also a lack of public recreational activities in the city. These conundrums incite the need of a covered elevated cycling bridge track to facilitate the safe and smooth cycle commutation in the city which would also serve the purpose of an alternate urban public space over the cycle bridge reducing the cost as well as the space requirement for the same, developing a user-friendly transportation and public interaction system for urban areas in the city. Based on the archival research methodologies, the following research draws information and extracts records from the data accounts of the Delhi Metro Rail Corporation Ltd. as well as the Centre for Science and Environment, India. This research will predominantly focus on developing a prototype design for high speed elevated bicycle lanes based on different road typologies, which can be replicated with minor variations in similar situations, all across the major cities of our country including the proposed smart cities. Furthermore, how these cycling lanes could be utilized for the place making process accommodating cycle parking and renting spaces, public recreational spaces, food courts as well as convenient shopping facilities with appropriate optimization. How to preserve and increase the share of smooth and safe cycling commute cycling for the routine transportation of the urban community of the polluted capital which has been on a steady decline over the past few decades.

Keywords: bicycle track, prototype, road safety, urban spaces

Conference Title: ICASES 2022: International Conference on Architectural Science and Environmental Sustainability

Conference Location : Amsterdam, Netherlands **Conference Dates :** January 21-22, 2022