



Air Quality at Tran Thi Ly Bridge

Da Nang Journey Map Series 2020-2021

About This Series

Building Healthy Cities (BHC) is a USAID-funded learning project in four Smart Cities in Asia – Indore, India; Makassar, Indonesia; Da Nang, Vietnam; and Kathmandu, Nepal. BHC is testing how to successfully apply urban planning approaches that improve the social determinants of health in complex systems.

BHC uses exploratory data collection, multisectoral engagement, and citizen participation. This systems approach informs project activities and the prioritization of city-funded workplans. The combined impact should improve the lives of all residents in these three cities and reduce preventable mortality.

BHC is using several tools and processes to create coalitions and organize its approach in each city. One key process is systems mapping to illustrate the key dynamics (patterns underlying problems) and define key entry (or 'leverage') points to address social and environmental determinants of health. Another way that BHC is documenting citizen experiences in each city is through Journey Maps.

The Journey Maps apply 'design thinking' approaches, which are often used to tailor products to intended customers; citizens are like customers in that they pay taxes or fees to use city services. BHC has adapted this tool to document the experience (or 'journey') of citizens who are trying to overcome one service issue in each city, over time, updated on a quarterly basis. The specific topics were identified during the first year of activities in each city and fit within the larger context shown in the systems maps. BHC is using these Journey Maps to track citizen and city official perspectives, and to document change at the neighborhood level.

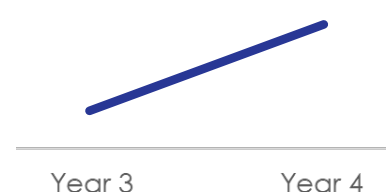
BHC is training people in each neighborhood to develop and use these Journey Maps and on grassroots advocacy techniques. By bringing the citizen experience directly to city planners, BHC hopes to better align municipal planning with community priorities such as safe water, clean air, hygiene, traffic safety, and other key components of healthy urban living.

Life of Project Journey Map Summary

BHC is concluding the Journey Maps in 2021. This process brought insights into day-to-day service availability for Da Nang residents, and created a regular dialogue with the community and city offices about the causes, consequences, and potential solutions to persistent urban health-related issues.

At the beginning of this 2-year map, road closures and construction dust from the focus project initially worsened traffic congestion and air quality. COVID-19 then delayed completion of construction. Once a significant portion of the project was complete, and workers put procedures in place to decrease construction dust, pedestrians and drivers saw positive changes in traffic flow and air quality. The city also recently installed 2 air pollution monitoring stations, with plans to install 6 more across 6 districts in the near future.

Journey Map Trajectory





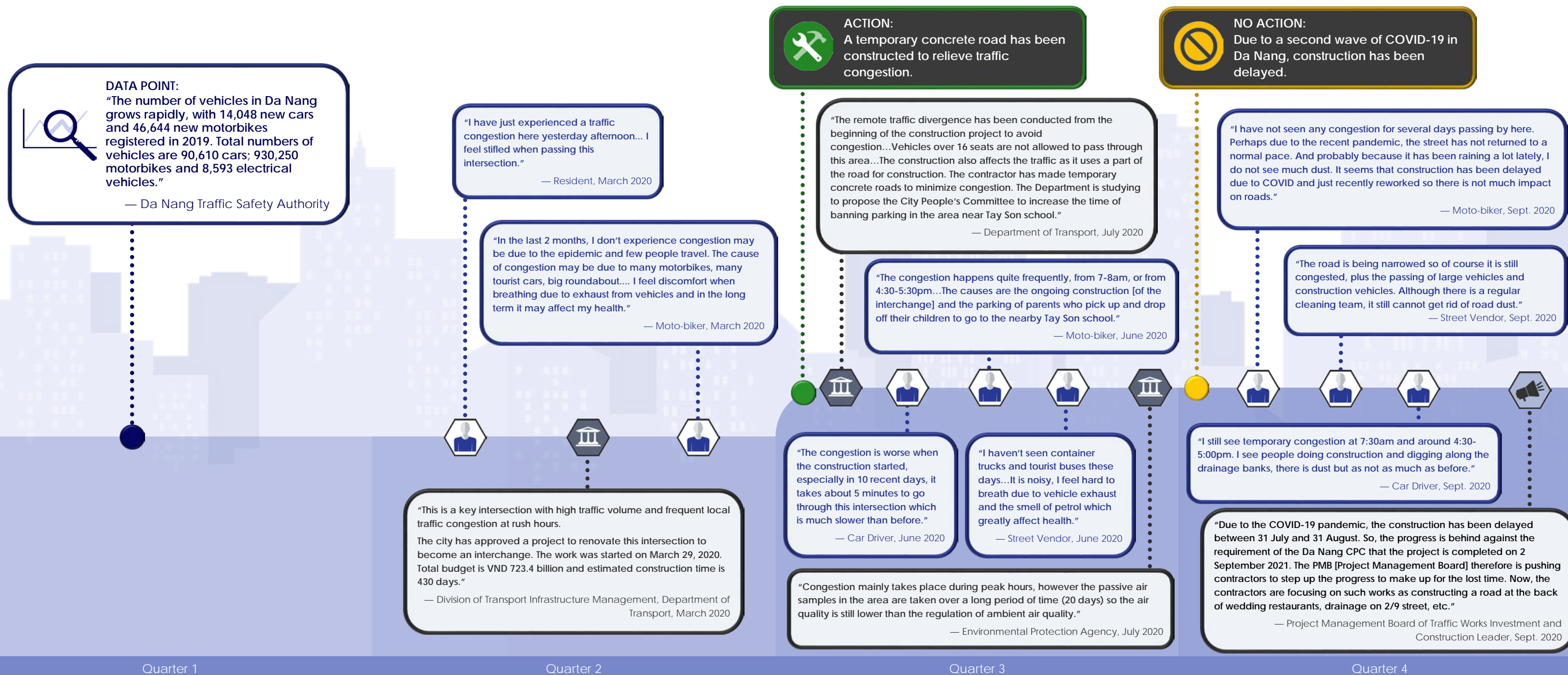
Da Nang Journey Map #3 – Air Quality at the Intersection at the Western Side of the Tran Thi Ly Bridge

YEAR 3 The intersection at the Western side of the Tran Thi Ly bridge is one of the main junctions in Da Nang. It connects the central entertainment area and social-political area from South to North, and connects the urban crowded areas and the coastal area from East to West. In recent years, with the development of the city's economy

and increased tourism, this intersection has experienced traffic congestion, which continues to get worse, especially during rush hour. This leads to reduced air quality in the area which negatively affects urban health and indirectly affects the satisfaction of tourists.



Construction site (left, source: BHC, Sept. 2020). Sidewalk under construction (right, source: BHC, Sept. 2020).





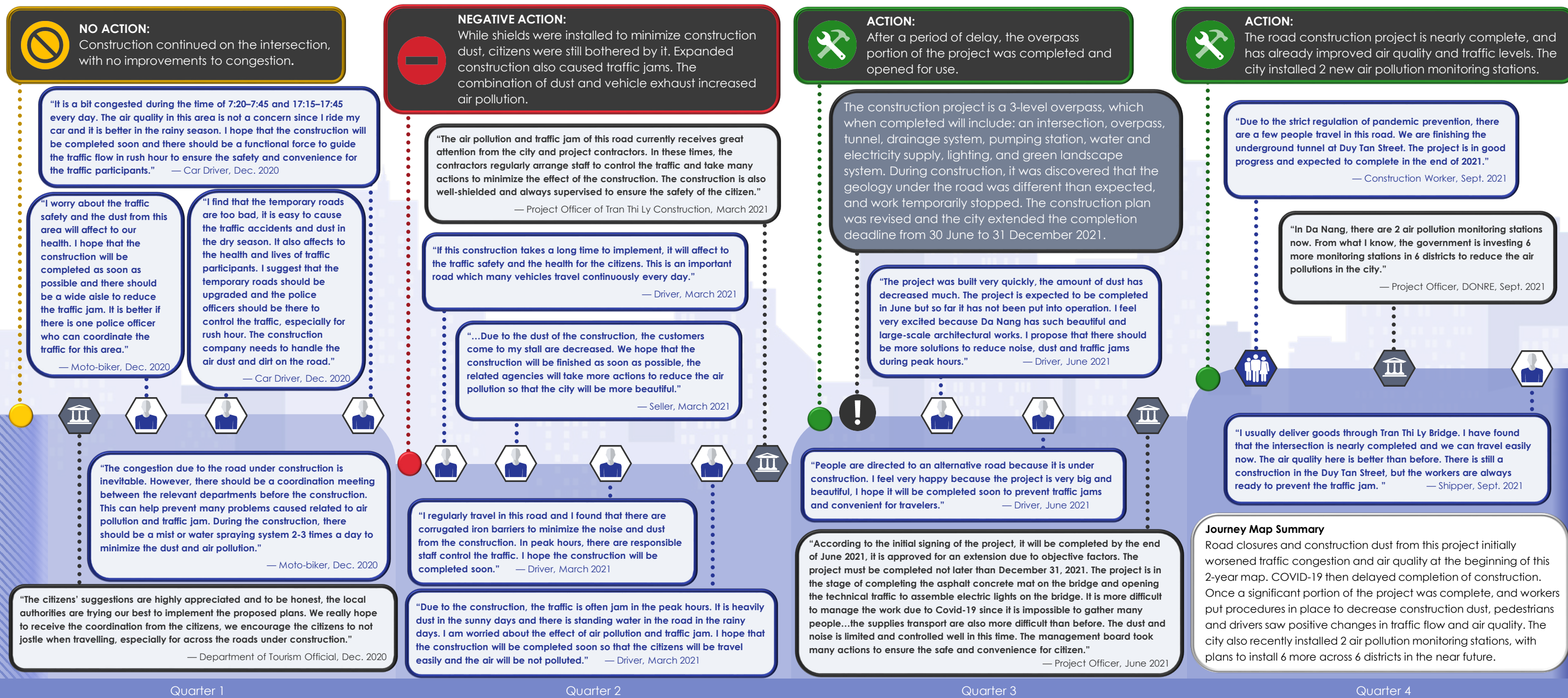
Da Nang Journey Map #3 – Air Quality at the Intersection at the Western Side of the Tran Thi Ly Bridge

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Construction at Tran Thi Ly Bridge, October 2021.



How Does This Story Connect to the Da Nang Systems Map?

Loop 8: Left Behind

While the beauty and hospitality offered in Da Nang City has created growth and advancement in many areas, the poor and vulnerable members of the population have struggled to access these resources and so disparities in health, economic, and social factors have increased. As these groups are further marginalized, barriers to participation in improvement efforts also increase; access and comfort with technology, level of awareness, fit of programs to community need, to name a few. When a large portion of the population is not able to support city policies for improvement, it has an impact on the ability of the city to provide the high level of environmental beauty and citizen hospitality that it is known for.

Example 1: (Hoa Chau socialization) Due to rapid urbanization and economic development, Da Nang citizens and many rich immigrants have invested in real estate and tourism and become richer. As a result, there is an increasing gap in Da Nang society between rich and poor. Such investment and development boosted the living

prices, especially land and house prices that the majority groups (farmers and workers) will never be able to afford. This phenomenon may result in the growth of crimes and negative impacts on the physical and mental health of those groups. Such social and economic hardship also reduces the time to think or desire to participate in the city development plan. They do not know how to invest and transform their lives, and meanwhile other high-resourced immigrants have the latest information to invest and earn more.

Example 2: While the increase in IT infrastructure and utilization has supported city advancements in many ways, those with limited literacy or access to technology have struggled to keep up. As the city continues to focus development efforts in this way these individuals (such as farmers, fishermen, and other low-wage workers) face increased barriers to accessing needed resources, as well as speaking up to share the challenges they face. The result is increased disparities in key health and social factors which, ultimately, limit whole-city growth.

