

BUILDING HEALTHY CITIES



# The Forgotten Bridge

## Indore Journey Map Series 2018-2021

### 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.

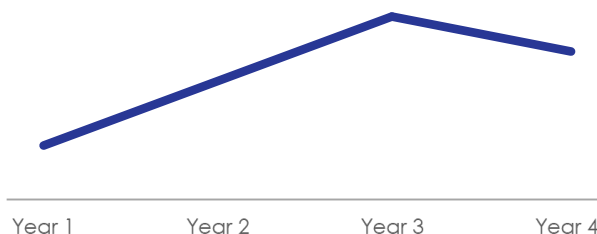
BHC is training people in each neighborhood to develop and use these Journey Maps and on grassroots advocacy techniques. By bringing the citizen experience directly to city planners, BHC hopes to better align municipal planning with community priorities such as safe water, clean air, hygiene, traffic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

This 4-year map began with positive change when the city responded to citizen requests shared via this map to replace an unsafe bridge over an open drain that had resulted in multiple deaths. A temporary iron bridge was installed, and construction began on a permanent bridge. However, the final steps to finish the bridge were significantly delayed by the construction agency and then COVID-19. On a positive note, the current bridge is significantly safer than the original and allows many people at a time to safely cross the drain.

Journey Map Trajectory





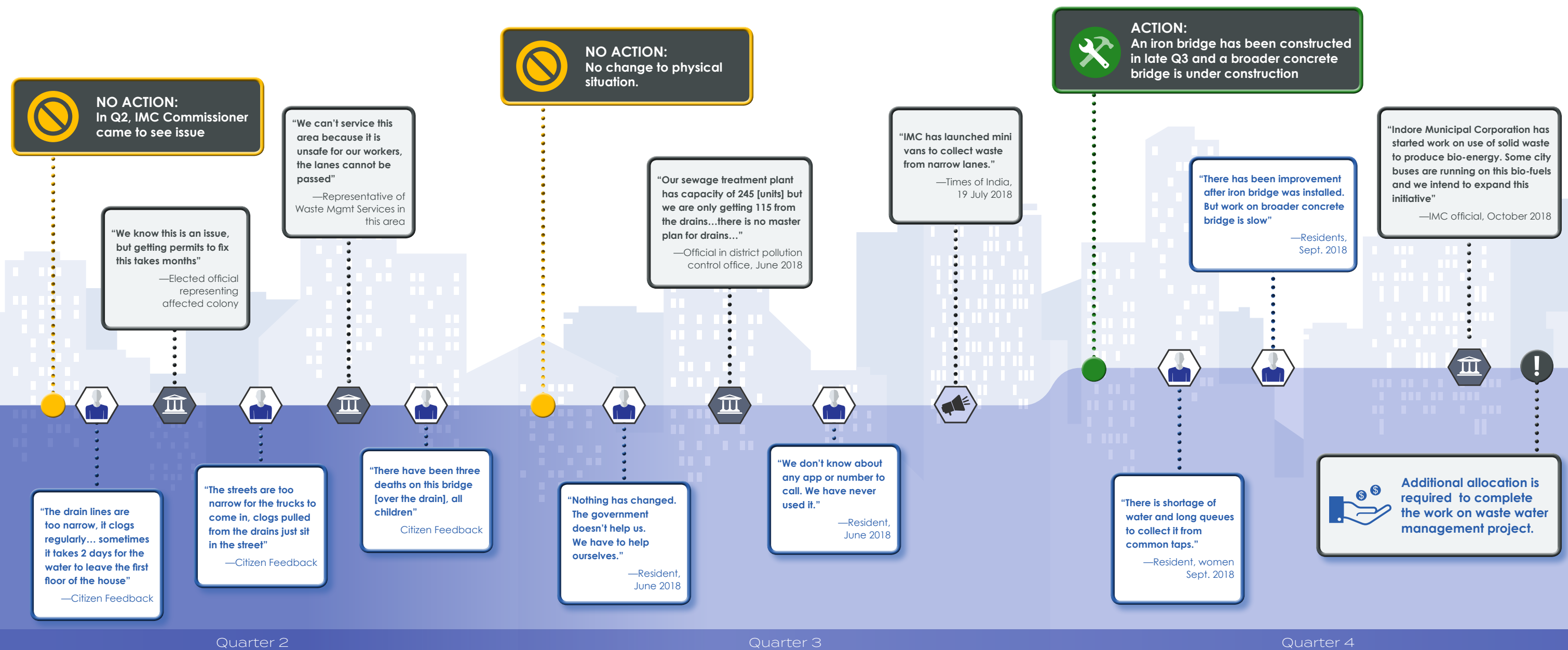
## Indore Journey Map #1 – The Forgotten Bridge

**YEAR 1** A major concern found during the 2018 base-line BHC *Health Needs Assessment* was that in some informal settlements there is poor drainage and infrastructure for storm and waste water. BHC has followed this issue in one neighborhood over time, but outside evidence suggest that open drains were a pervasive problem across informal Indore settlements (IMC, UN-Habitat, and WaterAid 2006). The neighborhood BHC is following is primarily informal housing stock within the Smart

City area-based development zone, with a stable population of primarily working-class residents. Poor drainage is compounded by the build up of trash in the drains, but when informal housing is built too close together it means the roads and lanes are too narrow for trash vans to automate clean-up of solid or water waste. Unsafe infrastructure built around the drains—for example, a rickety bridge over one open drain (see picture at right)—poses a risk of waterborne diseases and injuries in this neighborhood.



A safer iron bridge (left) was constructed to replace the original rickety bridge (right).







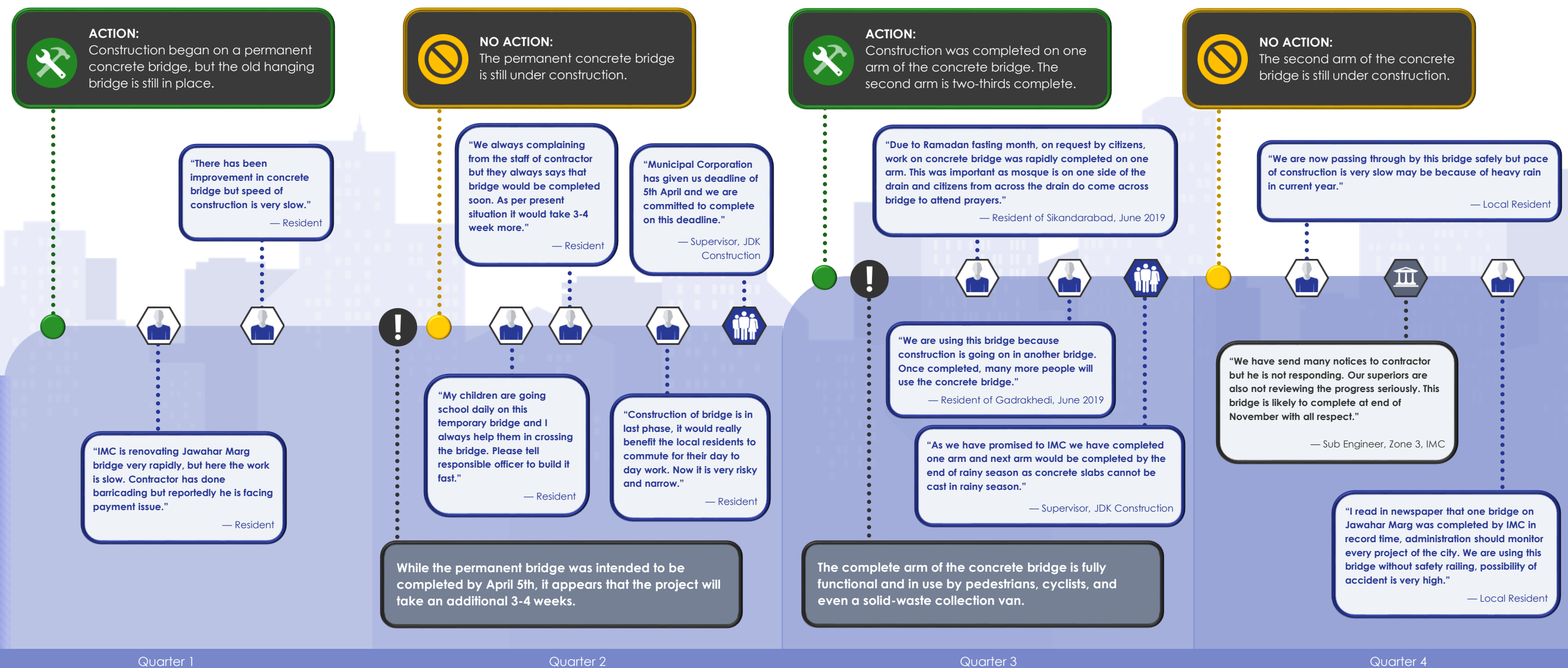
## Indore Journey Map #1 – The Forgotten Bridge

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One arm of the permanent concrete bridge is complete (left). The second arm is still under construction (top).





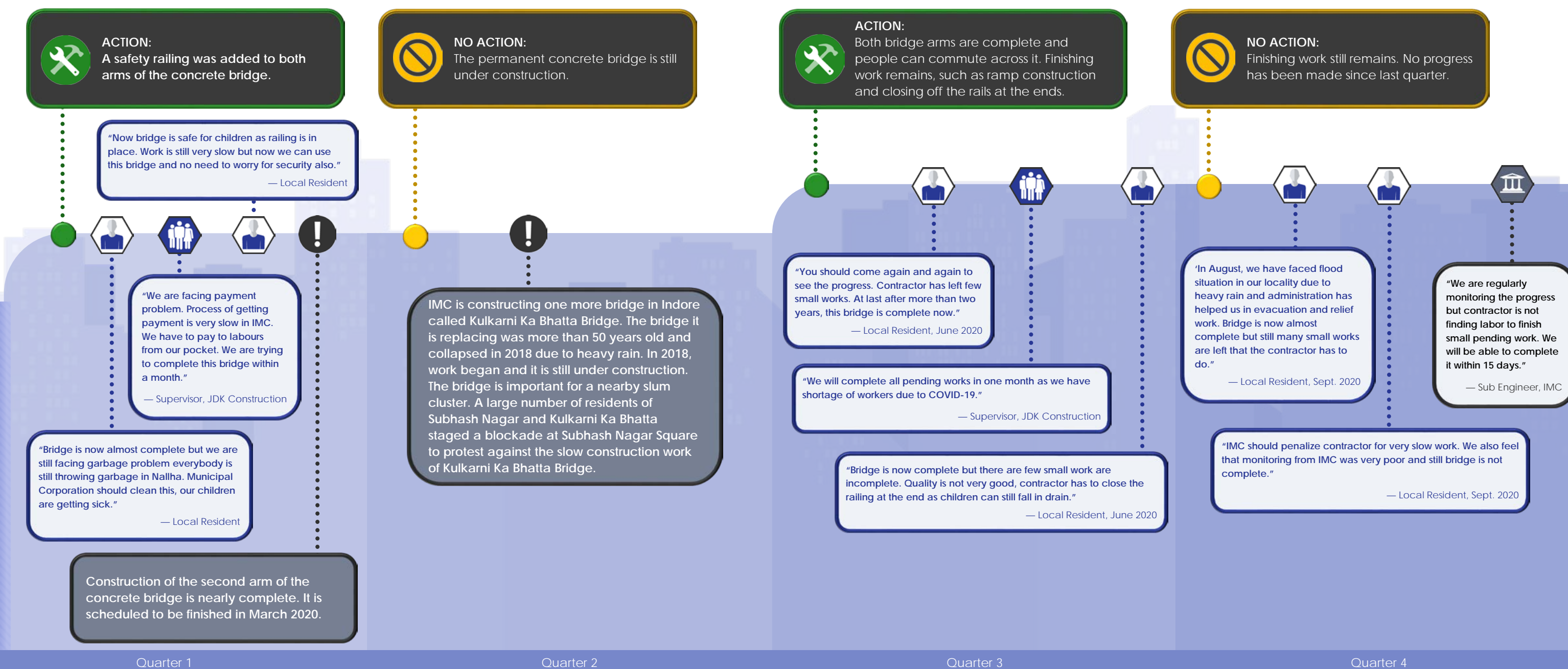
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One arm of the permanent concrete bridge (left). Safety railings were added to both arms of the bridge (right).







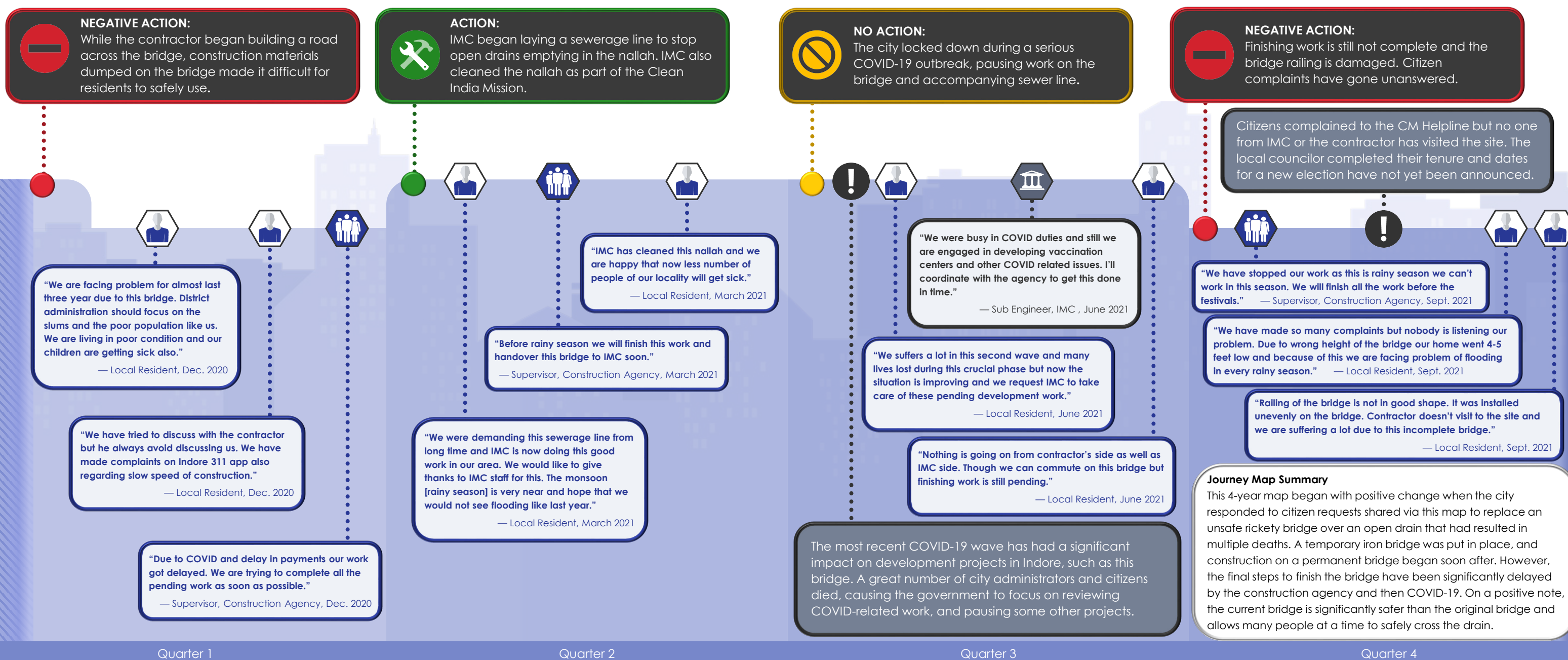
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IMC cleaned the nallah and began laying sewerage pipe (right, March 2021). Work on the bridge and sewerage line paused during a COVID-19 lockdown in Spring 2021 (left).



# How Does This Story Connect to the Indore Systems Map?

## Loop 16: The Forgotten Bridge

When the resources and infrastructure needed to support effective drainage of storm and waste water is not equally distributed across the city, the community level workers tasked with basic maintenance and up-keep are not able to be effective in their role in underserved communities. As a result, storm and wastewater is not drained effectively and pollution, stagnation and deterioration to existing infrastructure is increased. With unmitigated sewage and storm water overflow, community health and safety decreases, as does the neighborhood's transportation infrastructure. When communities are faced with poor health, injury, and reduced accessibility, they are easily excluded from conversations about development that could improve their situation. As a result, inequities in resource distribution continue.

**Example 1:** While most parts of Indore city are clean, there are some settlements which have poor environmental conditions, perhaps due to uneven

use of funds and efforts. We notice an area with poor waste water drainage due to clogged drains. While sanitation workers were present, they were not able to solve the problems which required engineering interventions. People living in such conditions are exposed to water-borne and vector-borne diseases due to stagnant water. Such communities lag behind in development as it is daily struggle in their lives to survive.

**Example 2:** Most of the Urban Primary Health Centres in the city are not being optimally utilized by the citizens due to various issues including poor infrastructure (most of them are in rented buildings) and lack of adequate healthcare personnel including doctors. Even poor citizens therefore prefer to go the private healthcare facilities and pay for services. These private centers do not easily share data with government health programs so this creates challenges for fully understanding population health demographics and needs.

