

A photograph of the interior of a public transit bus. Several passengers are visible, including a woman in the foreground holding a bouquet of yellow flowers, and a man with glasses sitting next to her. The bus has large windows and a digital display at the top. The text "Madrona Public Transportation Safety" is overlaid on the image in a large, white, sans-serif font.

Madrona Public Transportation Safety



Smart Cities and Public Transit

We wanted to learn more about Smart Cities and what existing applications are already in place to improve the quality of people's lives.

For transportation, there are current ventures into areas such as traffic management, parking control, and smart transportation. These, however, focused mainly on private modes and were more about making the machines or systems better.

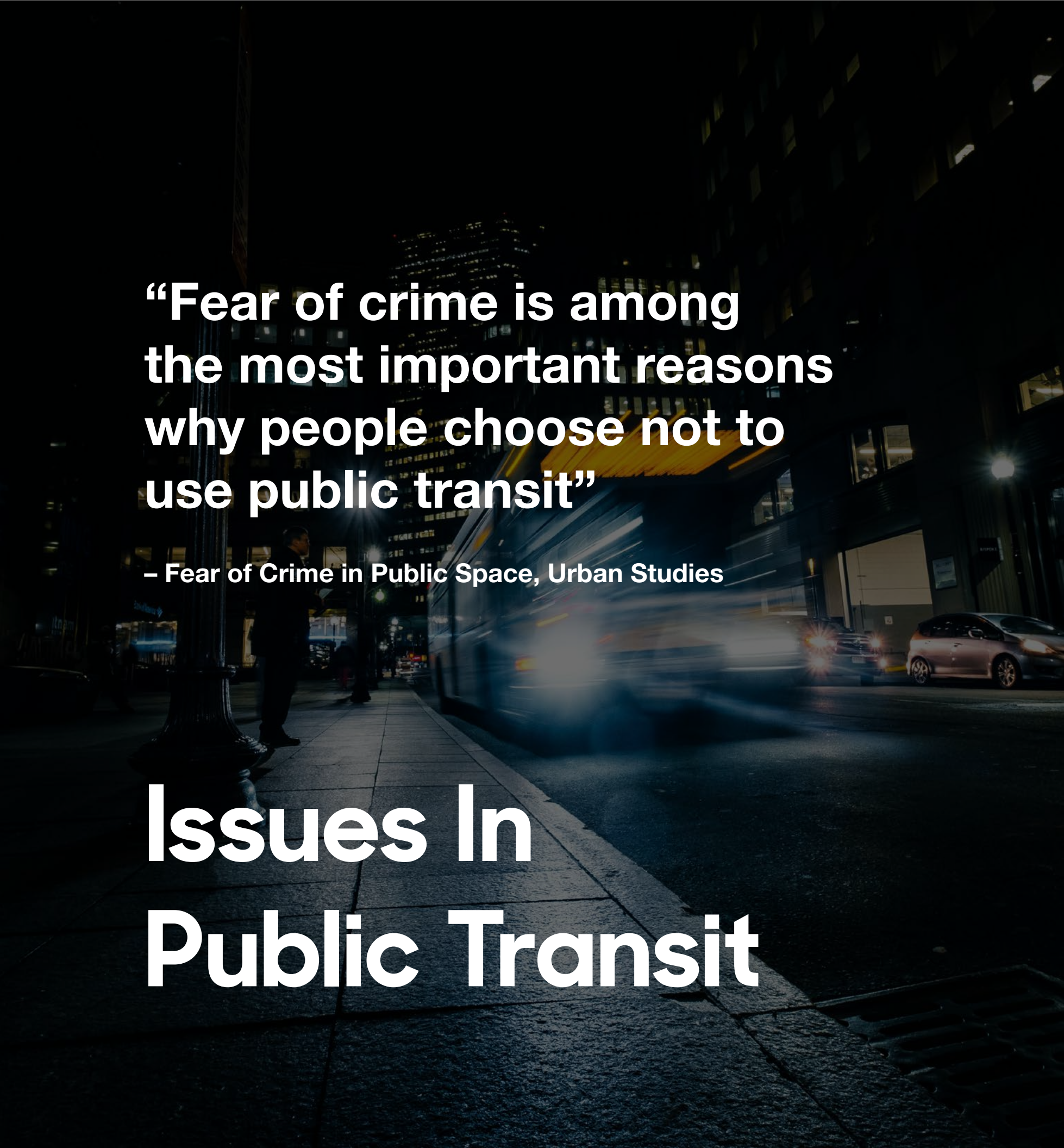
To fully figure out the potential future of public transportation in Smart Cities from a human perspective, we examined what public transit is like in today's world.

Future cities would benefit from public transport use.

According to the American Public Transportation Association, increased ridership on public transit has helped to revitalize previously underdeveloped areas, reduce energy consumption, and contribute to a sustainable future.

“The rise of the Internet of Things and the essential role that vehicles play as nodes in that network, and a transition away from achieving mobility through asset (car) ownership and toward accessing mobility as a service.”

- **The U.S. Department of Transportation, on how increased public transit usage would achieve a more connected urban future**



**“Fear of crime is among
the most important reasons
why people choose not to
use public transit”**

– Fear of Crime in Public Space, Urban Studies

Issues In Public Transit

Whilst scheduling inconsistencies and public transit accessibility are key concerns that influenced people’s decisions in using public transport, these are more about the quality of the infrastructure.

We wanted to explore perceived issues that people had with public transit.

Fear of crime was a prevailing concern in our research.

Fear of crime is broadly defined as a dread or anxiety towards criminal victimization.

A photograph showing the interior of a public transit vehicle, likely a bus or train. The scene is dimly lit, with warm, orange-toned light coming from the windows and interior lights. Several passengers are visible, some sitting on seats and others standing. The seats are dark-colored and arranged in rows. The overall atmosphere is somewhat somber and quiet.

Fear of Crime in Transit

The factors that contribute to fear on public transit and fear of crime in public spaces are mostly the same.

Unreliable service

Unfamiliarity and inconsistencies in the transit environment can lead to fear and anxiety, such as infrequent service or changes in mode of transport.

Night

Poor lighting, darkness and isolation contribute to fear of crime.

Age, disability, ethnicity & income

The young, elderly, physically disabled, ethnic minorities, and those with lower socioeconomic status are more likely to feel more vulnerable in public transit.

Gender

Studies have consistently demonstrated that women tend to have a greater fear of crime than men.



Human Behaviors in Public Transit

If we address people's concerns with public transport safety, in turn will encourage the use of public transport as a primary form of transport.

The Theory of Planned Behavior, proposed by Icek Ajzen, states that attitude, subjective norm, and perceived behavioral control work in conjunction to form an individual's intentions and behaviors.

In the majority of existing literature, The Theory of Planned Behavior is used to predict people's use of public transportation.

From the research conducted, environmental, personal and behavioral characteristics are the major factors that will determine if a person decides to use public transportation.

Design Challenge

We will explore the factors that could reduce the fear of crime in public transportation for night time riders.

Even though crime rates have dropped and even in areas with low crime-rates, the fear of crime is still pervasive.

Both men and women, regardless of age, feel least safe after dark at public transport stops.

“Many people’s lives have been affected by fear of crime rather than crime itself”

- Fear and the city, Urban Studies

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Thank You.