

# Roads and Streets of Doha

## **Social sustainability**

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# Content

- **Sustainability**
- **Social sustainability**
- **Roads and Streets of Doha**
- **Challenges in Doha**
- **Resolution**

# Sustainability

**Sustainable development** is the kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (Brundtland Report, 1987)



# Sustainability

Sustainability has three major pillars environmental, **social** and economic



# Sustainability

Sustainability: Less focus on social sustainability compared to environmental and economic realms



# Social Sustainability

Woodcraft et al., (2011) define social sustainability as

*"a process for creating sustainable, successful places that promote wellbeing, by understanding what people need from the places they live and work. Social sustainability combines design of the **physical realm** with design of the social world – **infrastructure** to support social and cultural life, **social amenities**, systems for citizen engagement and space for people and places to evolve"*

# Social Sustainability

Road vs Street



# Social Sustainability

## Road vs Street



- Connecting productive places
- High speed
- Low accessibility
- Simple design
- Not adaptive



- Creating wealth
- Low speed
- High accessibility
- Complex design
- Highly adaptive



# Streets

People vs Cars (**Who should be prioritize?**)



# Social Sustainability

Street designed for both pedestrians and cars



# Social Sustainability

People-oriented vs Auto-oriented Street



People-Oriented Street

vs.

Auto-Oriented Street



# Street`s features

People walkable-oriented Street (Strong towns, 2018)

- Does the street have no more than one lane of traffic in each direction?
- Are the lanes narrow (not much wider than the average car)?
- Is parking either directly on the street or behind the buildings?
- Are the homes and businesses close to the street with amenities (like signage and windows) sized for people?
- Would it be relatively safe and feasible for a person to cross the street at any point, including the middle of the block?
- Are there sufficient sidewalks?
- Are there people out on the street?

# Street`s features

Walkability features (Quercia, 2015)

- Road safety
- Easy to cross
- Sidewalks
- Hilliness
- Navigation
- Safety from crime
- Smart and beautiful
- Fun and relaxing



# Walkability app

Walkonomics app (Toronto, Manhattan, san-Francisco and England cities)



# Walkability

Southworth, (2005)

Not only does pedestrian transportation reduce congestion and have low environmental impact, it has social and recreational value

Design of a successful pedestrian network: (1) connectivity; (2) linkage with other modes; (3) fine grained land use patterns; (4) **safety**; (5) quality of path; and (6) path context

# Streets Features

Auto-oriented Street (Strong Towns, 2018)

- Are there multiple lanes of traffic in each direction?
- Are the lanes of traffic considerably wider than the average car?
- Do most of the businesses along the street provide their own parking lots?
- Is there a large distance between the street and the businesses or homes lining the street (parking, landscaping, etc.)?
- Are the intersections controlled with traffic signals?
- Does the street lack sidewalks?



# Social Sustainability

More people circulation increase economic opportunity (Cortright, 2009)

“In the typical market, an additional one point increase in Walk Score was associated with between a \$500 and \$3,000 increase in home values.”

# Social Sustainability

Shade for circulation





# Social Sustainability

Proposal: Pedestrianizing Oxford Street, London (Safety)



# Social Sustainability

More walkability increase **economic** opportunity (Cortright, 2009)





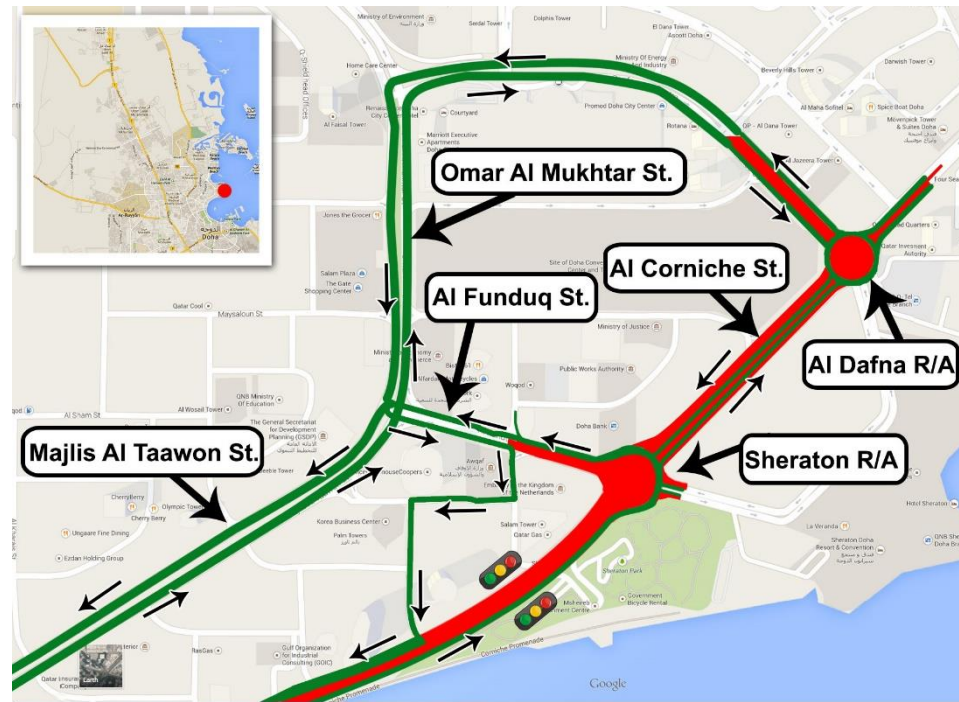
# Social Sustainability

Corniche is a nice place to walk



# Social Sustainability

It could be safer to drive to get there



# Social Sustainability

Corniche water-front crossing- Can be **safely** done with **traffic light**/ with **traffic congestion**



www.alamy.com - F3BFN1



www.alamy.com - J6434B





# Social Sustainability

Corniche water-front crossing- Requires pedestrian bridges



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# Social Sustainability

Corniche water-front crossing- Inadequate pedestrian crossing provisions- Lead to jaywalking

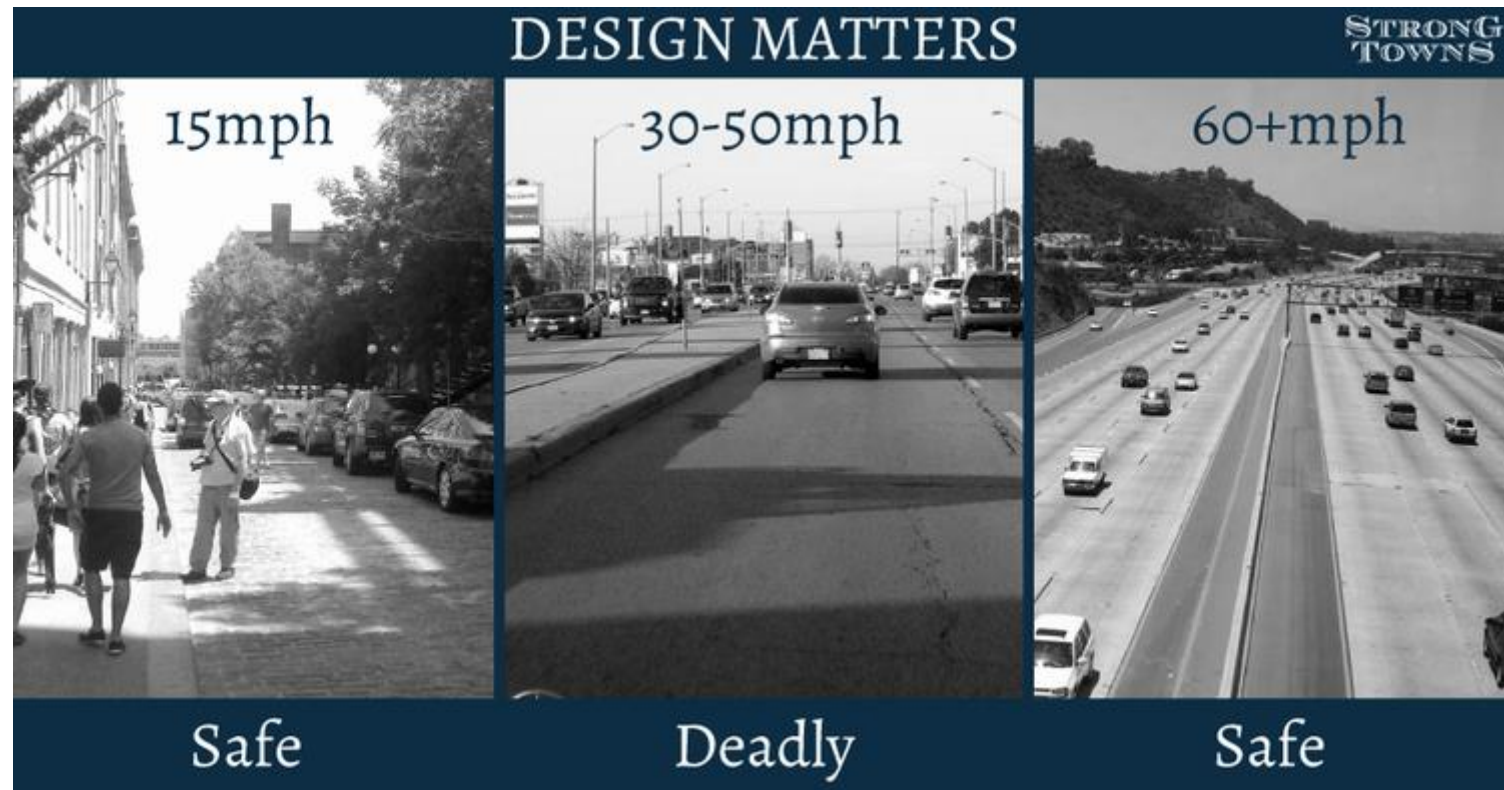


# Social Sustainability

Challenges of social sustainability in  
streets of Doha

# Social Sustainability

## Design



Strong towns, (2018)

# Social Sustainability

When pedestrians feel safer with more traffic congestion- Congestion can be good



# Social Sustainability

Driver Culture: Zebra cross safer with **traffic lights**





# Social Sustainability

Driver Culture: Zebra cross dangerous with **no-traffic lights**



# Social Sustainability

Some effort made in Doha

# Social Sustainability

Pedestrian crossing due to high accident Salwa road





# Social Sustainability

Shade for circulation



# Social Sustainability

public transportation



# Social Sustainability

Culturally

Driving is prioritized compared to walking

More reliance on private cars users compared to public transport

Cars have more priority to pedestrians

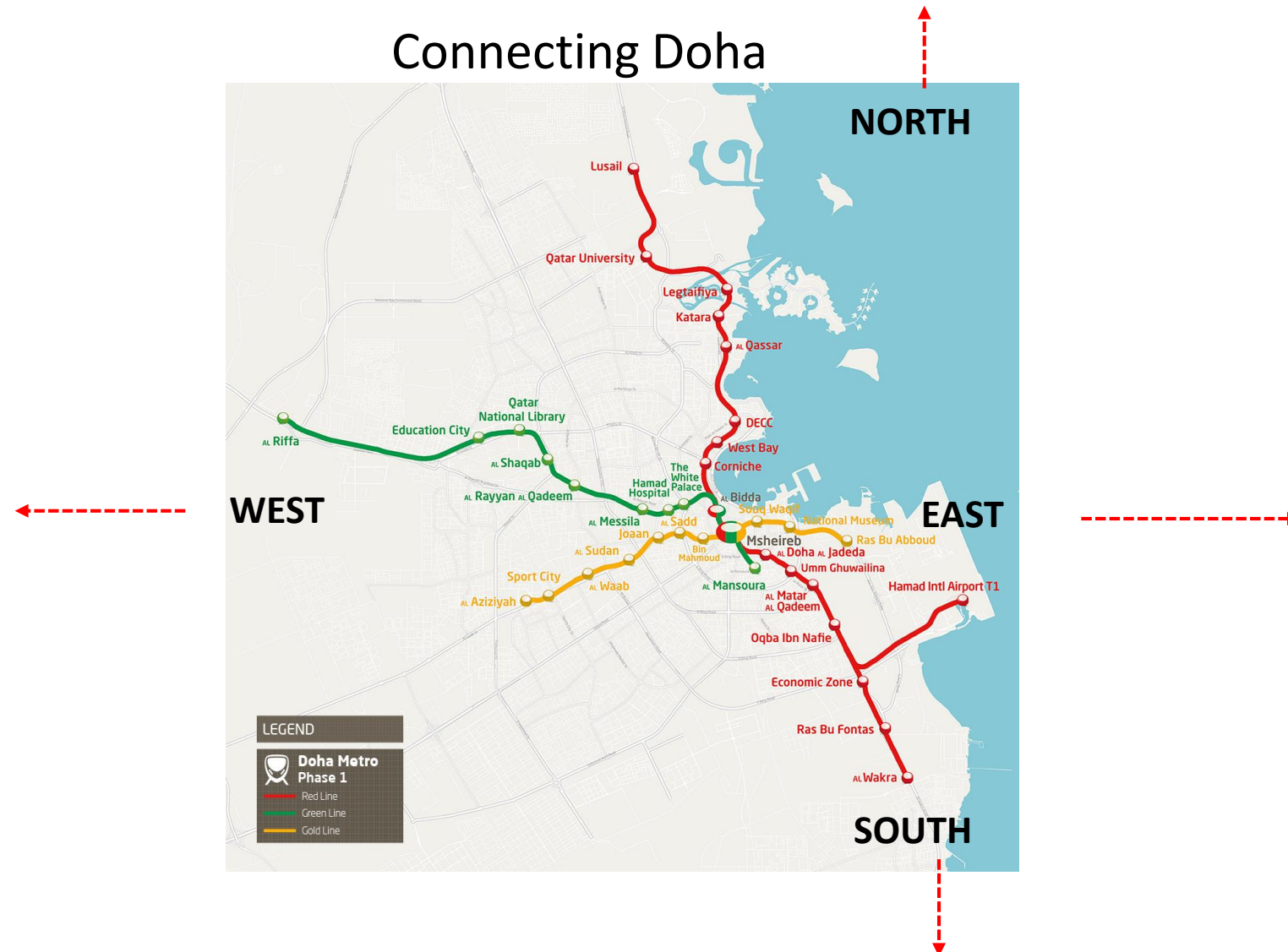
# Social Sustainability

Qatar Rail - Metro



# Social Sustainability

Connecting Doha





# Social Sustainability

## Qatar University Rail



**A- QU RAIL STATION**



- Shading
- Shortest route etc

**B. SELECTED CAMPUS LOCATION**



# Social Sustainability

Proposed resolutions

# Social Sustainability

## Resolutions

- Safety on roads (**Protect pedestrians**)





# Social Sustainability

## Resolutions

- Awareness to improve dangerous driving



# Social Sustainability

## Resolutions

- Shading (trees/ temporary **shading** structures)





# Social Sustainability

## Resolutions

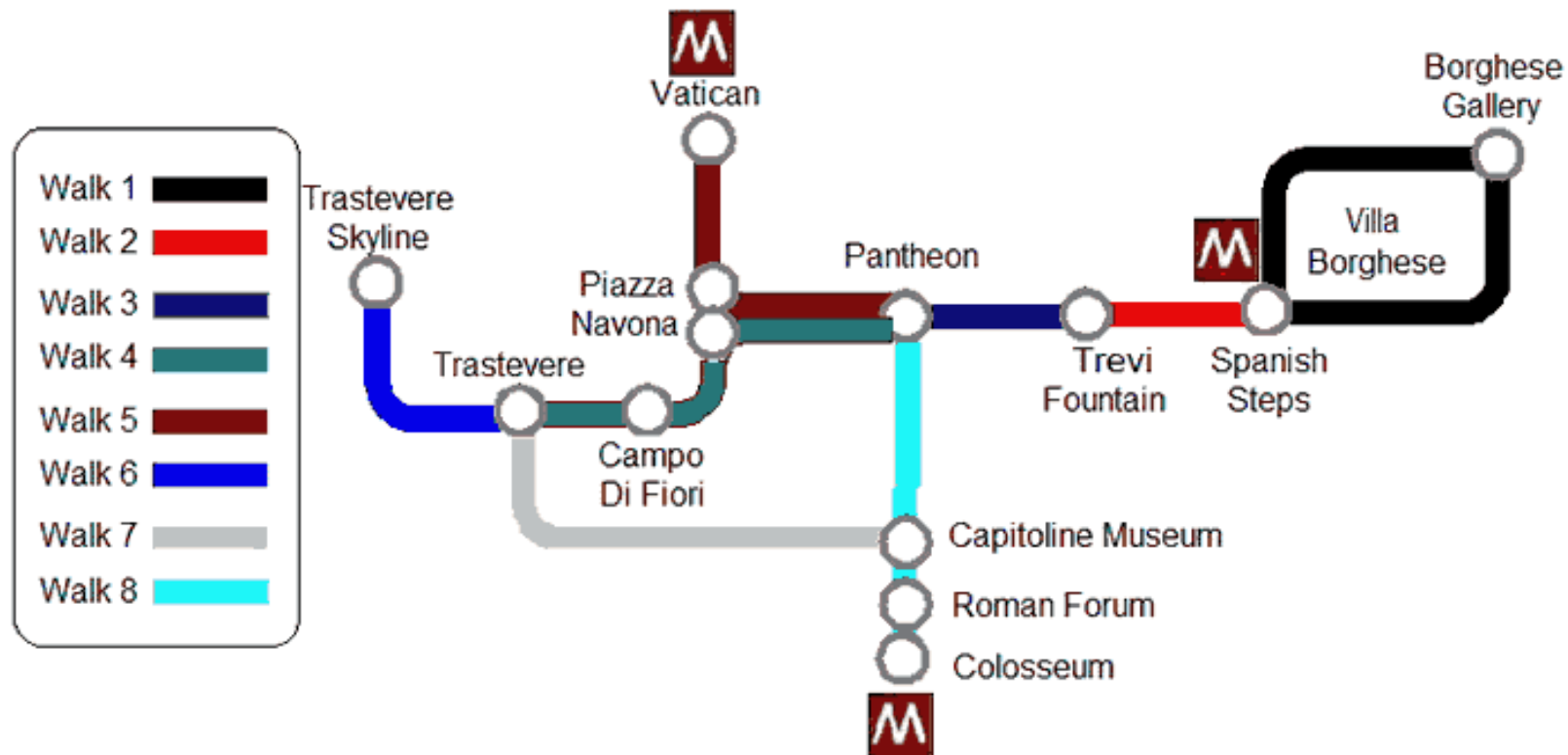
- Providing **shortest routes** to pedestrians



# Social Sustainability

## Resolutions

- Walk **appeal** spaces



# Social Sustainability

## Resolutions

- Re-designing **niches**. For example spaces between rail stations and various destination





# Social Sustainability

## Resolutions

- **Near walkable spaces** within communities to school, shopping, hospital, care centres



# Social Sustainability

## Resolutions

- Encourage **cycling**





# Social Sustainability

## Resolutions

- Provide **budget** to achieve initiatives

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# Social Sustainability

THE END

*Thank You For  
Listening*

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