Al-Najah National University
Faculty of Engineering
Urban Planning Department

Graduation Project 2
"Urban Transport Planning"

Dr. Ali Abd-Alhameed
Dr. Zahraa Zawawi

Ala’ Ibraheem Ahmad
Qalqiliya city

The contents

1. Study area diagnosis
   1. qalqilia city importance: "Why qalqilia city for the project!!"
   2. Historical expansion of the city of qalqilia.
   3. qalqilia city expansion during the years.

2. Qalqilia city roads Diagnosis

3. ANALYSIS AND STRATEGIC PLANNING
   1. SWOT Analysis
   2. Strength Map
   3. Weaknesses map

Main Goals
Main needs
Vision statement

4. PLAN PREPARATION AND DETAILED PLANNING

5. Conclusion and recommendations
Study area diagnosis

qalqilia city importance: "Why qalqilia city for the project!!"
Qalqilia governorate location according to other West Bank governorates.
There is a regional road linking Qalqilya with Nablus. This is a positive point for the governorate, where it is easy to reach the governorate and connect with the other governorates.
communities that connected to Qalqilia city
Why qaqlilia city for the project?
The political situation in the city
the political situation in the city
the political situation in the city
the political situation in the city
the political situation in the city
2

Population density and construction is increasing dramatically

Historical development of streets and buildings

Population studies
Historical development of streets and buildings
Historical development of streets and buildings
Historical development of streets and buildings
Historical development of streets and buildings
Problems in the city of Qalqiliya

1. 16000 Crossing

- Old city
- CBD
- High density
- Redrawing intersection
- Street need reviving
- High traffic

1:16000
Qalqilia city roads Diagnosis

- Streets types
- roads width
- road Surface
- roads direction
- commercial streets
- Road speed
- VPH
- services
- roads used by trucks
- Traffic volume counts
- transportation movements
Traffic volume counts

Location 1
Mohamad Al –Fateh Main Entrance intersection

Location 2
Al_Morabeteen intersection

Location 3
Fatooh intersection
<table>
<thead>
<tr>
<th>Location</th>
<th>Time Frame</th>
<th>Traffic Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location 1</td>
<td>7.30-8.30</td>
<td>419</td>
</tr>
<tr>
<td>Location 2</td>
<td>7.30-8.30</td>
<td>436</td>
</tr>
<tr>
<td>Location 3</td>
<td>7.30-8.30</td>
<td>733</td>
</tr>
<tr>
<td></td>
<td>11.00-12.00</td>
<td>698</td>
</tr>
<tr>
<td></td>
<td>11.00-12.00</td>
<td>502</td>
</tr>
<tr>
<td></td>
<td>11.00-12.00</td>
<td>615</td>
</tr>
<tr>
<td></td>
<td>16.00-17.00</td>
<td>399</td>
</tr>
<tr>
<td></td>
<td>16.00-17.00</td>
<td>358</td>
</tr>
<tr>
<td></td>
<td>16.00-17.00</td>
<td>585</td>
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</tbody>
</table>
SWOT Analysis

Positive Map

Negative map
Provide suitable and unexploited methods of movement. The possibility of providing a service line to serve all areas away from Abu Ali Iyad main street. Taxis are available in most areas of the city. Commercial uses are located on the main street.
There is no parking in the city.

The use of trucks needed to stand.

Locations of some services in which a specific area is concentrated.

taxi stations where it is close to each other.
<table>
<thead>
<tr>
<th><strong>Economic Benefits</strong></th>
<th><strong>Social Benefits</strong></th>
<th><strong>Environmental Benefits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings in transportation costs</td>
<td>Improved transportation options and choices</td>
<td>Green space</td>
</tr>
<tr>
<td>Increasing the demand for public services</td>
<td>Community cohesion</td>
<td>Reduced air pollution</td>
</tr>
<tr>
<td>Transfer more efficient</td>
<td>Increased physical activity and health</td>
<td>Reduced resource consumption</td>
</tr>
<tr>
<td></td>
<td>Congestion reduction</td>
<td>Reduced water pollution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduced “heat Island” effect</td>
</tr>
</tbody>
</table>
Strengths

Issues

Weaknesses

- Need to reduce traffic in residential areas
- Provide service lines to serve the city
- Low accessibility levels
- Reviving traffic on several streets
- Air and noise pollution on main roads
- Streets landscaping needs
- High traffic congestion on main connecting roads
- Safety requirements
- Prevent horizontal height in the center area
Bad use
Revive traffic
Design the intersection
Use the street to pass the workers
Taxi Service
Traffic Management
Transfer
Revive traffic
Artisanal and Industrial area
Traffic Management

Mohammed Al Fateh Roundabout

1:350

Two way

One way
Design the intersection

Intersection of martyr Abu Ali Eyad

scale 1:400
Design the intersection
Traffic movement on Bus route

Bus 1

Bus 2

المعبر (للعمال فقط)

1:16,000
Traffic movement on Bus route

<table>
<thead>
<tr>
<th>Route No.</th>
<th>Bus 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>4500 m</td>
</tr>
<tr>
<td>Speed</td>
<td>40 Km/hr</td>
</tr>
<tr>
<td>Trip length “loop”</td>
<td>1 hr and 15 min</td>
</tr>
</tbody>
</table>

Frequency: 6:30 - 21:45

- Peak hours (7:00-8:30 and 12:50-15:30): Each 10 min
- Other times: Each 20 min

Bus 1

معبر (للعمال فقط)

Traffic movement on Bus route

Bus 2
Traffic movement on Bus route

Route No. | Bus 2
---|---
Length | 5000m
Speed | 40Km/hr
Trip length “loop” | 1 hr and 15 min

Frequency | 6:30 - 21:45
---|---
Peak hours (7:00-8:30 and 12:50-15:30) | Each 10 min
Other times | Each 20 min

Bus 1 | Bus 2
Locations and preparation of taxi serving areas

- Taxi office
- Terminal taxi
- Area need service

40
30
20
10
18
18
12
8

1:16,000
Use the street to pass the workers

Workers street
To CBD
To residential
To Main Street
Conclusion
Traffic Plan for Qalqiliya City

- Taxi Service
- Worker street
- Design the intersection
- Traffic Management
- Design the intersection
- Artisanal and industrial area

1:4,000
Thank You