



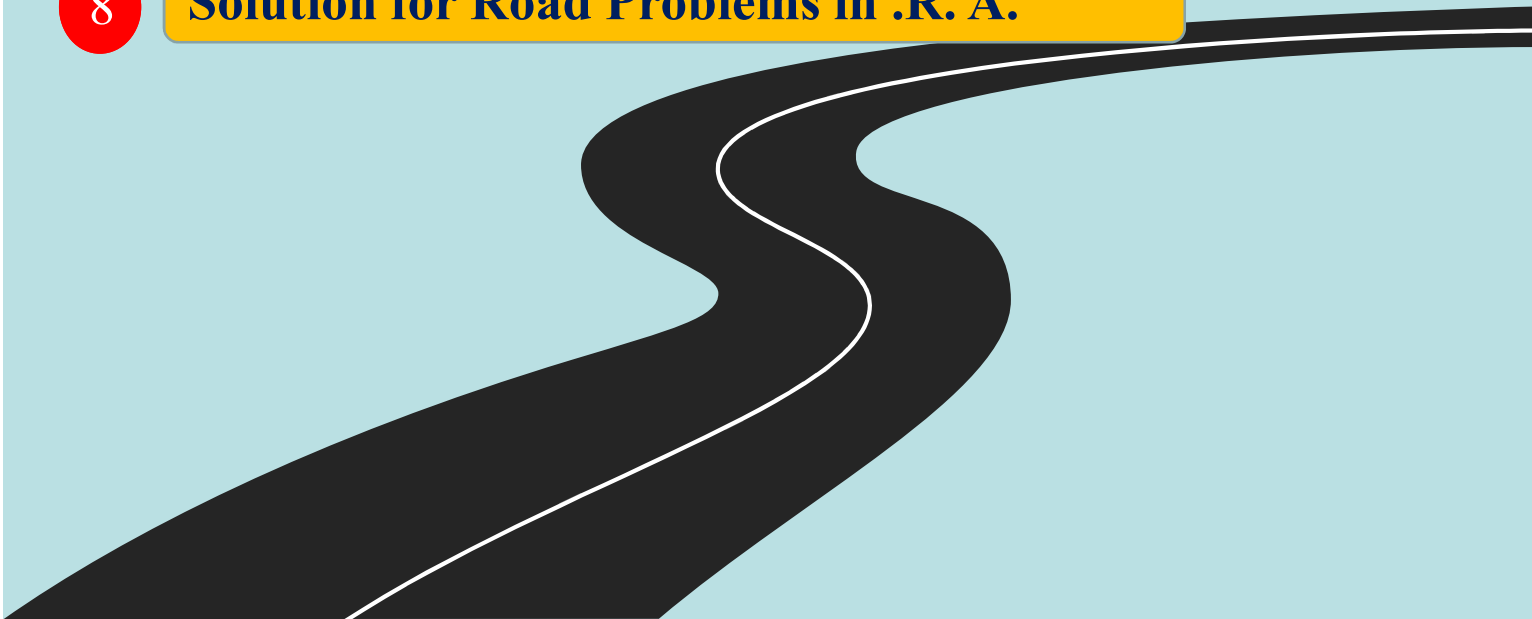
جوړی ریځاوبانه کانی سنوری ئیداره ی راپه رین، گرفته کان و
چاره سه ریان

**Types of roads in Raparin administration, Problems
and their solutions**

PRSESNT BY : Eng. Bakhtyar KH. Abdalla

Content

- 1 **Transportation & Road infrastructure**
- 2 **Modes of Transportation**
- 3 **Types of roads in Raparin administration**
- 4 **Some of the Main in R. Administration**
- 5 **Statistics of roads in R. administration**
- 7 **Road Problems in R. Administration**
- 8 **Solution for Road Problems in .R. A.**



Transportation

Transportation and mobility are pathways to urbanization the road network and the railway system in Iraq have been in existence since the rule of the **Ottoman Empire** during the early **1900s**, currently, Iraq has a network of roads and railways that is in need for rehabilitation and improvement.

Road infrastructure

Road Infrastructure means **land used for the transport of goods and passengers via road** and may include national, provincial and municipal roads, facilities to park and stop, road reserves, maintenance and maneuvering facilities

Modes of Transportation

Air

6

Land Road

1

Train

5

Walking

2

Animal

4

**Ships and
Boats**

3



Types of roads in Raparin administration



1

**Rigid
Pavement
Roads**

**Flexible
Pavement
Roads**

2



3

**Sub base
Roads**

**Subgrade
Roads**

4



Some of the Main Roads of Raperin Administration

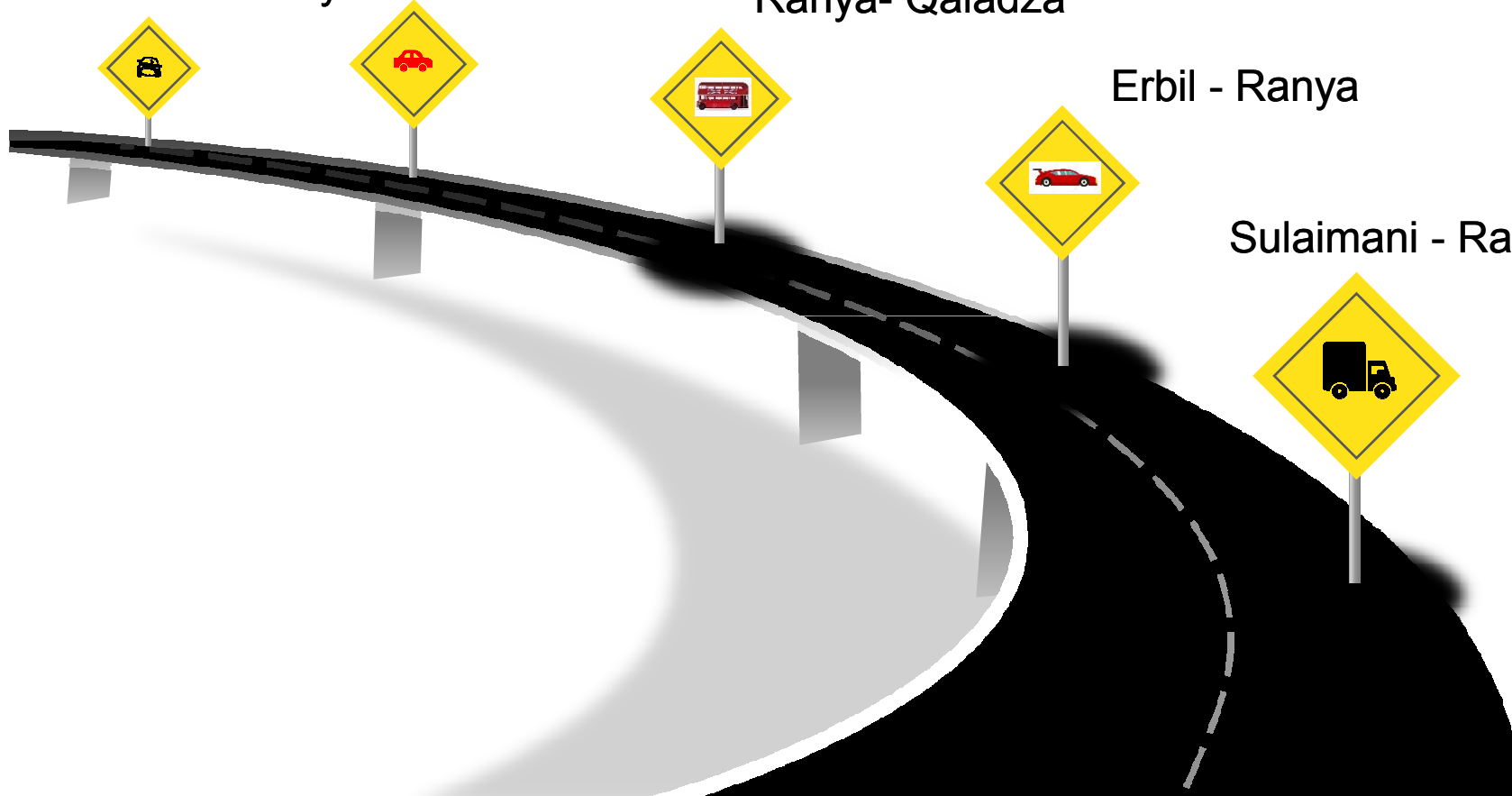
Ranya - Sarkapkan

Ranya-Darband- Dukan

Ranya- Qaladza

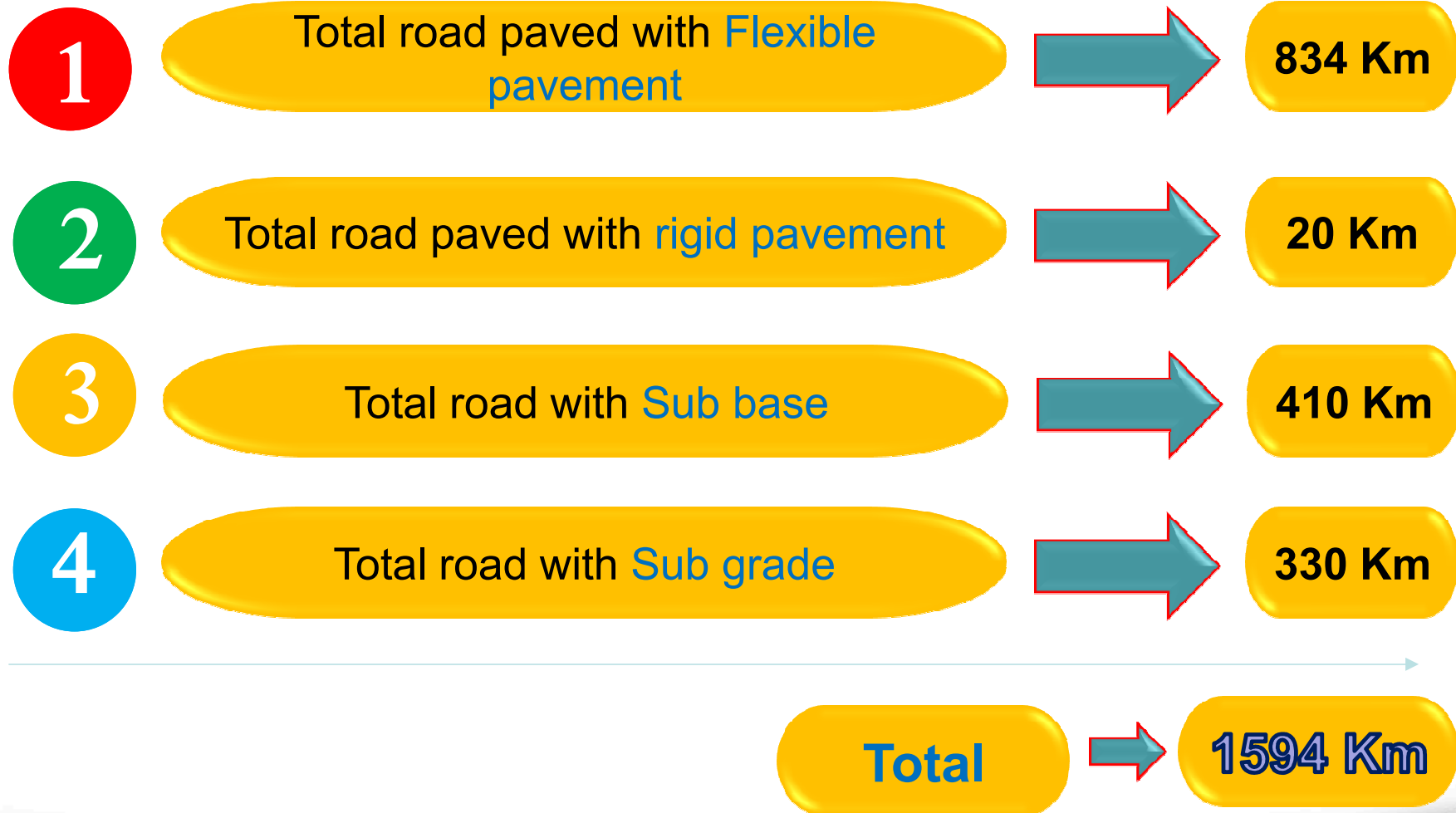
Erbil - Ranya

Sulaimani - Ranya



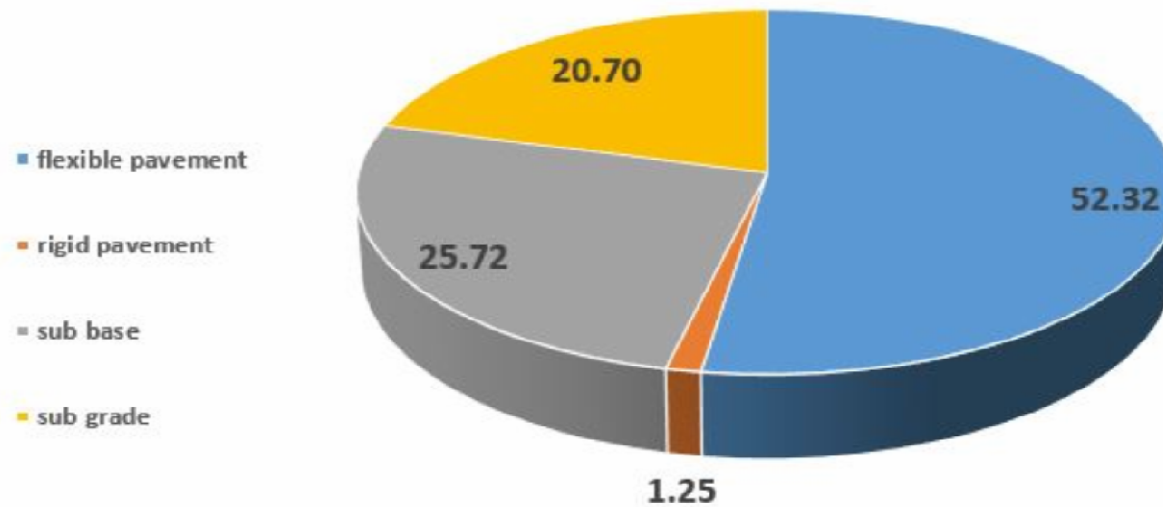
Statistics of roads in Raparin administration

According to our statistics in **directorate of road and maintenance in Raparin**, types of roads and their available length are as follows;



Statistics of roads in Percentage(%)

Total Road Percentages



Road Problems in Raparin Administration District

- ❑ Most of our roads in this district are one **side road** with two lanes.
- ❑ Nearly all of the roads need **maintenance**, because they were constructed decades ago.
- ❑ The **breadth** of our directorate work area, as includes Ranya district, Pishdar district with all their belongings as sub-districts and villages. Also Bingrd & Khidran sub-districts are in our working circle.
- ❑ Most of Our border in this district is **mountainous**, mostly in winter it snows, rains. Sometimes there will be flood, fall of mountain parts and thus the roads will be closed and need urgent work to be opened.
- ❑ According to our investigation and calculation, we estimated that we need nearly **150,000,000** monthly.Iraqi dinars to renovate the aforementioned roads in this region.
- ❑ Our roads generally have **potholes** since they are frequently one of the leading causes of traffic accidents.
- ❑ Some of the roads damaged due to **water accumulation**, especially in winter and spring as the manholes can not convey most of the rain water.

Road Problems in Raparin Administration District

- ❑ Damaged road signs.
- ❑ we have not **enough budget** for all the roads maintenance and constructing new roads that are needed.
- ❑ **Unavailability** of the needed **machines** as grader, bulldozer and roller ...etc.
- ❑ Besides some of the roads are old, but **more and more automobiles** brought and enter our region. From the fifties Darbandikhan tunnel constructed by the Russians and needed urgent lightening and renovating . In Kurdistan, most road networks are still outdated and in need of reconstruction.
- ❑ Not having **flexible pavement** factories for the directorates in the cities.
- ❑ The **excess weight of trucks** has taken the roads of Raparin to the brink of destruction.
- ❑ poor quality of work.

Solution for Road Problems in Raparin Administration District

01

Plan to change the main roads into **two way roads** in Raparin Administration

02

Rehabilitation and **repair** of one-way roads

03

Some of the village roads are just **subgrade** and **sub-base** and needed to be paved with **stabilizer**.

04

Some villages still **lack a road** or the road is just at the **subgrade stage** and has to be **paved**.

05

Adequate **budgets** should be provided to **solve** these problems.

06

Road mapping is a main factor to protect the **safety** of citizens.

07

More focus should be given to **tourist roads** like Makok Road, Sar ashkewtan, Gird Astera roads, etc.

08

The government has to work more on **improving road safety** **reducing** the weight of trucks that are **overloaded**.

09

Because the roads are unable to **bear** all the loads, it is worth considering to **importing automobiles**.

10

Resuming work in the projects that have been **delayed** since this has seriously damaged the quality of the roads as a whole.

11

Roads should be properly **planned** and **designed** in order to have a **long lifespan**.

12

Adding more **transit options** to help diversify the way people can commute

Thank you for your attention

Engineer Bakhtyar Khidhir