OneMap@Punjab

Objective: To develop a unified, province-wide Smart GIS platform serving as the single source of truth for geospatial information integrating underground and over-ground utility data, enabling automated construction conflict detection, and improving access to essential facilities across Punjab.

Original Approved Cost:	PKR 1,466.028 Million
Sponsoring Agency:	Planning & Development Board (P&D)
Executing Agency:	Planning & Development Board (P&D)
O&M Agency:	Planning & Development Board (P&D)
Approval Forum:	PDWP
Original Approved Gestation:	36 Months (Till June 2029)
Plan Provision:	ADP 2026-27 – Budgeted Allocation **PKR 140 Million**

Project Scope & Phasing

The scope of OneMap@Punjab Project extends beyond simple digital mapping and aims to establish a complete, unified, province-wide Smart digital ecosystem.

It covers the integration of geospatial datasets, consolidation of underground and over-ground utilities, development of conflict detection mechanisms, and provision of public-facing navigation services.

Justification of the Project

Punjab is currently facing significant challenges in managing its urban growth and infrastructure development.

One of the most pressing issues is the frequent conflict between underground and over-ground utilities such as water, sewerage, electricity, gas, and telecom lines during construction projects. These conflicts often lead to project delays, cost overruns, and service disruptions, undermining the efficiency of infrastructure development. Moreover, government agencies often rely on outdated maps and manual surveys, limiting their ability to make evidence-based planning decisions and slows down project approvals.

From the citizen's perspective, the absence of a reliable public-facing system makes it difficult for people to access accurate information about essential services such as hospitals, schools, and other public facilities, reducing the efficiency of service delivery. Existing mapping initiatives are mostly proprietary and vendor-dependent, making them costly, difficult to scale and unsustainable over the long term.

OneMap@Punjab Project directly addresses these challenges by creating a comprehensive, open-source, and centralized Smart GIS platform. It will not only ensure consistency and accuracy of spatial data across departments but will also enable real-time conflict detection, improve inter-agency coordination, and streamline approval and construction processes. By providing a public-facing navigation POI system, it will enhance transparency and accessibility of government services.

The project aligns with the Digital Punjab Vision and contributes to the Sustainable Development Goals:

SDG 9 – Industry, Innovation & Infrastructure

SDG 11 – Sustainable Cities & Communities

Major Components

1. Development of a geospatial unified data repository (single source of truth).
2. Spatial datasets from government departments will be integrated into single digital ecosystem.
3. Automated Construction Conflict Detection linked with construction permit workflows.
4. User-based Role Management for secure data uploading, versioning and access control.
5. Public POI Finder covering hospitals, schools, parks and other essential facilities.
6. Underground infrastructure detection using GPR technology in selected areas.
7. Development of a geospatial unified data repository (single source of truth).