



PTU College Kapurthala



PUNJAB PWD (B&R) Digital Dashboard

UNLEASHING THE POWER OF TECHNOLOGY IN BUILDING PUNJAB AS ONE OF THE LEADING STATES

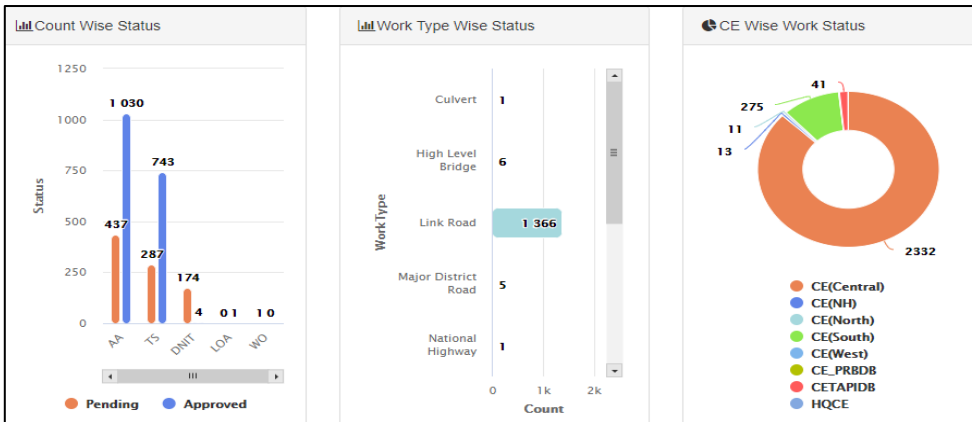
DIGITAL Punjab

Vol. 3

Business Intelligence

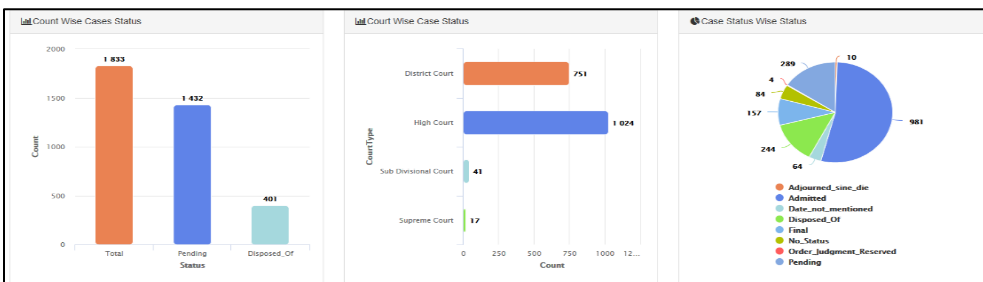
Business Intelligence is one the modules which was envisaged as a part of the Computerization of PWD B&R project. The purpose and intent was to have an analytical and customized view of the statuses of tasks/activities undertaken w.r.t. to the various functions of PWD, which have been automated under the computerization of PWD B&R project. The Business Intelligence dashboard presently has been configured and implemented to display analytical reports pertaining to EPM (Engineering & Project Management), Legal & Assets Management modules. In addition to the function the B.I. Dashboard also informs about the Status of the various cases of PWD B&R who have been logging in the system.

B.I. Snapshot of EPM



The above B.I dashboard for EPM has been split into three views.

- The view no. 1 showcases the total no. of estimates pending and approved estimates at various stages i.e. AA (Administrative approval), TS (Technical Sanction), DNIT (Detail Notice Inviting Tender), LOA (Letter of Acceptance), WO (Work Order).
- The view no. 2 displays the work type wise status e.g. Link road, MDR (Major District road), Buildings, Bridges, Electrical & Mechanical.
- The view no. 3 displays the total no. of works as Chief Engineer office wise.



In this issue...

- Business Intelligence
- Road Network Maps.
- Listing of Works < 10 Lacs.
- Upcoming Projects



Capt. Amarinder Singh
Chief Minister, Punjab
Patron-in-Chief



Sh. Vijay Inder Singla
Public Works Minister
Patron



Sh. Hussan Lal, IAS
Secretary Public Works
Patron

B.I. Snapshot of Legal

The B.I dashboard for Legal is split into 3 views.

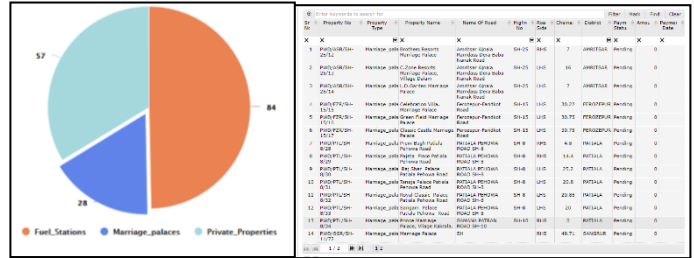
- The view no. 1 displays the total no. of Legal Court cases pending and disposed of.
- The view no. 2 displays the Court wise case status (Supreme Court, High Court, District Court, Sub-Divisional Court).
- The view no. 3 displays the total no. of Legal Cases Status wise e.g. Adjudged Sine Die, Admitted, Date not mentioned, Disposed of, Final Judgement & Pending etc.

PWD-B&R marching digitally for making PUNJAB – the most promising State

Property Access Management Module

An Online tool to monitor, manage & track the information w.r.t. the grant of access to various properties (marriage places, fuel stations, private properties) along the State roads has been developed and published under the assets management module pertaining to the State roads for grant of access and to further monitor the depository fees both one time and recurring.

The system has the capability of giving alerts from the access renewal one-month prior so that appropriate action can be initiated.



Road Network Maps

The Primary objective of developing State-wide web based Geo Portal to acquire, process, store, distribute and improve the utilization of geospatial data. The system deals with spatially referenced and geographically tagged / linked data / information as well as non-spatial data for creating multi-dimensional decision support system. It would provide a single window services to users to increase the efficiency and productivity other departmental agencies such as Medical & Health, Police, Water Resources, Education, Forestry, etc.

Layer Description- Punjab GIS Portal is a web-based station for interactive mapping and visualization of Road network with geo-spatial data. The portal combines GIS principles tools and various layers to harmonize a relatively large and multi-dimensional dataset. List of layers:-

- Plan roads
- Core Network Roads
- DRRP Roads.
- Link Roads.
- Forest Boundary.
- MP Constituency.
- MLA Constituency.
- District Boundary.
- Block Boundary.
- PWD Circle Boundary.
- PWD Division Boundary.
- State Boundary.
- Habitations
- District HQ.
- Tehsil HQ.
- Towns/Cities.
- Railway line.
- Rivers.
- Market Centre.

Public Works Department
 (Buildings and Roads) Punjab

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Road Networks Maps

AMRITSAR

BARNALA

BATHINDA

SBS NAGAR

FARIDKOT

FATEHGARH SAHIB

FAZILKA

FERROZPUR

GURDASPUR

HOSHIARPUR

JALANDHAR

KAPURTHALA

Works < 10 Lacs

List of Works < 10 Lacs:- PWD-B&R with a mandate to ensure wider publicity of the works being executed/published, has planned to publish the information relating to these works on PWD Punjab Website. Hence, a module has been designed on PWD Punjab Website, which is being used by the field officers for listing the said works.

Online Employee Transfer Module

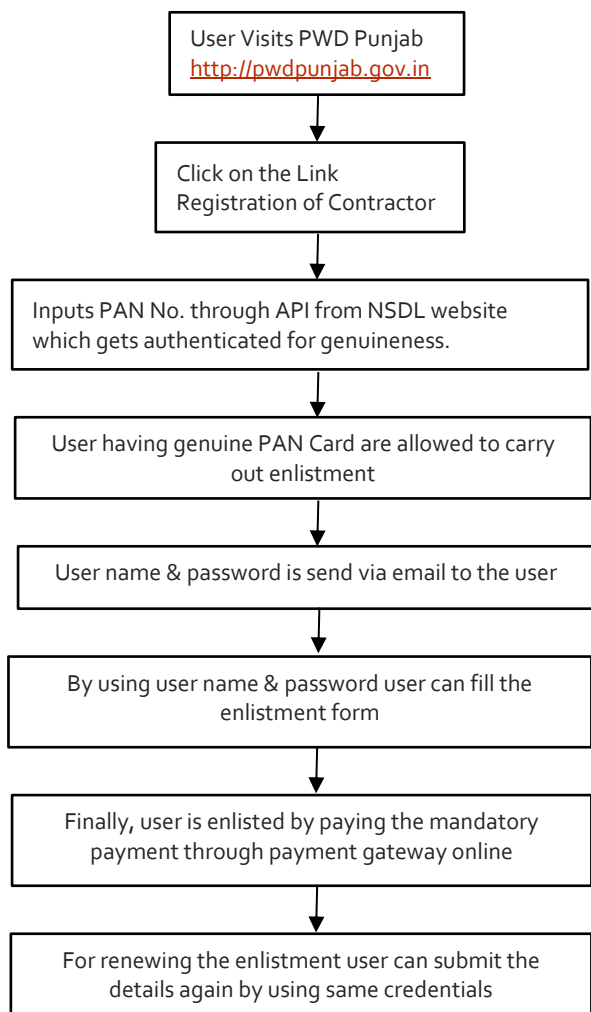
An online module using Content Management System (CMS) has been designed developed and has been made on PWD Punjab Website. The transfer/postings of the Officers/ Officials of PWD-B&R which are being made through issuance of Office Orders are fed into the system to generate an online real time database, which is available for browsing in the public domain on the PWD Punjab Website.

A road map on the path of progress/prosperity for the State

Upcoming Projects

1. Enlistment of Contractors

The module envisages to ensure that genuine and interested contractors get enlisted with the department. The module has been designed with strong validation check and integration with the NSDL for verification of PAN No's of the contractor. The application module has the following process:



2. Online Reservation of PWD Rest Houses

An online Application on the lines of Punjab Bhawan Booking is being adopted for getting the bookings of PWD Rest Houses automated. The functional aspect of the application has been finalized and shortly the application will be made available through PWD Punjab Website, which will allow the users to book the facility online as per the availability.

Capacity Building

1. **Workshop on Knowledge** –A workshop on 'Knowledge Updation of Field Engineers' of PWD-B&R & PMB was conducted on 08, Feb,2019 at MGSIPA, Chandigarh.

• **Presentation on use of Waste Plastic in Road construction** - An informative presentation describing one of the innovative methods in the Road construction i.e. use of waste plastic was delivered by Er. Sher Mohammad, SE. The presentation showcased the innovative methods being adopted in one of the PWD Circles i.e. Ludhiana where the use of waste plastic was carried out by shredding the Waste Plastic and then mixing the same with the aggregate and the finally with Asphalt. The benefits derived by use of this technology are manifold and are listed below:

- Improves the binding capacity of aggregates.
- Environmental friendly.
- Improvement in impact value, stripping value.
- Reduction in water absorption of aggregates.
- Higher resistance to water induced damages.
- Higher resistance to deformation.

• **Presentation on Performance based maintenance Contracts for Link Roads** – A presentation on PBC was delivered by Er. Anil Kumar Sharma, EE, (PRBDB) where critical points on contracts covering the performance parameters was discussed. The PPT delivered showcased and elaborate representation of the projects/contracts where performance has been considered as one of the key components.

• **Presentation on Quality Assurance in Road Construction** – A presentation on the quality aspects detailing about the capacity, capability of the department w.r.t. the quality assurance parameters along with an update on the various new gadgets which PWD has recently procured was delivered Er. Randhir Singh, Dy. Director (Research Lab- QC).

• **Presentation on PMGSY relating Issues/OMMAS** – The ITNO (PMGSY) Er. Santokh Singh, (PRBDB) informed about the various issues relating to PMGSY roads and the OMMAS data. During the presentation all the concerned were educated for handling and entering of details on OMMAS so that accurate data is presented to MoRD.

• **Presentation on PWDIMS/GIS** – The Dashboards of EPM, Legal, Asset Management were showcased to the field officials. A brief demo describing the functionalities of Mobile Application 'Punjab Sadak Sewa' was delivered to the field officials. The demo showcased, how a citizen can download app from Google play store, send feedback of the condition of road and the same shall be addressed by the concerned Circle/ Division official of the respective road.

PWD-B&R creating effective, efficient platform for Work Execution

Star Performers of PWD - B&R



Er. Sher Mohamad
Superintending Engineer (SE)
 Innovative methods of Road Construction (Use of Waste Plastic)



Er. Anil Kumar Sharma
EE (PRBDB) PWD B&R
 Capacity Building initiative on PBMC (Performance based Management Contract)



Er. Ajay Singla
(SDE) PWD B&R
 Support & Coordination for updation of CSR



Er. Raj Kumar Garg
Assistant Engineer, Const. Div. No.1, Mohali
 Support in Updation of CSR



Er. Santokh Singh
Assistant Engineer, PRBDB PMGSY, OMMAS
 Issue resolution and update of OMMAS

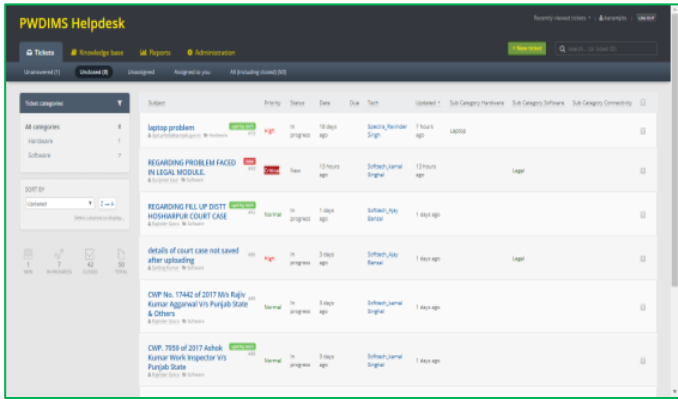
FOR MORE INFORMATION

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Helpdesk

- A dedicated helpdesk has been established in PRBDB, SCO 60-61, Phase 2, Mohali office for addressing issues & concerns of the PWD Users relating to all types of Hardware, & Software Issues under the PWDIMS Project.
- The users of PWD-B&R can raise tickets based upon the type of the issues, which are handled by Technical Experts for a quick and a prompt resolution.
- The Help desk is also supported through telephonic support where the users of PWD-B&R can call and get their issues registered.

Dial PWD Helpdesk
0172 - 5134608
 or raise a ticket at
<http://202.164.54.243:8081>
for Hardware & Software Support



PWD-B&R taking steps for contribution to DIGITAL PUNJAB