Pavement Historical Database (PHD)
Data Entry References

Obtain the following documents from an MDOT representative before using this guide:
- **PHD User Guide** – This is the manual for use of PHD. This guide is an overall source of PHD information and will have good technical information. (*version: 1/2014*)
- **PHD Training** – This is a PowerPoint presentation for PHD users. It outlines process, displays examples, and provides further details. (*version: 11/5/2015*)
- **Data Entry Items in PHD** – This document lists all data entry items for jobs, segments, lanes, shoulders, and layers. (*version: 4/16/2016*)

Preliminary Information:
- Data collection and data entry should take place during project construction or shortly thereafter.
- Access PHD using the correct MILogin link: MDOT personnel = https://miloginworker.michigan.gov / Consultant personnel = https://milogintp.michigan.gov
- If not using MILogin for PHD, there is no standard format that collected data should be provided in. This is determined by the requesting MDOT representative.
  - The Excel file for data collection/distribution, *'MDOT_PHD_Data_Spreadsheet.xlsm'* can be provided at the discretion of the MDOT representative.

Topic	General Summary	User Guide (per section number)	PHD Training (per slide #)	Data Entry Items in PHD (per section title)
System purpose	PHD is a centralized electronic data warehouse. It stores user entered "As Built" pavement and material information on MI state-owned roads (trunkline). It provides readily available data that can be searched, sorted, and exported.	1.1	5 - 7	
What Goes Into PHD?	Any project greater than 0.1 mile long, that has work on MDOT trunkline, which includes the mainline or paved shoulder, curb & gutter, is required to be entered. Projects less than 0.1 mile are optional. Only work on the MDOT network is entered – no local road work.	1.1; 3.1	12 - 14	**Entire Document** (lists all items)
General PHD Workflow	A designated person (consultant or MDOT) collects data for PHD project entry. Then information is given to an MDOT Data Entry user to enter data into PHD.		8 - 9, 11	
General PHD Job Preparation	Obtain "As Built" information. Obtain JMF and mix designs of HMA and PCC pavement. Obtain testing orders for surface seals and crack treatments. Check for changes made during construction. Convert Control Section and station numbering to Physical Reference (PR) numbering. Determine the beginning and ending milepoints of each segment.	3.1.2		
Data Hierarchy	Jobs are made up of Segments (roadbed MP to MP); Segments are made up of Lanes/Shoulder, Curb & Gutter; Lanes/Shoulder, Curb & Gutter are made up of Layers; Layers have Attributes.	3.1	15	

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Job Details	Provide the Job ID for PHD. Obtain the Open to Traffic Date. Check if the project is a CPM project; (validate if job is Simplified CPM applicable – see section 4.1 of the User Guide).	3.1.1; 3.1.2; 3.2.1; 3.2.2; CH 4 (Simplified CPM)	34, 36, 52	Create Screen; MAP Jobs; Non MAP Jobs
Segmentation	New segments or sub segments are required when sectional changes occur greater than 0.1 mile. Ramp lane(s) adjacent to mainline are entered with mainline PR until the 2' point.	3.4	16 - 19, 53	Road Segment List screen; Segment Details screen
Lanes & Lane Numbering	Lanes are integers numbered from right to left, facing the increasing milepoint direction of the PR segment; (PR Finder can be used to determine the increasing milepoint direction). Lane 1 is the right-most travel through-lane of the PR segment. For tapers, the lane begins at the start of the taper and ends at the end of the taper.	3.5.1	20 - 25, 55	Lane Details screen
Shoulder, Curb & Gutter	The left side and right side is determined facing the increasing milepoint direction of the PR segment; (PR Finder can be used to determine the increasing milepoint direction).	3.5.2	26 - 27, 40, 55	Shoulder/Curb & Gutter Details screen
Layers & Layer Attributes	A layer is a single thickness of a paved/placed material or repair work. Layers paved/placed in the specified job should be entered, separate from those in other jobs. Existing layers should not be entered. Milling/repair work completed on existing layers, however, is entered. Different layers may have different attributes. Layers with aggregates require aggregate names and pit source numbers.	3.5.1	28 - 33, 54	Layers and Layer Details
Job or Segment Comments	Specific details or additional information can be identified by comments. Provide comments for a particular segment or job as needed.	3.8	52, 56	Road Segment List screen; Segment Details screen
Review/Typical Errors	Review collected data before providing it to the Data Entry user.		46 - 48	
Miscellaneous/FAQ	Use the MDOT PR/CS Finder for milepoint conversions: http://www.mcgi.state.mi.us/prfinder/ Use the MDOT Construction Contract Inquiry system for project changes, and quantity information: http://mdotcf.state.mi.us/public/trnsport/ Recorded questions and answers on data gathering, requirements, and entry are provided in the **PHD FAQ** documents. Contact an MDOT representative to obtain the most current version of the FAQ documents: • *'General Overview', 'Training', 'Data Entry', 'Data Entry Aids and Resources', 'Quality Assurance', 'Reports'*	1.3	52 - 58	

Updated: 10/25/2016