# 2. [PRE-PROJECT PLANNING TOOLS: PDRI AND ALIGNMENT (RS113-1)](https://www.construction-institute.org/pre-project-planning-tools-pdri-and-alignment)

**Report Summary:** RT-113 produced the first project definition rating index (PDRI) for industrial projects and the Alignment Thermometer. The PDRI is a weighted index that is based on industry best practices. It allows users to measure the level of scope definition and to compare that level to anticipated project success. The PDRI consists of 70 elements in a weighted checklist format. The weighted score of a project can range up to 1000 points, with a lower score being better than a higher score. Based on analysis of 40 projects, projects that scored lower than 200 (out of 1000 total points) were significantly more successful than those that scored higher than 200.

**Key Takeaways:**

## (1) Properly define the scope and align it with business needs during pre-project planning to improve both the cost and cycle time needed to design and construct capital facilities.

## (Project Phase: Feasibility through Turnover)

* Identify: Clearly define project objectives, goals, and deliverables through stakeholder input and collaboration.
* Develop: Create an adequate scope statement that outlines all work required for the project, including exclusions and assumptions.
* Align: Ensure alignment among project team members by establishing clear roles, responsibilities, and expectations.
* Measure: Use tools such as the Project Definition Rating Index (PDRI) to measure the completeness of the scope definition and identify areas of risk.
* Verify: Validate the scope definition through regular reviews with stakeholders and the project team to ensure that it remains accurate and relevant.

## (2) Use the PDRI to measure the completeness of the scope definition and to identify areas of risk.

## (Project Phase: Feasibility through Turnover)

* Utilize: Apply the PDRI as a checklist to determine the necessary steps in defining the project scope.
* Measure: Use the PDRI to assess the completeness of the project scope definition and identify potential risks and areas for improvement.
* Identify: Analyze the results from the PDRI to pinpoint specific aspects of the project that may be prone to risk or uncertainty.
* Review: Regularly review and update the project scope definition based on new information or changes in project requirements.
* Validate: Verify the accuracy and relevance of the project scope definition through stakeholder input and ensure that it remains aligned with business needs.

## (3) The PDRI serves as the following:

## (Project Phase: Feasibility through Turnover)

* A checklist that the project team can use in determining the necessary steps needed to define the project scope.
* A listing of standardized scope definition terminology throughout the construction industry.
* An industry standard for rating the completeness of the project scope definition to facilitate risk assessment, predict escalation, and evaluate the potential for disputes.
* A means to monitor progress at various stages during the pre-project planning effort and to focus efforts on high risk areas that need definition.
* A tool to aid in communication between owners and design contractors by highlighting poorly defined areas in a scope definition package.
* A means for project team members to reconcile differences using a common basis for project evaluation.
* A training tool for companies and individuals throughout the industry.
* A benchmarking tool for companies to use in evaluating the completion of the scope definition versus the probability of success on future projects.

## (4) Use the following four excellent Construction Industry Institute resources to address critical pre-project planning implementation issues.

## (Project Phase: Feasibility through Turnover)

* Publication 12-1 is an agreement matrix for identifying, communicating, reinforcing, and controlling project objectives. This tool quantifies the agreement among the various project participants.
* SP 39-2 provides a pattern for an organization’s pre-project planning process and identifies performed tasks.
* IR 113-2 describes the PDRI for industrial projects that can be used to measure the completeness of the scope definition and to manage the pre-project planning process.
* IR 113-3 contains an Alignment Thermometer to determine whether the team is focusing on the issues and processes that have a substantial effect on team alignment.

## [(5) Tool: Project Definition Rating Index (PDRI): Industrial Projects, Version 5.0 (IR113-2)](https://www.construction-institute.org/pdri-project-definition-rating-index-industrial-projects-version-5-0)

## (Project Phase: Feasibility through Turnover)

* Evaluate project readiness: The PDRI assesses the maturity and accuracy of the front-end planning process to improve decision-making and project outcomes.
* Define the scope effectively: This feature includes 70 scope elements and 27 accuracy factors to identify front-end planning scope gaps.
* Boost performance: Projects with high maturity and accuracy scores improve cost control and minimize changes.
* Support multiple phases: The PDRI is usable across project phases as a checklist, risk tool, and progress tracker.
* Foster collaboration: The PDRI encourages communication among owners, designers, and contractors for aligned project goals.

## (6) Refer to 2. Alignment and 16. Team Building for other golden nuggets in this report.

## (Project Phase: Feasibility through Turnover)