

Integrated Resource Planning Model (IRPM) Partnership

AUTHORS

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IRPM, a result of Y-12's partnership with Simulation Dynamics, Inc., is a decision support tool used for long-term, rough-cut resource and capacity planning. IRPM evaluates the impact of rapidly changing schedules, variable budgets, and changing resource bases (i.e., personnel, equipment, and facilities and their effects on schedule performance, projected cost, and resource utilization).

IRPM is used to model multiple programs and perform what-if scenarios.

ADVANTAGES

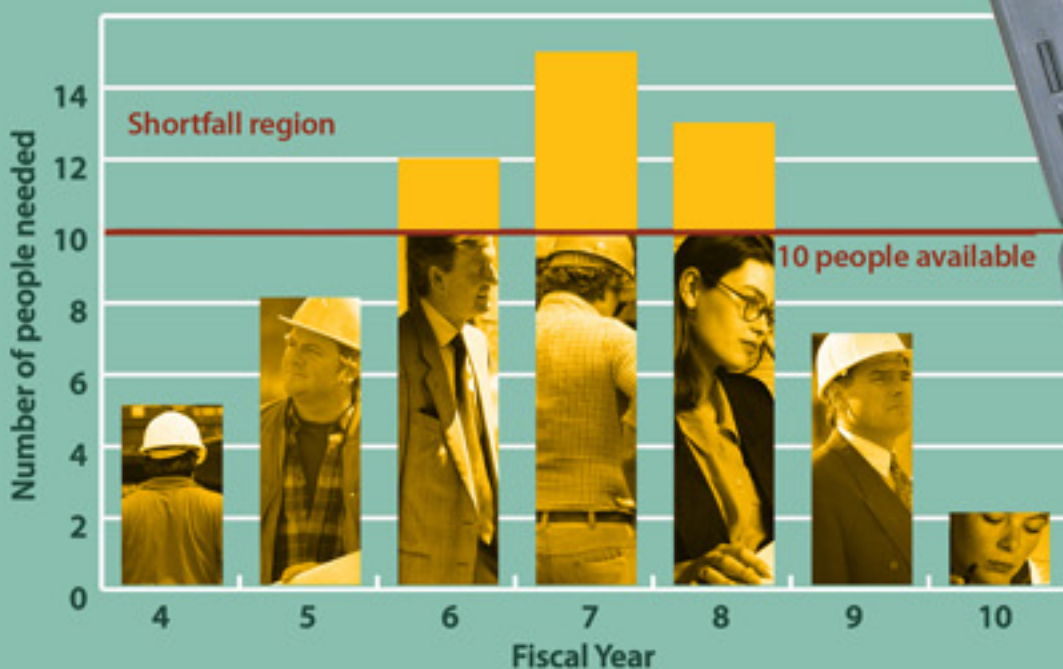
- A custom-built, user-friendly graphical user interface
- An embedded supply chain solution engine
- An extensive embedded database constructed from existing corporate data

IRPM can aid the National Nuclear Security Administration and Nuclear Weapons Complex (NWC) by

- modeling resource availability and readiness (e.g., personnel availability, equipment purchases, etc.),
- evaluating production alternatives, alternate routes, and different material processes, and
- modeling NWC-wide supply chains.

POTENTIAL MODEL OUTPUTS

- Personnel shortfall
- Schedule performance



SCENARIO INPUTS

- Resource availability
- Budget changes
- Schedule modifications



National Security Complex partnered with

