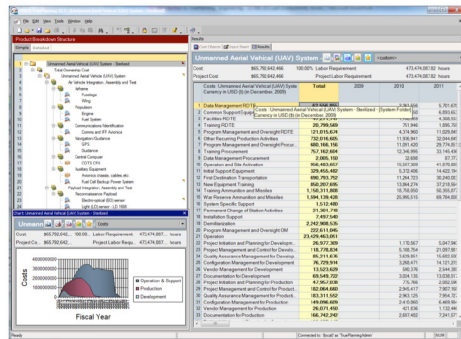


# Scalable Hardware Cost Modeling, from Components to Systems

PRICE cost estimating solutions deliver qualities that meet the demand for credible, data-driven estimating in today's economy—speed, accuracy, transparency, defensibility and standardization.

- **Produce credible top-down estimates** backed by extensive analysis and refinement of historic data points, correlated to the scope and complexity of specific projects.
- **Use multiple cost models** integrated within a single estimate, for a more accurate picture of true costs across all components and disciplines.
- **Reduce cost proposal** cycle time and expense by 30%-60%.



A detailed product breakdown structure, listed in a parent/child hierarchy, accounts for every facet of hardware system fabrication.

## Rigorous cost justification in one comprehensive view

PRICE® Cost Models™ used for hardware estimating in the PRICE® TruePlanning™ Cost Estimating Framework address a wide range of systems and components:

- **Hardware Component Model:** Estimate development, production, maintenance and operation of hardware systems incorporating mechanical, structural, and/or electronic components.
- **Hardware COTS (Commercial Off The Shelf):** Model the cost to purchase, design, change, modify, maintain, and operate off-the-shelf or furnished items.
- **Electronic Module Model:** Estimate development and production cost and schedule—from assembly through testing—of a “parent” electronic circuit module, board, or multi-chip module, in conjunction with a “child” level cost object in TruePlanning.
- **Electronic Component Model:** Identify direct costs associated with purchase of off-the-shelf components used as “child” level cost objects in the creation of “parent” level electronic assemblies.
- **Custom Integrated Circuit Model:** Model development and production costs/schedules of custom and semi-custom microcircuits, by task-specific technologies and disciplines.

## Hardware Cost Model Performance Benefits

PRICE offers multiple Companion Applications that empower users to enhance the value, versatility, and insight of TruePlanning estimate data.

- Reduce estimating time to days or hours
- Scalability from component to System of Systems (SoS) estimates
- Easy-to-use wizards, templates, and simplified input parameters
- Cover all phases of hardware acquisition—planning to testing
- Factor comprehensive cost drivers, component/assembly/subsystem, and hardware/software integration
- Create instant “what if” and trade-off analyses
- Integrate with other cost models used in PRICE TruePlanning
- Profile program/project staffing
- Enable complex modeling for teams with diverse experience/skill sets
- Automate sensitivity and schedule/effect analyses
- Create cost distributions over time, and provide cost impact estimates for accelerated, interrupted, or protracted development schedules
- Summarize monthly cost and progress for budgeting, risk analysis, and project tracking
- Seamless integration with Microsoft® Excel®

## Fact-based cost modeling, at a system level

PRICE Cost Models provide fact-based integrity designed to accommodate system-level perspective. Unlike speculative techniques or “guesstimates,” PRICE Cost Models use industry-specific parametric data models and benchmarks built on factual data gleaned from thousands of programs. This reliable data, plus the thousands of proven cost estimating relationships embedded in PRICE Cost Models, deliver credible estimates from the component to system level.

## Account for integration costs, too

Overlooking or miscalculating the costs to modify and integrate finished components into a system build often requires estimates to be reworked. The ability of PRICE TruePlanning to factor in hardware component, assembly, subsystem, and software integrations, up front, means more accurate estimating for better decision-making and fewer requirements to make adjustments after the fact.

## Gain the benefit of repeatable methodologies

PRICE methodologies use industry and in-house historical data that enable users to improve their estimating process incrementally, with every successive project. The more projects estimated with PRICE Cost Models for TruePlanning, the greater your historical data relevance and estimating accuracy.

## Harness the power of PRICE Research

PRICE Cost Models leverage the experience of PRICE® Research™, the industry’s most effective independent cost research organization, representing four decades of experience serving government, commercial, and industrial programs.

### PRICE TruePlanning: One framework for multiple solutions

PRICE Cost Models for the PRICE TruePlanning framework integrate data-driven credibility within estimates spanning multiple disciplines:

- **PRICE Hardware Models** for chips, components, modules, and COTS or custom hardware
- **PRICE Software Models** for custom, COTS, and SOA uses
- **PRICE Systems Models** for process and assembly tasks
- **PRICE IT Models** for IT Infrastructure
- **PRICE Early Concept Models** for military aircraft, ships, vehicles
- **Customer-specific cost models**

PRICE TruePlanning Companion Applications add flexibility and power for sharing and managing data with the cost estimating framework.

### PRICE TruePlanning’s role in Estimating Systems Integration

The compatible family of PRICE® TruePlanning™ Cost Estimating Framework and Companion Applications, PRICE® Integrated Cost Models™, PRICE® TrueFindings™, and PRICE® TrueMapper™ empowers a more strategic view of cost estimating and life cycle cost management, within the context of PRICE Estimating Systems Integration.



**DECADES OF COST ESTIMATING EXCELLENCE**

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