# Crosswind Learning



# Crosswind Success Series:
# PMP® Exam Bootcamp Manual

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## Control Resources

### Inputs

Project Management Plan
- **Resource Management Plan**

Project Documents
- **Issue Log**
- Lessons Learned Register
- **Physical Resource Assignments**
- **Project Schedule**
- **Resource Breakdown Structure**
- **Resource Requirements**
- Risk Register

**Work Performance Data**

Agreements

Organizational Process Assets

### Outputs

**Work Performance Information**

**Change Requests**

Project Management Plan Updates
- Resource Management Plan
- Schedule Baseline
- Cost Baseline

Project Documents Updates
- Assumption Log
- Issue Log
- Lessons Learned Register
- Physical Resource Assignments
- Resource Breakdown Structure
- Risk Register

### Tools and Techniques

Data Analysis
- **Alternatives Analysis**
- **Cost-benefit Analysis**
- **Performance Reviews**
- Trend Analysis

Problem Solving

Interpersonal and Team Skills
- **Negotiation**
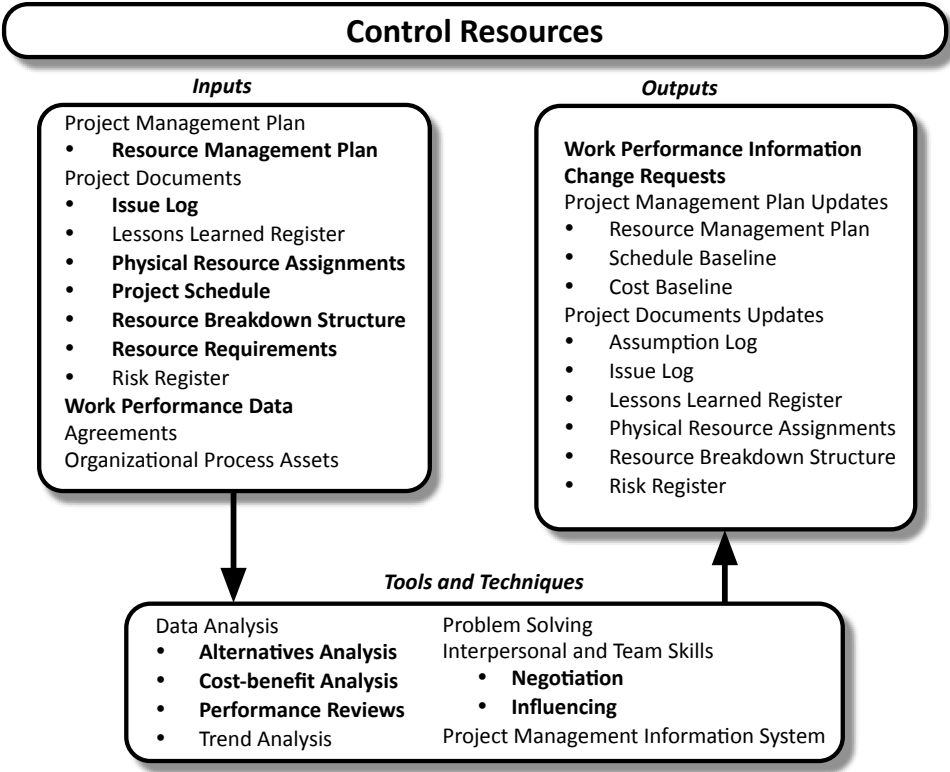- **Influencing**

Project Management Information System

**Figure 5-11: Control Resources Data Flow Diagram**

The source for the above figure is the Project Management Institute, *A Guide to the Project Management Body of Knowledge*, (*PMBOK® Guide*) – Sixth Edition, Project Management Institute Inc., 2017, Figure 9-14, Page 352

| Control Resources (Monitoring and Controlling) | | |
|---|---|---|
| **Key Inputs** | Resource Management Plan | The resource management plan is a component of the project management plan that documents:  the manner in which the team and physical resources are determined, quantified, and acquired; resource roles, responsibilities, authorities, and competence (skill and capacity); project organizational charts; team resource management (definition, management, control, and release); team training; team development; and control of physical resources (availability and acquisition).  It provides direction for the use, control, and release of resources. |

Chapter 5
Resource

| Control Resources (Continued) | | |
|---|---|---|
| **Key Inputs (Cont.)** | Issue Log | The issue log is used to record and track any project challenges that cannot be immediately resolved. Issues may include a lack of resources, a delay in obtaining necessary resources, or resources that are ineffective or below grade. The project team uses the log to ensure issues are resolved during the execution of the project management plan. Updates occur during activities performed while monitoring and controlling the project. |
| | Physical Resource Assignments | Physical resources include infrastructure, facilities, equipment, and other non-personnel items required to complete the project. Documentation for physical resource assignments typically include the resource breakdown structure and the project schedule. |
| | Project Schedule | The project schedule is the product of a schedule model containing linked activities and their planned dates, durations, milestones, and resources. Specifically, the schedule shows what resources are required, when they are required, and where they are required. It is usually formatted as a bar chart, milestone chart, or project schedule network diagram, although tabular formatting may occur. Until resources have been allocated and start and finish dates substantiated, the project schedule is preliminary. A master schedule or milestone schedule is a summary form of the project schedule. |
| | Resource Breakdown Structure (RBS) | The resource breakdown structure is a graphical representation of resources by category and type displayed in hierarchical order. Categories may include, but are not limited to labor, equipment, supplies, and material. Types may include, but are not limited to **skill level**, **grade level**, and **required certification**. It is referenced whenever a replacement or reacquisition is required. |
| | Resource Requirements | Resource requirements define the types and quantities of team and physical resources needed for a work package or for each activity in a work package. This can then be aggregated to calculate the estimated resources for each work package (if the basis for aggregation is the activity), work breakdown structure (WBS) branch, and the project. Exhibits typically include the basis of estimate for each resource and assumptions made as to resource type, availability, and required quantities. |

| Control Resources (Continued) | | |
|---|---|---|
| Key Inputs (Cont.) | Work Performance Data | Work performance data represents the raw metrics and observations identified during the performance of project work activities. It includes facts related to the number and types of resources used during the project. |
| Key Tools & Techniques | Alternatives Analysis | Alternatives analysis is a technique utilized to assess the most appropriate options to execute the work of the project. Examples are evaluating alternatives to optimize resource utilization and to determine if using additional resources/paying overtime is better than late delivery or phased deliveries. |
| | Cost-benefit Analysis | Cost-benefit analysis is a financial tool that determines the scenario that best fits the needs of the project by comparing the cost of each scenario to its expected benefits. During resource control, it is typically used to determine the best corrective action for project deviations. |
| | Performance Reviews | Performance reviews use metrics, comparison, and analysis to determine the differences between planned resource utilization and actual resource utilization. Cost and schedule related work performance information can be used to identify issues that impact resource utilization. |
| | Negotiation | Negotiation is the art of reaching a mutual agreement and is a very important skill in relation to resource control. It can be used to obtain additional resources, change resources, or lower resource related costs. |
| | Influencing | Influencing skills are useful in promoting performance, especially when there is a lack of direct authority. A key skill used during resource control, it can be used to resolve issues and obtain needed resources in a timely manner. |
| Key Outputs | Work Performance Information | Work performance information includes supplemental and contextualized information regarding the performance of the project scope in comparison to the scope baseline. The information can contain important facets of resource control such as actual resource allocation, which can then be compared to resource requirements. |

| Control Resources (Continued) | | |
|---|---|---|
| **Key Outputs (Cont.)** | Change Requests | Change requests are requests for modification that have not been formally approved through the change control process. Modifications to the schedule, resource breakdown structure, or other impacted components of the project management plan may be requested. |

| Situational Question and Real World Application |
|---|
| Failure to effectively control resources can result in a project that is over schedule and/or budget due to resources that are not in place at the correct time and/or required corrective actions that are not performed. |

## 5.7. Project Resource Management Formulas and Variables

There are no formulas for this chapter.

## 5.8. Project Resource Management Terminology

| Term | Description |
|---|---|
| **Acquire Resources** | The process of establishing the availability of resources, internal and/or external to the organization |
| **Aggressors** | A role with a negative attitude toward the project |
| **Attitude Power** | A type of power that can involve using a middle person to negotiate for the project manager |
| **Authority** | The power to assign resources, disburse funds, make or authorize decisions for the project |
| **Blockers** | A role that interrupts information flow on the project |
| **Clarifiers** | A role that helps focus on making sure people on the project understand what the details of the project entail |
| **Coercive/Penalty Power** | A type of power that uses negative approaches including threatening and punishment to get people to do things they don't want to do |
| **Colocation** | A technique for improving team effectiveness, as well as communication and collaboration among team members, by placing them in close proximity to each other |
| **Commitment Power** | A type of power that uses commitment via alliances and partnerships on the project team to tackle challenges to the project as they arise; has a potential connection with referent power |