Data Dictionary

O*NET ® 7.0 Database

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Summary of Modifications

Date	Page	Description
February 2, 2005	28	The Structure and Description table was modified to change the data type for the Response column in the Occupation Level Metadata file from NUMBER(3) to VARCHAR2(75).

Table of Contents

List of Figures

List of Appendices

Data Examples

Introduction

This document provides a reference to the files available in the O*NET 7.0 Database. It serves as documentation for systems analysts, developers, and researchers who plan to use the O*NET 7.0 Database as a basis for developing other products, software, or system applications.

Each file in the O*NET 7.0 Database contains data that can be used to create a database structure with a database management system (DBMS) of choice. The files do NOT represent a database structure, but provide as much content as possible for the database developer to select columns for database field and table creation. The O*NET-SOC Code is a common key/link between the various data elements for developers wishing to create a relational database structure. Additional relationships are depicted in **Figure 1 – Relationships of O*NET Look-Up Files to Domain Files**. The data in each file are contained in tab-delimited text fields with column headings in the first row of the file.

Each file in the O*NET 7.0 Database is described in this document. A list of columns is included, showing the column name used in the file, its data type, and a description of the column content. (Note: The column names provided are intended to be descriptive of the file contents, and are not suggested or required names to be used in constructing database tables.)

File Structure

A description and data example for each file are included. In addition, the File Structure Changes section for each table provides the reader a detailed list of changes that have been made to the structure of the data file since the release of the O*NET 4.0 Database.

The data types are taken from the Oracle DBMS:

CHAR:	fixed-length character string
VARCHAR2:	varying-length string
NUMBER:	number
DATE:	date

The NUMBER data type is used in two different instances in the files. One is to represent a number without a decimal point (an integer) such as the Job Zone column. The other instance represents a floating point number, such as the Data Value column, associated with the O*NET-SOC occupations. It is indicated as NUMBER (5,2) which means 5 total places are in the number with the possibility of 3 before the decimal point and 2 behind the decimal point.

Note: Users should note that these data types refer to the stored values. In generating tab-delimited text files, null values are represented by "n/a". Some variations of field type

assignments may be required of users to correctly import the files. These variations are dependent on the application(s) used.

File Relationships

The file descriptions are organized into three distinct groupings – look-up files, domain files, and other files. The look-up files are described first to provide a frame of reference for the other data files that are included in the database release. They include the content model that identifies the most important types of information about work and integrates them into a theoretically and empirically sound system.

The domain files contain descriptors of work and worker characteristics including the various ratings data and occupational metadata that have been obtained through the research efforts of O*NET and its partners.

The other files provide additional information that supplements the look-up and domain files but does not fit into either of those categories. For example, the O*NET Survey Booklet Location file contains the content model elements that have corresponding survey item numbers in the survey booklet.

Figure 1 - Relationships of O*NET Look-up Files to Domain Files, provides a visual display of the relationship between the look-up files and the domain files that are distributed with O*NET 7.0 Database Release. To utilize the table, select a domain file name and follow the row across to see the associated look-up files. The data element name that provides the linkage between the two files is provided in each intersection cell. The empty intersection cells indicate that there is no relationship between the look-up and domain files.

Figure 1 - Relationships of O*NET Look-up Files to Domain Files

Look-up Files / Domain Files	ONET-SOC Data	ONET Content Model Reference	Scale Reference	Job Zone Reference
Ability	ONET-SOC Code	Element ID	Scale ID	
Education Training Experience	ONET-SOC Code	Element ID	Scale ID	
Interest	ONET-SOC Code	Element ID	Scale ID	
Knowledge	ONET-SOC Code	Element ID	Scale ID	
ONET-SOC Job Zones	ONET-SOC Code			Job Zone
Skills	ONET-SOC Code	Element ID	Scale ID	
Tasks	ONET-SOC Code		Scale ID	
Work Activity	ONET-SOC Code	Element ID	Scale ID	
Work Context	ONET-SOC Code	Element ID	Scale ID	
Work Styles	ONET-SOC Code	Element ID	Scale ID	
Work Value	ONET-SOC Code	Element ID	Scale ID	

Figure 2 - Relationships of Other Files to O*NET Look-up Files provides a visual
display of the relationships between the look-up files and other files that are distributed
with O*NET Database Release 7.0. In the same manner as described above, select a file
from the left column and follow the row across to see the associated reference files. The
data element name that provides the linkage between the two files is provided in each
intersection cell. The empty intersection cells indicate that there is no relationship
between the reference and these other files.

Figure 2 - Relationships of Other Files to O*NET Look-up Files

Look-up Files / Other Files	ONET-SOC Data	ONET Content Model Reference	Scale Reference	Job Zone Reference
Occupation Level Metadata	ONET-SOC Code			
ONET Level Scale Anchors		Element ID	Scale ID	
Survey Booklet Location		Element ID		

Using the O*NET Data and Metadata

Metadata is provided in the O*NET database to provide users with information that will
help evaluate the quality and valid use of the data. The needs of individual users of the
O*NET database will determine which metadata items are utilized.

To facilitate that use, cells that are shaded or contain **bold** text denote O*NET metadata
versus O*NET data. It's assumed that the needs of many users will be met by using
O*NET data along with the O*NET metadata that provides the recommended "flags" for
"Not Relevant" or "Recommend Suppress". In this case, all unshaded rows in the
illustrated file structure should be utilized, including those containing the bold text.
Those interested in a more detailed study or use of the database can choose to utilize any
or all of the provided metadata items. Metadata is provided at both the item level and at
the occupation level. Keys to this information are provided in the Appendices.

Content Update Since Release 4.0

The O*NET 4.0 database represents the final version of an "analyst ratings only" O*NET Database. The ratings for each of the 900+ O*NET-SOC occupations in the 4.0 database were developed by occupational analysts and every occupation contains ratings for the same range of descriptors. The ongoing O*NET data collection program is gradually replacing these original analyst ratings with ratings derived primarily from job incumbents, as well as, ratings from an updated analyst procedure. The database structure and content changes incorporated in 4.0 were made to make the database consistent with data collection program. For more details about these changes, please refer to *"Summary of O*NET 4.0 Content Model and Database"* (October 2001) (http://www.onetcenter.org/resData.html#summary)

The April 2003 release of the O*NET 5.0 Database represented the first database release to incorporate data from the data collection program. It was the first of planned semi-annual updates of the database to update all O*NET-SOC occupations.

Release 5.0 contained the following:

- New and revised Task Statements (455 occupations)
- Addition of Task Statement ratings (54 occupations)
- Updated Abilities, Work Activities, Knowledge, Skills, and Work Context data (54 occupations)
- Addition of Training and Work Experience, and Education data (54 occupations)
- Addition of Work Styles data (54 occupations)
- Addition of metadata to the file structure to specify source of data and date of update
- Addition of Emerging Task Statements
- Addition of Detailed Work Activities

Release 5.1 contained the following:

- New and Revised Task Statements (69 occupations)
- Updated Job Zones (54 occupations)
- Level Scale Anchors for Skills, Knowledge, Ability, and Work Activity Domains
- New Occupational Level Metadata
  - O*NET-SOC Establishment Response Rate
  - O*NET-SOC Employee Response Rate
  - O*NET-SOC Case Completeness Rate
  - Total Completes for O*NET-SOC
- New Occupational Level Distribution Statistics
  - Data Collection Mode
  - How long at Current Job
  - Industry
- New Ratings Level Metadata

- Standard Error
- Lower 95% Confidence Interval Bound
- Upper 95% Confidence Interval Bound
- Sample Size
- Recommended Suppression
- "Not Relevant for the Occupation" flag

Release 6.0 contains the following:

- New and revised Task Statements (140 occupations)
- Addition of Task Statement ratings (126 occupations)
- Updated Abilities, Work Activities, Knowledge, Skills, and Work Context data (126 occupations)
- Addition of Training and Work Experience, and Education data (126 occupations)
- Addition of Work Styles data (126 occupations)
- Updated Job Zones (126 occupations)
- Addition of scale anchors for both the Work Context and for the Education, Training and Experience domains.
- Updated Occupation Level Metadata (126 occupations)

Release 7.0 contains the following:

- New and revised Task Statements (100 occupations)
- Addition of Task Statement ratings (100 occupations)
- Updated Abilities, Knowledge, Skills, Work Activities, and Work Context data (100 occupations)
- Addition of Education, Training and Work Experience data (100 occupations)
- Addition of Work Styles data (100 occupations)
- Updated Job Zones (100 occupations)
- Updated Occupation Level Metadata (100 occupations)

- Changes since the release of the O*NET 4.0 Database are further summarized in **Figure 3.**

Figure 3 - O*NET Database Content Changes Since Release 4.0

File	Release 5.0	Release 5.1	Release 6.0	Release 7.0
O*NET-SOC Data			changed and updated data	
O*NET Content Model Reference				
Scales Reference		changed data		
Job Zone Reference				
Ability	updated data and new metadata	changed data and new metadata	updated data	updated data
Education, Training, and Experience	new file	new metadata	updated data	updated data
Interest	new metadata			
Knowledge	updated data and new metadata	new metadata	updated data	updated data
O*NET-SOC Job Zones		new data and metadata	updated data	updated data
Skills	updated data and new metadata	new metadata	updated data	updated data
Tasks	updated data and new metadata	new and changed data; new metadata	new, changed, and updated data	new, changed, and updated data
Work Activity	updated data and new metadata	new metadata	updated data	updated data
Work Content	updated data and new metadata	new metadata	updated data	updated data
Work Styles	new file	new metadata	updated data	updated data
Work Values	new metadata			
Occupation Level Metadata		new file	updated data	updated data
O*NET Level Scale Anchors		new file	updated data	
O*NET Survey Booklet Location	new file			

Note: 'Updated' refers to content changes resulting from the data collection program; 'New' – refers to data elements/types/descriptors first appearing in the database; and 'Changed' refers to any other edits made.

Look-Up
File Descriptions

O*NET-SOC Data

Purpose: Provide O*NET-SOC Codes, titles, and definitions.

File Name: onetsoc_data.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Title	VARCHAR2(150)	O*NET-SOC Title
Description	VARCHAR2(1000)	O*NET-SOC Description

This file contains each O*NET SOC code, occupational title, and definition/description. They are displayed in three tab delimited fields with the columns named O*NET-SOC Code, Title and Description. The three fields are represented by one row. There are a total of 1,167 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes	X	X	X	X

Data Example:

Refer to **Table 1 - O*NET-SOC Data**, page 37

O*NET Content Model Reference

Purpose: Provide O*NET Content Model elements.

File Name: onet_content_model_reference.txt

Structure and Description:

Column	Type	Column Content
Element ID	VARCHAR2(20)	Content Model Outline Position
Element Name	VARCHAR2(150)	Content Model Element Name
Description	VARCHAR2(1500)	Content Model Element Description

This file contains the Content Model elements and descriptions. It is displayed in three tab delimited fields with the columns named Element ID, Element Name, and Description. The three fields are represented by one row. There are a total of 564 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes	X	X	X	X

Data Example:

Refer to **Table 2 - O*NET Content Model Reference**, page 38

Scales Reference

Purpose: Provide a reference to the scale names and values.

File Name: scales_reference.txt

Structure and Description:

Column	Type	Column Content
Scale ID	VARCHAR2(3)	Scale ID
Scale Name	VARCHAR2(50)	Scale Name
Minimum	NUMBER(1)	Scale Minimum
Maximum	NUMBER(3)	Scale Maximum

This file contains the Scale information by which the raw values are measured. It is displayed in four tab delimited fields with the columns named Scale ID, Scale Name, Minimum, and Maximum. The four fields are represented by one row. There are a total of 69 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes		X	X	X
Scale ID data type changed from CHAR(2) to VARCHAR2(3)	X			

Data Example:

Refer to **Table 3 - Scales Reference**, page 38

Job Zone Reference

Purpose: Provide Job Zone data (developed to help transition DOT's measures of Specific Vocational Preparation (SVP) to O*NET's measure of experience, education, and job training).

File Name: job_zone_reference.txt

Structure and Description:

Column	Type	Column Content
Job Zone	NUMBER(1)	Job Zone number
Name	VARCHAR2(50)	Job Zone name/zone
Experience	VARCHAR2(300)	Job Zone experience requirements
Education	VARCHAR2(500)	Job Zone educational requirements
Job Training	VARCHAR2(300)	Job Zone training requirements
Examples	VARCHAR2(500)	Job Zone examples
SVP Range	VARCHAR2(25)	Specific vocational preparation range

This file contains the Job Zone data in seven tab delimited fields with the columns named Job Zone, Name, Experience, Education, Job Training, Examples, and SVP Range. The seven fields are represented by one row. There are 5 rows of data in this file representing each Job Zone.

File Structure Changes:

	When			
Description of Change	**Release 5.0**	**Release 5.1**	**Release 6.0**	**Release 7.0**
No structure changes	X		X	X
Number column renamed Job Zone		X		

Data Example:

Refer to **Table 4 - Job Zone Reference**, page 39

Domain File Descriptions

Ability

Purpose: Provide a mapping of O*NET-SOC codes (occupations) to Ability ratings.

File Name: Ability.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Element ID	VARCHAR2(20)	Ability Outline Position in the Content Model Structure
Element Name	VARCHAR2(150)	Ability Name
Scale ID	VARCHAR2(3)	Scale used as the basis for rating
Data Value	NUMBER(5,2)	Rating associated with the O*NET-SOC occupation
N	NUMBER(4)	Sample Size
Standard Error	NUMBER	Standard Error
Lower CI Bound	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Not Relevant	**VARCHAR2(1)**	**Not Relevant for the Occupation (Y=yes, N=no)**
Date	DATE	Date when data was updated
Domain Source	VARCHAR2(30)	Source of the data

This file contains the Content Model Ability data associated with each O*NET-SOC occupation. It is displayed in 13 tab delimited fields and identified using the column names provided above. Item rating level metadata is provided in columns named N, Standard Error, Lower CI Bound, Upper CI Bound, Recommend Suppress, Not Relevant, Date and Domain Source. Refer to **Appendix 1 - Item Rating Level Statistics - Analyst** for additional information on these items. The 13 fields are represented by one row. There are a total of 95,264 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes			X	X
Date and Source columns added	X			
Scale ID data type changed from CHAR(2) to VARCHAR2(3)	X			
Data Value data type changed from NUMBER(9,6) to NUMBER(5,2)	X			
Columns added for N, Standard Error, Lower CI Bound, Upper CI Bound, Recommend Suppress, and Not Relevant		X		
Source column was renamed to Domain Source		X		

Data Example:

Refer to **Table 5 - Ability**, page 40

Education, Training, and Experience

Purpose: Provide a mapping of O*NET-SOC codes (occupations) to Education, Training, and Experience ratings.

File Name: EducTrainExp.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Element ID	VARCHAR2(20)	Outline Position in the Content Model Structure
Element Name	VARCHAR2(150)	Name associated with Education, Training and Experience
Scale ID	VARCHAR2(3)	Scale used as the basis for rating
Category	NUMBER(5)	Percent frequency category (Refer to file - Survey Booklet Location)
Data Value	NUMBER(5,2)	Rating associated with the O*NET-SOC occupation
N	NUMBER(4)	Sample Size
Standard Error	NUMBER	Standard Error
Lower CI Bound	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Date	DATE	Date when the data was updated
Domain Source	VARCHAR2(30)	Source of the data

This file contains the percent frequency data associated with Education, Training and Experience Content Model elements. It is displayed in 13 tab delimited fields and identified using the column names provided above. Item rating level metadata is provided in columns named N, Standard Error, Lower CI Bound, Upper CI Bound, Recommend Suppress, Date and Domain Source. Refer to **Appendix 2 - Item Rating Level Statistics - Incumbent** for additional information on these items. The 13 fields are represented by one row. There are a total of 11,480 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes			X	X
Added as a new file	X			
Columns added for N, Standard Error, Lower CI Bound, Upper CI Bound, and Recommend Suppress		X		
Source column renamed Domain Source		X		

Data Example:

Refer to **Table 6 - Education, Training, and Experience**, page 41

Interest

Purpose: Provide a mapping of O*NET-SOC codes (occupations) to Interest ratings.

File Name: Interest.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Element ID	VARCHAR2(20)	Interest Outline Position in the Content Model Structure
Element Name	VARCHAR2(150)	Interest Name
Scale ID	VARCHAR2(3)	Scale used as the basis for rating
Data Value	NUMBER(5,2)	Rating associated with the O*NET-SOC occupation
Date	DATE	Date when data was updated
Domain Source	VARCHAR2(30)	Source of the data

This file contains the Content Model Interest data associated with each O*NET-SOC occupation. It is displayed in seven tab delimited fields with the columns named O*NET-SOC Code, Element ID, Element Name, Scale ID, Data Value, Date, and Domain Source. The seven fields are represented by one row. There are a total of 8,100 rows of data in this file.

Note: Interest ratings are presented as two scales: OI reports the RIASEC level of each interest and IH presents "highpoint codes", the numbers of the RIASEC scales for the first, second and/or third highest ratings. To better understand the scales, refer to the report: <u>Development of Occupational Interest Profiles</u>, on the O*NET Consortium site (Home > Products > Research and Technical Reports).

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes			X	X
Date and Source columns added	X			
Scale ID data changed from CHAR(2) to VARCHAR2(3)	X			
Data Value data type changed from NUMBER(9,6) to NUMBER(5,2)	X			
Source column renamed Domain Source		X		

Data Example:

Refer to **Table 7 - Interest**, page 42

Knowledge

Purpose: Provide a mapping of O*NET-SOC codes (occupations) to Knowledge ratings.

File Name: Knowledge.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Element ID	VARCHAR2(20)	Knowledge Outline Position in the Content Model Structure
Element Name	VARCHAR2(150)	Knowledge Name
Scale ID	VARCHAR2(3)	Scale used as the basis for rating
Data Value	NUMBER(5,2)	Rating associated with the O*NET-SOC occupation
N	NUMBER(4)	Sample Size
Standard Error	NUMBER	Standard Error
Lower CI Bound	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Not Relevant	**VARCHAR2(1)**	**Not Relevant for the Occupation (Y= yes, N=no)**
Date	DATE	Date when data was updated
Domain Source	VARCHAR2(30)	Source of the data

This file contains the Content Model Knowledge data associated with each O*NET-SOC occupation. It is displayed in 13 tab delimited fields and identified using column names provided above. Item rating level metadata is provided in columns named N, Standard Error, Lower CI Bound, Upper CI Bound, Recommend Suppress, Not Relevant, Date, and Domain Source. Refer to **Appendix 2 - Item Rating Level Statistics - Incumbent** for additional information on these items. The 13 fields are represented by one row. There are a total of 60,456 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes			X	X
Date and Source columns added	X			
Scale ID data changed from CHAR(2) to VARCHAR2(3)	X			
Data Value data type changed from NUMBER(9,6) to NUMBER(5,2)	X			
Columns added for N, Standard Error, Lower CI Bound, Upper CI Bound, Recommend Suppress, and Not Relevant		X		
Source column renamed Domain Source		X		

Data Example:

Refer to **Table 8 - Knowledge**, page 43

O*NET-SOC Job Zones

Purpose: Provide a mapping of O*NET-SOC codes (occupations) to Job Zone ratings.

File Name: onetsoc_job_zones.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Job Zone	NUMBER(1)	Job Zone Number
Date	DATE	Date when data was updated
Domain Source	VARCHAR2(30)	Source of the data

This file contains each O*NET-SOC code and its corresponding job zone number.   Each record is displayed in four tab delimited fields with the columns named O*NET-SOC Code, Job Zone, Date, and Domain Source. The four fields are represented by one row. There are a total of 916 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes			X	X
Date and Domain Source added		X		

Data Example:

Refer to **Table 9 - O*NET-SOC Job Zones**, page 44

Skills

Purpose: Provide a mapping of O*NET-SOC codes (occupations) to Skill ratings.

File Name: Skills.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Element ID	VARCHAR2(20)	Skill Outline Position in the Content Model Structure
Element Name	VARCHAR2(150)	Skill Name
Scale ID	VARCHAR2(3)	Scale used as the basis for rating
Data Value	NUMBER(5,2)	Rating associated with the O*NET-SOC occupation
N	NUMBER(4)	Sample Size
Standard Error	NUMBER	Standard Error
Lower CI Bound	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Not Relevant	**VARCHAR2(1)**	**Not Relevant for the Occupation (Y=yes, N=no)**
Date	DATE	Date when data was updated
Domain Source	VARCHAR2(30)	Source of the data

This file contains the Content Model Skills data associated with each O*NET-SOC occupation. It is displayed in 13 tab delimited fields and identified using the column names provided above. Item rating level metadata is provided in columns named N, Standard Error, Lower CI Bound, Upper CI Bound, Recommend Suppress, Not Relevant, Date, and Domain Source. Refer to **Appendix 2 - Item Rating Level Statistics - Incumbent** for additional information on these items. The 13 fields are represented by one row. There are a total of 64,120 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes			X	X
Date and Source columns added	X			
Scale ID data changed from CHAR(2) to VARCHAR2(3)	X			
Data Value data type changed from NUMBER(9,6) to NUMBER(5,2)	X			
Columns added for N, Standard Error, Lower CI Bound, Upper CI Bound, Recommend Suppress, Not Relevant		X		
Source column renamed Domain Source		X		

Data Example:

Refer to **Table 10 - Skills**, page 45

Tasks

Purpose: Provide a mapping of O*NET-SOC codes (occupations) to tasks associated with the occupation.

File Name: Tasks.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Task ID	NUMBER(8)	Identifies each Task containing data ratings
Task	VARCHAR2(1000)	Task statement associated with an occupation
Task Type	VARCHAR2(12)	Core or Supplemental
Incumbents Responding	NUMBER(4)	Number of incumbents providing task information
Scale ID	VARCHAR2(3)	Scale used as the basis for the rating
Data Value	NUMBER(5,2)	Rating associated with each task of O*NET-SOC occupation
N	NUMBER(4)	Sample Size
Standard Error	NUMBER	Standard Error
Lower CI Bound	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Percent Relevant-R	NUMBER(5,2)	Relevance of each task to O*NET-SOC occupation
N-R	NUMBER(4)	Sample Size
Standard Error-R	NUMBER	Standard Error
Lower CI Bound-R	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound-R	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress-R	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Percent Frequency: Yearly Or Less-F1	NUMBER(5,2)	Percent frequency category rating for each task of O*NET-SOC occupation
N-F1	NUMBER(4)	Sample Size
Standard Error-F1	NUMBER	Standard Error
Lower CI Bound-F1	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound-F1	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress-F1	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Percent Frequency: More Than Yearly-F2	NUMBER(5,2)	Percent frequency category rating for each task of O*NET-SOC occupation
N-F2	NUMBER(4)	Sample Size
Standard Error-F2	NUMBER	Standard Error
Lower CI Bound-F2	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound-F2	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress-F2	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Percent Frequency: More Than Monthly-F3	NUMBER(5,2)	Percent frequency category rating for each task of O*NET-SOC occupation
N-F3	NUMBER(4)	Sample Size
Standard Error-F3	NUMBER	Standard Error
Lower CI Bound-F3	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound-F3	NUMBER	Upper 95% Confidence Interval Bound

Column	Type	Column Content
Recommend Suppress-F3	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Percent Frequency: More Than Weekly-F4	NUMBER(5,2)	Percent frequency category rating for each task of O*NET-SOC occupation
N-F4	NUMBER(4)	Sample Size
Standard Error-F4	NUMBER	Standard Error
Lower CI Bound-F4	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound-F4	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress-F4	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Percent Frequency: Daily-F5	NUMBER(5,2)	Percent frequency category rating for each task of O*NET-SOC occupation
N-F5	NUMBER(4)	Sample Size
Standard Error-F5	NUMBER	Standard Error
Lower CI Bound-F5	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound-F5	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress-F5	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Percent Frequency: Several Times Daily-F6	NUMBER(5,2)	Percent frequency category rating for each task of O*NET-SOC occupation
N-F6	NUMBER(4)	Sample Size
Standard Error-F6	NUMBER	Standard Error
Lower CI Bound-F6	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound-F6	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress-F6	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Percent Frequency: Hourly Or More-F7	NUMBER(5,2)	Percent frequency category rating for each task of O*NET-SOC occupation
N-F7	NUMBER(4)	Sample Size
Standard Error-F7	NUMBER	Standard Error
Lower CI Bound-F7	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound-F7	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress-F7	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Date	DATE	Date when data was updated
Domain Source	VARCHAR2(30)	Source of the data

This file contains the tasks associated with each O*NET-SOC occupation. It is displayed in 62 tab delimited fields using the column names above. The 62 fields are represented by one row. Groups of related columns are identified between bold lines in the file structure table to provide a visual depiction of the data relationships. The groups of related data contain many of the same types of data (N sample size, Standard Error, Lower CI Bound, Upper CI Bound, and Recommend Suppress). To provide unique column names, a suffix (a dash followed by 1 or 2 characters) has been appended to these column names. This allows the data files to be imported directly into Access and other applications without having conflicting (duplicate) column names. The suffixes used are as follows:

> R = Percent Relevant related columns
> F1 = Percent Frequency: Yearly or Less
> F2 = Percent Frequency: More Than Yearly
> F3 = Percent Frequency: More Than Monthly
> F4 = Percent Frequency: More Than Weekly
> F5 = Percent Frequency: Daily

F6 = Percent Frequency: Several Times Daily
F7 = Percent Frequency: Hourly or More

There are a total of 16,273 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes			X	X
Date and Source metadata added	X			
Source column changed to Domain Source	X			
Title column deleted	X			
All other metadata items added		X		

Data Example:

Refer to **Table 11 - Tasks**, page 46 (Note: Only the first 18 columns of the file structure are represented in the data example)

Work Activity

Purpose: Provide a mapping of O*NET-SOC codes (occupations) to Work Activity ratings.

File Name: WorkActivity.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Element ID	VARCHAR2(20)	Work Activity Outline Position in the Content Model
Element Name	VARCHAR2(150)	Work Activity Name
Scale ID	VARCHAR2(3)	Scale used as the basis for rating
Data Value	NUMBER(5,2)	Rating associated with the O*NET-SOC occupation
N	NUMBER(4)	Sample Size
Standard Error	NUMBER	Standard Error
Lower CI Bound	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Not Relevant	**VARCHAR2(1)**	**Not Relevant for the Occupation (Y=yes, N=no)**
Date	DATE	Date when data was updated
Domain Source	VARCHAR2(30)	Source of the data

This file contains the Content Model Work Activity data associated with each O*NET-SOC occupation. It is displayed in 13 tab delimited fields and identified using the column names provided above. Item rating level metadata is provided in columns named N, Standard Error, Lower CI Bound, Upper CI Bound, Recommend Suppress, Not Relevant, Date, and Domain Source. Refer to **Appendix 2 - Item Rating Level Statistics - Incumbent** for additional information on these items. The 13 fields are represented by one row. There are a total of 75,112 rows of data in this file.

File Structure Changes:

| Description of Change | When | | | |
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes			X	X
Date and Source columns added	X			
Scale ID data changed from CHAR(2) to VARCHAR2(3)	X			
Data Value data type changed from NUMBER(9,6) to NUMBER(5,2)	X			
Columns added for N, Standard Error, Lower CI Bound, Upper CI Bound, Recommend Suppress, Not Relevant		X		
Source column renamed Domain Source		X		

Data Example: Refer to **Table 12 - Work Activity**, page 47

Work Context

Purpose: Provide a mapping of O*NET-SOC codes (occupations) to Work Context ratings.

File Name: WorkContext.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Element ID	VARCHAR2(20)	Work Context Outline Position in the Content Model
Element Name	VARCHAR2(150)	Work Context Name
Scale ID	VARCHAR2(3)	Scale used as the basis for rating
Category	NUMBER(5)	Percent frequency category (Refer to file - Survey Booklet Location)
Data Value	NUMBER(5,2)	Rating associated with the O*NET-SOC occupation
N	NUMBER(4)	Sample Size
Standard Error	NUMBER	Standard Error
Lower CI Bound	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Not Relevant	**VARCHAR2(1)**	**Not Relevant for the Occupation (Y=yes, N=no)**
Date	DATE	Date when data was updated
Domain Source	VARCHAR2(30)	Source of the data

This file contains the Content Model Work Context data associated with each O*NET-SOC occupation. It is displayed in 14 tab delimited fields and identified using the column names provided above. Item level metadata is provided in columns named N, Standard Error, Lower CI Bound, Upper CI Bound, Recommend Suppress, Not Relevant, Date and Domain Source. Refer to **Appendix 2 - Item Rating Level Statistics - Incumbent** for additional information on these items. The 14 fields are represented by one row. There are a total of 118,808 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes			X	X
Date and Source columns added	X			
Scale ID data changed from CHAR(2) to VARCHAR2(3)	X			
Data Value data type changed from NUMBER(9,6) to NUMBER(5,2)	X			
Source column renamed Domain Source		X		
All other metadata items added		X		

Data Example: Refer to **Table 13 - Work Context**, page 48

Work Styles

Purpose: Provide a mapping of O*NET-SOC codes (occupations) to Work Styles ratings.

File Name: WorkStyles.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Element ID	VARCHAR2(20)	Work Styles Outline Position in the Content Model
Element Name	VARCHAR2(150)	Work Styles Name
Scale ID	VARCHAR2(3)	Scale used as the basis for rating
Data Value	NUMBER(5,2)	Rating associated with the O*NET-SOC occupation
N	NUMBER(4)	Sample Size
Standard Error	NUMBER	Standard Error
Lower CI Bound	NUMBER	Lower 95% Confidence Interval Bound
Upper CI Bound	NUMBER	Upper 95% Confidence Interval Bound
Recommend Suppress	**VARCHAR2(1)**	**Low Precision Indicator (Y=yes, N=no)**
Date	DATE	Date when data was updated
Domain Source	VARCHAR2(30)	Source of the data

This file contains the Content Model Work Styles data associated with each O*NET-SOC occupation. It is displayed in 12 tab delimited fields and identified using the column names provided above. Item rating level metadata is provided in columns named N, Standard Error, Lower CI Bound, Upper CI Bound, Recommend Suppress, Date, and Domain Source. Refer to **Appendix 2 - Item Rating Level Statistics - Incumbent** for additional information on these items. The 12 fields are represented by one row. There are a total of 4,480 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes			X	X
Added as a new file	X			
Source column renamed Domain Source		X		
All other metadata items added		X		

Data Example:

Refer to **Table 14 - Work Styles**, page 48

Work Values

Purpose: Provide a mapping of O*NET-SOC codes (occupations) to Work Value ratings.

File Name: WorkValue.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Element ID	VARCHAR2(20)	Work Value Outline Position in the Content Model Structure
Element Name	VARCHAR2(150)	Work Value Name
Scale ID	VARCHAR2(3)	Scale used as the basis for rating
Data Value	NUMBER(5,2)	Rating associated with the O*NET-SOC occupation
Date	DATE	Date when data was updated
Domain Source	VARCHAR2(30)	Source of the data

This file contains the Content Model Work Values data associated with each O*NET-SOC occupation. It is displayed in seven tab delimited fields with the columns named O*NET-SOC Code, Element ID, Element Name, Scale ID, Data Value, Date, and Domain Source. The seven fields are represented by one row. There are a total of 24,300 rows of data in this file.

Note: Work Values ratings are presented as two types of scores: work needs and aggregates of these needs, which are labeled "Mean Extent" in the Element Name. To better understand the scales, refer to the report: Determining the Occupational Reinforcer Patterns for O*NET Occupational Units, on the O*NET Consortium site (Home > Products > Research and Technical Reports).

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes			X	X
Date and Source columns added	X			
Scale ID data changed from CHAR(2) to VARCHAR2(3)	X			
Data Value data type changed from NUMBER(9,6) to NUMBER(5,2)	X			
Source column renamed Domain Source		X		

Data Example:

Refer to **Table 15 - Work Values**, page 49

Other
File Descriptions

Occupation Level Metadata

Purpose: Provide O*NET-SOC Occupational Level Metadata associated with the incumbent data collection.

File Name: OccLevelMetadata.txt

Structure and Description:

Column	Type	Column Content
O*NET-SOC Code	VARCHAR2(10)	O*NET-SOC Code
Item	VARCHAR2(150)	Occupation Level Statistics
Response	VARCHAR2(75)	Type of Response
N	NUMBER(4)	Sample Size
Percent	NUMBER(5,2)	Percentage of responses
Date	DATE	Date the data was updated

This file contains occupational level metadata variables associated with data collection statistics. The file is displayed in six tab delimited fields with the columns named O*NET-SOC Code, Item, Response, N, Percent and Date. The six fields are represented by one row. Refer to **Appendix 3 - Key to Incumbent Occupation Level Metadata** for additional descriptions of the data provided in this file. There are a total of 6160 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes	n/a		X	X
Added as a new file		X		

Data Example:

Refer to **Table 16 - Occupation Level Metadata**, page 50

O*NET Scale Anchors

Purpose: Provide description of O*NET Scale Anchors.

File Name: Anchors.txt

Structure and Description:

Column	Type	Column Content
Element ID	VARCHAR2(20)	Content Model Outline Position
Element Name	VARCHAR2(150)	Content Model Element Name
Scale ID	VARCHAR2(3)	Scale ID
Anchor Value	NUMBER(3)	Anchor Value Associated With Element
Anchor Description	VARCHAR2(1000)	Detail Description of Anchor Associated With Element

This file contains the scale anchors associated with the following six content areas – 1) Abilities, 2) Education and Training, 3) Knowledge, 4) Skills, 5) Work Activities, and 6) Work Context. It includes all scale anchors utilized in the data collection survey where the scale anchors are variable and item specific. Scale anchors are not included for those survey items where the scale anchors are fixed. This includes the five-point importance scale and the seven-point task frequency scale. (Note: See O*NET Data Questionnaires at http://www.onetcenter.org/ombclearance.html).

The file is displayed in five tab delimited fields with the columns named Element ID, Element Name, Scale ID, Anchor Value, and Anchor Description. The five fields are represented by one row. There are a total of 805 rows of data in this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes	n/a			X
Added as a new file		X		
Added Scale ID column			X	

Data Example:

Refer to **Table 17 - O*NET Scale Anchors**, page 51

O*NET Survey Booklet Location

Purpose: Provide O*NET Content Model elements.

File Name: Survey_Booklet_Location.txt

Structure and Description:

Column	Type	Column Content
Element ID	VARCHAR2(20)	Content Model Outline Position
Element Name	VARCHAR2(150)	Content Model Element Name
Survey Item Number	VARCHAR2(4)	Survey Booklet Location Number

This file contains the Content Model elements that have corresponding survey item numbers in the Survey Booklet. It is displayed in three tab delimited fields with the columns named Element ID, Element Name, and Survey Item Number. The three fields are represented by one row. There are a total of 238 rows of data in this file.

Note: Each survey item number corresponds to a survey question in the O*NET Questionnaires, found on the O*NET Consortium site (Home > Data Collection > OMB Clearance). The values for incumbent data categories are percentage ratings corresponding to survey question options. Match the element ID(s) from data files to a survey item number using this file.

File Structure Changes:

Description of Change	When			
	Release 5.0	Release 5.1	Release 6.0	Release 7.0
No structure changes		X	X	X
Added as a new file	X			

Data Example:

Refer to **Table 18 - O*NET Survey Booklet Location**, page 51

Appendices

Appendix 1 - Item Rating Level Statistics - Analyst

Rating Level Statistics

For each of the Ability domain elements, additional rating level statistics, such as Standard Error and data flags are included to help provide a description of the quality of the data values. The file has columns to represent these additional values.

The explanations for the Rating Level Statistics columns are explained in the following definitions.

Standard Error - Standard errors were calculated to provide an indication of each estimate's precision. The standard error of the mean (SE_M) is the standard deviation of the ratings across analysts divided by the square root of the number of analysts (i.e., eight). Statistics with large standard errors are generally considered less precise than those with small standard errors.

Upper CI Bound and **Lower CI Bound** - The standard error of the mean (SE_M) was used to define a range (confidence interval) around the estimate. The upper and lower bounds of the 95% confidence interval establish this range such that over a large number of sample estimates the probability is .95 that the population mean will be included in a confidence interval of this size. The upper bound of the confidence interval is calculated by taking the SE_M and multiplying it by 1.96 and adding that number to the observed mean. The lower bound of the confidence interval is calculated by taking the SE_M and multiplying it by 1.96 and subtracting that number from the observed mean.

Recommend Suppress - Users are encouraged to use estimates exhibiting "low precision" with caution and for many applications users are advised to consider suppressing these estimates. Abilities estimates are considered to have low precision if the standard error is greater than .51. The value of .51 was selected as a suppression criterion because $1.0/1.96 = .5102$. An SE_M of >.51 means that the upper and lower bounds of the confidence interval are more than 1 scale point away from the observed mean.

Not Relevant –The ability level rating is identified as "not relevant" if 0, 1, or 2 analysts rated importance for that ability ≥ 2 (i.e., six or more analysts rated importance a 1). A value of "1" indicates 0, 1, or 2 analysts rated importance ≥ 2. A value of "0" indicates more than 2 analysts rated importance ≥ 2. Users are encouraged to provide their end-users with an indication that the item level rating is "not relevant" rather than displaying the level value or displaying no level information.

Appendix 2 - Item Rating Level Statistics - Incumbent

Rating Level Statistics

For each of the domain elements, additional rating level statistics, such as Standard Error and data flags are included to help provide a description of the quality of the data values. Each of the domain files (Education, Training, and Experience, Knowledge, Skills, Tasks, Work Activity, Work Context, and Work Styles) has columns to represent these additional values.

The explanations for the Rating Level Statistics columns are explained in the following definitions.

Standard Error - Standard errors were calculated to provide an indication of each estimate's precision. The standard error is the square root of the variance of the estimate. Statistics with large variances are generally considered less precise than those with small variances.

Upper CI Bound and **Lower CI Bound** - The standard error was used to define a range (confidence interval) around the estimate. The 95-percent confidence level means that if all possible samples were selected and an estimate of the value and its sampling error were computed for each, then for approximately 95 percent of the samples, the interval would include the "true" average value.

Recommend Suppress - Users are encouraged to use estimates exhibiting "low precision" with caution and for many applications users are advised to consider suppressing these estimates. An estimate is considered to have low precision if any of the following are true: (1) the sample size is less than 10; (2) the variance is 0 and the sample size is less than 15; (3) the relative standard error (RSE) is greater than 0.5. (The RSE of a mean estimate is the ratio of the estimate's standard error to the estimate itself. To calculate the RSE of the estimates expressed as percentages (e.g., the proportion of respondents who indicated they perform a task once per week), the log transformation of the proportion was used.)

Not Relevant – "Level" estimates were flagged as "not relevant" if more than 75% of item respondents to the corresponding "Importance" item rated the item as "not important." Users are encouraged to provide their end-users with an indication that the item level rating is "not relevant" rather than displaying the level value or displaying no level information.

Appendix 3 - Key to Incumbent Occupation Level Metadata

Each O*NET-SOC Code has detailed information associated with the O*NET data collection called Occupation Level Metadata. The name and explanation for each data value in the item column is presented below. The O*NET-SOC Level Sample Distribution Statistics, that are provided in the Percent column of the Occupation Level Metadata file, are unweighted percents. Therefore, these values do not represent the estimated distribution of the O*NET-SOC population.

O*NET-SOC Establishment Response Rate - The establishment response rate is the percentage of sampled eligible establishments for the occupation that agreed to participate.

O*NET-SOC Employee Response Rate - The employee response rate is the percentage of employees sampled for the occupation who returned questionnaires.

O*NET-SOC Case Completeness Rate - The case completeness rate for an occupation refers the percentage of total returned questionnaires that were retained after editing and data cleaning.

Total Completes for O*NET-SOC – Total Completes refers to the total number of incumbents who completed one of the four questionnaire types.

Data Collection Mode - Incumbents had the option to complete the questionnaire either using a web-based survey or a paper survey. Valid responses are:
- Paper
- Web

How Long at Current Job - Incumbents indicated in the background questionnaire how long they had been in their current job. Valid responses are:
- 10 years or more
- 6-9 years
- 1-5 years
- <1 year
- Missing

Industry Division (Major Group Codes (SIC) within Division in parentheses) - Each sampled establishment was assigned to one primary industry division in the sampling frame. The Major Industry Group Codes (SIC) within the Division are provided in parentheses. Valid responses are:
- Agriculture, Forestry, Fishing (01 - 09)
- Mining (10 - 14)
- Construction (15 - 17)
- Manufacturing (20 - 39)
- Transportation, Communication, Electric, Gas, and Sanitary Services (40 - 49)

35

- Wholesale Trade (50 -51)
- Retail Trade (52 - 59)
- Financial, Insurance and Real Estate (60 - 67)
- Services (70 - 89)
- Public Administration (91 - 97)
- Non-classifiable (99)

Data Examples

Table 1 - O*NET-SOC Data

O*NET-SOC Code	Title	Description
11-1011.01	Government Service Executives	Determine and formulate policies and provide overall direction of Federal, State, local, or international government activities. Plan, direct, and coordinate operational activities at the highest level of management with the help of subordinate managers.
11-9012.00	Farmers and Ranchers	On an ownership or rental basis, operate farms, ranches, greenhouses, nurseries, timber tracts, or other agricultural production establishments which produce crops, horticultural specialties, livestock, poultry, finfish, shellfish, or animal specialties. May plant, cultivate, harvest, perform post-harvest activities, and market crops and livestock; may hire, train, and supervise farm workers or supervise a farm labor contractor; may prepare cost, production, and other records. May maintain and operate machinery and perform physical work.
41-9022.00	Real Estate Sales Agents	Rent, buy, or sell property for clients. Perform duties, such as study property listings, interview prospective clients, accompany clients to property site, discuss conditions of sale, and draw up real estate contracts. Includes agents who represent buyer.
51-2041.01	Metal Fabricators, Structural Metal Products	Fabricate and assemble structural metal products, such as frameworks or shells for machinery, ovens, tanks, and stacks, and metal parts for buildings and bridges, according to job order or blueprints.
53-6051.05	Motor Vehicle Inspectors	Inspect automotive vehicles to ensure compliance with governmental regulations and safety standards.
55-1011.00	Air Crew Officers	Perform and direct in-flight duties to ensure the successful completion of combat, reconnaissance, transport, and search and rescue missions. Duties include operating aircraft communications and radar equipment, such as establishing satellite linkages and jamming enemy communications capabilities operating aircraft weapons and defensive systems; conducting pre-flight, in-flight, and post-flight inspections of onboard equipment; and directing cargo and personnel drops.

Table 2 - O*NET Content Model Reference

Element ID	Element Name	Description
1	Worker Characteristics	Worker Characteristics
1.A	Abilities	Enduring attributes of the individual that influence performance
1.A.1.a	Verbal Abilities	Abilities that influence the acquisition and application of verbal information in problem solving
1.A.1.a.1	Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences
1.A.1.a.2	Written Comprehension	The ability to read and understand information and ideas presented in writing

Table 3 - Scales Reference

Scale ID	Scale Name	Minimum	Maximum
CT	Context Category	1	3
CTP	Context Category (Categories 1-3)	0	100
CX	Context	1	5
CXP	Context (Categories 1-5)	0	100
IM	Importance	1	5
LV	Level	0	7
OJ	On-The-Job Training (Categories 1-9)	0	100
PT	On-Site Or In-Plant Training (Categories 1-9)	0	100
RL	Required Level Of Education (Categories 1-12)	0	100
RW	Related Work Experience (Categories 1-11)	0	100

Table 4 - Job Zone Reference

Job Zone	Name	Experience	Education	Job Training	Examples	SVP Range
1	Job Zone One: Little or No Preparation Needed	No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a general office clerk even if he/she has never worked in an office before.	These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.	Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.	These occupations involve following instructions and helping others. Examples include bus drivers, forest and conservation workers, general office clerks, home health aides, and waiters/waitresses.	(Below 4.0)
2	Job Zone Two: Some Preparation Needed	Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a drywall installer might benefit from experience installing drywall, but an inexperienced person could still learn to be an installer with little difficulty.	These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.	Employees in these occupations need anywhere from a few months to one year of working with experienced employees.	These occupations often involve using your knowledge and skills to help others. Examples include drywall installers, fire inspectors, flight attendants, pharmacy technicians, salespersons (retail), and tellers.	(4.0 to < 6.0)

Table 5 - Ability

O*NET-SOC Code	Element ID	Element Name	Scale ID	Data Value	N	Standard Error	Lower CI Bound	Upper CI Bound	Recommend Suppress	Not Relevant	Date	Domain Source
29-2061.00	1.A.1.a.1	Oral Comprehension	IM	4.63	8	0.18	4.27	4.98	N	n/a	3/2003	Analyst
29-2061.00	1.A.1.a.1	Oral Comprehension	LV	4.13	8	0.3	3.55	4.7	N	N	3/2003	Analyst
29-2061.00	1.A.1.a.2	Written Comprehension	IM	3.5	8	0.19	3.13	3.87	N	n/a	3/2003	Analyst
29-2061.00	1.A.1.a.2	Written Comprehension	LV	3.5	8	0.27	2.98	4.02	N	N	3/2003	Analyst
29-2061.00	1.A.1.a.3	Oral Expression	IM	4.13	8	0.23	3.68	4.57	N	n/a	3/2003	Analyst
29-2061.00	1.A.1.a.3	Oral Expression	LV	4.13	8	0.23	3.68	4.57	N	N	3/2003	Analyst
29-2061.00	1.A.1.a.4	Written Expression	IM	3.75	8	0.37	3.03	4.47	N	n/a	3/2003	Analyst
29-2061.00	1.A.1.a.4	Written Expression	LV	3	8	0.33	2.36	3.64	N	N	3/2003	Analyst

Table 6 - Education, Training, and Experience

O*NET-SOC Code	Element ID	Element Name	Scale ID	Category	Data Value	N	Standard Error	Lower CI Bound	Upper CI Bound	Recommend Suppress	Date	Domain Source
11-2022.00	2.D.1	Required Level of Education	RL	1	0	25	0	n/a	n/a	N	3/2003	Incumbent
11-2022.00	2.D.1	Required Level of Education	RL	2	18.97	25	10.67	5.29	49.51	N	3/2003	Incumbent
11-2022.00	2.D.1	Required Level of Education	RL	3	7.36	25	6.68	1.04	37.51	N	3/2003	Incumbent
11-2022.00	2.D.1	Required Level of Education	RL	4	48.04	25	14.59	21.68	75.55	N	3/2003	Incumbent
11-2022.00	2.D.1	Required Level of Education	RL	5	2.23	25	3.53	0.08	39.09	N	3/2003	Incumbent
11-2022.00	2.D.1	Required Level of Education	RL	6	10.81	25	8.14	2.08	40.89	N	3/2003	Incumbent
11-2022.00	2.D.1	Required Level of Education	RL	7	0	25	0	n/a	n/a	N	3/2003	Incumbent
11-2022.00	2.D.1	Required Level of Education	RL	8	12.59	25	8.78	2.7	42.77	N	3/2003	Incumbent
11-2022.00	2.D.1	Required Level of Education	RL	9	0	25	0	n/a	n/a	N	3/2003	Incumbent
11-2022.00	2.D.1	Required Level of Education	RL	10	0	25	0	n/a	n/a	N	3/2003	Incumbent
11-2022.00	2.D.1	Required Level of Education	RL	11	0	25	0	n/a	n/a	N	3/2003	Incumbent
11-2022.00	2.D.1	Required Level of Education	RL	12	0	25	0	n/a	n/a	N	3/2003	Incumbent

Table 7 - Interest

O*NET-SOC Code	Element ID	Element Name	Scale ID	Data Value	Date	Domain Source
11-1011.01	1.B.1.a	Realistic	OI	2	3/2002	Legacy Analyst
11-1011.01	1.B.1.b	Investigative	OI	3	3/2002	Legacy Analyst
11-1011.01	1.B.1.c	Artistic	OI	2.33	3/2002	Legacy Analyst
11-1011.01	1.B.1.d	Social	OI	5	3/2002	Legacy Analyst
11-1011.01	1.B.1.e	Enterprising	OI	6.66	3/2002	Legacy Analyst
11-1011.01	1.B.1.f	Conventional	OI	5.66	3/2002	Legacy Analyst
11-1011.01	1.B.1.g	First Interest High-Point	IH	5	3/2002	Legacy Analyst
11-1011.01	1.B.1.h	Second Interest High-Point	IH	6	3/2002	Legacy Analyst
11-1011.01	1.B.1.i	Third Interest High-Point	IH	4	3/2002	Legacy Analyst
11-1011.02	1.B.1.a	Realistic	OI	2.66	3/2002	Legacy Analyst
11-1011.02	1.B.1.b	Investigative	OI	3.33	3/2002	Legacy Analyst
11-1011.02	1.B.1.c	Artistic	OI	2.33	3/2002	Legacy Analyst
11-1011.02	1.B.1.d	Social	OI	4.33	3/2002	Legacy Analyst
11-1011.02	1.B.1.e	Enterprising	OI	7	3/2002	Legacy Analyst
11-1011.02	1.B.1.f	Conventional	OI	5.66	3/2002	Legacy Analyst
11-1011.02	1.B.1.g	First Interest High-Point	IH	5	3/2002	Legacy Analyst
11-1011.02	1.B.1.h	Second Interest High-Point	IH	6	3/2002	Legacy Analyst
11-1011.02	1.B.1.i	Third Interest High-Point	IH	4	3/2002	Legacy Analyst

Table 8 - Knowledge

O*NET-SOC Code	Element ID	Element Name	Scale ID	Data Value	N	Standard Error	Lower CI Bound	Upper CI Bound	Recommend Suppress	Not Relevant	Date	Domain Source
11-2022.00	2.C.8.b	Law and Government	IM	2.57	25	0.34	1.9	3.3	N	n/a	3/2003	Incumbent
11-2022.00	2.C.8.b	Law and Government	LV	3.25	25	0.51	2.25	4.35	N	N	3/2003	Incumbent
11-2022.00	2.C.9.a	Telecommunications	IM	1.68	25	0.28	1.12	2.28	N	n/a	3/2003	Incumbent
11-2022.00	2.C.9.a	Telecommunications	LV	0.97	25	0.45	0.07	1.93	N	N	3/2003	Incumbent
11-2022.00	2.C.9.b	Communications and Media	IM	2.14	25	0.32	1.44	2.76	N	n/a	3/2003	Incumbent
11-2022.00	2.C.9.b	Communications and Media	LV	2.47	25	0.53	1.41	3.59	N	N	3/2003	Incumbent
11-2022.00	2.C.10	Transportation	IM	2.89	25	0.33	2.22	3.58	N	n/a	3/2003	Incumbent
11-2022.00	2.C.10	Transportation	LV	2.56	25	0.53	1.51	3.69	N	N	3/2003	Incumbent

Table 9 - O*NET-SOC Job Zones

O*NET-SOC Code	Job Zone	Date	Domain Source
11-1011.01	4	3/2002	Legacy Analyst
11-1011.02	5	3/2002	Legacy Analyst
11-2011.00	4	12/2004	Analyst
11-2021.00	4	7/2004	Analyst
11-2022.00	4	10/2003	Analyst
11-3011.00	4	10/2003	Analyst
11-3021.00	5	7/2004	Analyst
11-3031.01	5	3/2002	Legacy Analyst

Table 10 - Skills

O*NET-SOC Code	Element ID	Element Name	Scale ID	Data Value	N	Standard Error	Lower CI Bound	Upper CI Bound	Recommend Suppress	Not Relevant	Date	Domain Source
17-1011.00	2.A.1.a	Reading Comprehension	IM	4.24	17	0.25	3.67	4.73	N	n/a	3/2003	Incumbent
17-1011.00	2.A.1.a	Reading Comprehension	LV	4.98	17	0.39	4.17	5.83	N	N	3/2003	Incumbent
17-1011.00	2.A.1.b	Active Listening	IM	4.64	17	0.17	4.24	4.96	N	n/a	3/2003	Incumbent
17-1011.00	2.A.1.b	Active Listening	LV	5.49	17	0.33	4.8	6.2	N	N	3/2003	Incumbent
17-1011.00	2.A.1.c	Writing	IM	3.99	17	0.27	3.43	4.57	N	n/a	3/2003	Incumbent
17-1011.00	2.A.1.c	Writing	LV	5.15	17	0.25	4.57	5.63	N	N	3/2003	Incumbent
17-1011.00	2.A.1.d	Speaking	IM	3.96	17	0.22	3.53	4.47	N	n/a	3/2003	Incumbent

Table 11 - Tasks

O*NET-SOC Code	Task ID	Task	Task Type	Incumbents Responding	Scale ID	Data Value	N	Standard Error	Lower CI Bound	Upper CI Bound	Recommend Suppress	Percent Relevant-R	N-R	Standard Error-R	Lower CI Bound-R	Upper CI Bound-R	Recommend Suppress-R
17-1012.00	141	Prepare site plans, specifications, and cost estimates for land development, coordinating arrangement of existing and proposed land features and structures.	Core	73	IM	4.48	67	0.11	4.28	4.72	N	96.73	73	3.42	77.41	99.61	N
17-1012.00	142	Confer with clients, engineering personnel, and architects on overall program.	Core	74	IM	4.42	74	0.11	4.18	4.62	N	100	74	0	n/a	n/a	N
17-1012.00	143	Compile and analyze data on conditions, such as location, drainage, and location of structures for environmental reports and landscaping plans.	Core	74	IM	4.22	70	0.13	3.94	4.46	N	98	74	2.61	77.53	99.86	N
17-1012.00	144	Inspect landscape work to ensure compliance with specifications, approve quality of materials and work, and advise client and construction personnel.	Core	74	IM	4.04	73	0.14	3.72	4.28	N	98.97	74	1.82	73.22	99.97	N

Note: This is only a partial data example. Only 18 of the columns are included in this table.

Table 12 - Work Activity

O*NET-SOC Code	Element ID	Element Name	Scale ID	Data Value	N	Standard Error	Lower CI Bound	Upper CI Bound	Recommend Suppress	Not Relevant	Date	Domain Source
13-1051.00	4.A.1.a.1	Getting Information	IM	4.32	24	0.25	3.78	4.82	N	n/a	3/2003	Incumbent
13-1051.00	4.A.1.a.1	Getting Information	LV	3.64	24	0.55	2.46	4.74	N	N	3/2003	Incumbent
13-1051.00	4.A.1.a.2	Monitor Processes, Materials, or Surroundings	IM	3.5	24	0.35	2.78	4.22	N	n/a	3/2003	Incumbent
13-1051.00	4.A.1.a.2	Monitor Processes, Materials, or Surroundings	LV	4.19	24	0.51	3.14	5.26	N	N	3/2003	Incumbent
13-1051.00	4.A.1.b.1	Identifying Objects, Actions, and Events	IM	3.69	24	0.33	3.02	4.38	N	n/a	3/2003	Incumbent
13-1051.00	4.A.1.b.1	Identifying Objects, Actions, and Event	LV	4.04	24	0.52	2.92	5.08	N	N	3/2003	Incumbent
13-1051.00	4.A.1.b.2	Inspecting Equipment, Structures, or Material	IM	3.47	24	0.35	2.78	4.22	N	n/a	3/2003	Incumbent
13-1051.00	4.A.1.b.2	Inspecting Equipment, Structures, or Material	LV	3.67	24	0.55	2.56	4.84	N	N	3/2003	Incumbent
13-1051.00	4.A.1.b.3	Estimating the Quantifiable Characteristics of Products, Events, or Information	IM	4	24	0.29	3.4	4.6	N	n/a	3/2003	Incumbent
13-1051.00	4.A.1.b.3	Estimating the Quantifiable Characteristics of Products, Events, or Information	LV	3.79	24	0.54	2.68	4.92	N	N	3/2003	Incumbent
13-1051.00	4.A.2.a.1	Judging the Qualities of Things, Services, or People	IM	3.45	24	0.36	2.66	4.14	N	n/a	3/2003	Incumbent
13-1051.00	4.A.2.a.1	Judging the Qualities of Things, Services, or People	LV	3.83	24	0.54	2.68	4.92	N	N	3/2003	Incumbent

Table 13 - Work Context

O*NET-SOC Code	Element ID	Element Name	Scale ID	Category	Data Value	N	Standard Error	Lower CI Bound	Upper CI Bound	Recommend Suppress	Not Relevant	Date	Domain Source
17-1012.00	4.C.3.d.	Duration of Typical Work Week	CT	n/a	2.38	19	0.19	2	2.8	N	n/a	3/2003	Incumbent
17-1012.00	4.C.3.d.8	Duration of Typical Work Week	CTP	1	0	19	0	n/a	n/a	N	n/a	3/2003	Incumbent
17-1012.00	4.C.3.d.8	Duration of Typical Work Week	CTP	2	62.3	19	17.2	26.19	88.5	N	n/a	3/2003	Incumbent
17-1012.00	4.C.3.d.8	Duration of Typical Work Week	CTP	3	37.7	19	16.56	12.1	72.69	N	n/a	3/2003	Incumbent

Table 14 - Work Styles

O*NET-SOC Code	Element ID	Element Name	Scale ID	Data Value	N	Standard Error	Lower CI Bound	Upper CI Bound	Recommend Suppress	Date	Domain Source
11-2022.00	1.C.1.a	Achievement/Effort	IM	2.93	25	0.33	2.22	3.58	N	3/2003	Incumbent
11-2022.00	1.C.1.b	Persistence	IM	3.39	25	0.31	2.76	4.04	N	3/2003	Incumbent
11-2022.00	1.C.1.c	Initiative	IM	3.2	25	0.36	2.46	3.94	N	3/2003	Incumbent

Table 15 - Work Values

O*NET-SOC Code	Element ID	Element Name	Scale ID	Data Value	Date	Domain Source
11-1011.01	1.B.2.a	Achievement-Mean Extent	EN	4	3/2002	Legacy Analyst
11-1011.01	1.B.2.a.1	Ability Utilization	EN	4.12	3/2002	Legacy Analyst
11-1011.01	1.B.2.a.2	Achievement	EN	3.87	3/2002	Legacy Analyst
11-1011.01	1.B.2.b	Working Conditions-Mean Extent	EN	3.87	3/2002	Legacy Analyst
11-1011.01	1.B.2.b.1	Activity	EN	4.12	3/2002	Legacy Analyst
11-1011.01	1.B.2.b.2	Independence	EN	2.87	3/2002	Legacy Analyst
11-1011.01	1.B.2.b.3	Variety	EN	4	3/2002	Legacy Analyst

Table 16 - Occupation Level Metadata

O*NET-SOC Code	Item	Response	N	Percent	Date
11-2022.00	O*NET-SOC Establishment Response Rate	n/a	n/a	64.1	3/2003
11-2022.00	O*NET-SOC Employee Response Rate	n/a	n/a	60.4	3/2003
11-2022.00	O*NET-SOC Case Completeness Rate	n/a	n/a	89.6	3/2003
11-2022.00	Total Completes for O*NET-SOC	n/a	86	n/a	3/2003
11-2022.00	Data Collection Mode	Paper	76	88.4	3/2003
11-2022.00	Data Collection Mode	Web	10	11.6	3/2003
11-2022.00	How Long at Current Job	10 Years or More	33	38.4	3/2003
11-2022.00	How Long at Current Job	6-9 Years	8	9.3	3/2003
11-2022.00	How Long at Current Job	1-5 Years	37	43	3/2003
11-2022.00	How Long at Current Job	<1 Year	8	9.3	3/2003
11-2022.00	How Long at Current Job	Missing	0	0	3/2003
11-2022.00	Industry Division (Major Group Codes (SIC) within Division in parentheses)	Agriculture, Forestry, Fishing (01-09)	0	0	3/2003
11-2022.00	Industry Division (Major Group Codes (SIC) within Division in parentheses)	Mining (10-14)	0	0	3/2003
11-2022.00	Industry Division (Major Group Codes (SIC) within Division in parentheses)	Construction (15-17)	4	4.7	3/2003
11-2022.00	Industry Division (Major Group Codes (SIC) within Division in parentheses)	Manufacturing (20-39)	29	33.7	3/2003

Table 17 - O*NET Scale Anchors

Element ID	Element Name	Scale ID	Anchor Value	Anchor Description
1.A.1.a.1	Oral Comprehension	LV	2	Understand a television commercial
1.A.1.a.1	Oral Comprehension	LV	4	Understand a coach's oral instructions for a sport
1.A.1.a.1	Oral Comprehension	LV	6	Understand a lecture on advanced physics
1.A.1.a.2	Written Comprehension	LV	2	Understand signs on the highway
1.A.1.a.2	Written Comprehension	LV	4	Understand an apartment lease
1.A.1.a.2	Written Comprehension	LV	6	Understand an instruction book on repairing missile guidance systems
1.A.1.a.3	Oral Expression	LV	2	Cancel newspaper delivery by phone
1.A.1.a.3	Oral Expression	LV	4	Give instructions to a lost motorist
1.A.1.a.3	Oral Expression	LV	6	Explain advanced principles of genetics to college freshmen
1.A.1.a.4	Written Expression	LV	1	Write a note to remind someone to take food out of the freezer
1.A.1.a.4	Written Expression	LV	4	Write a job recommendation for a subordinate

Table 18 - O*NET Survey Booklet Location

Element ID	Element Name	Survey Item Number
1.A.1.a.1	Oral Comprehension	AB01
1.A.1.a.2	Written Comprehension	AB02
1.A.1.a.3	Oral Expression	AB03