GETTING STARTED

HINTS AND TIPS FOR WORKING WITH A WEB APPLICATION

OTIS is a web application. It does not require any special software to use, just a network connection and a copy of Microsoft Internet Explorer. For the most part, OTIS does work with other web browsers, like Chrome, Firefox, or Safari, but Internet Explorer is the only browser guaranteed to be compatible with OTIS.

As a web application, OTIS users are not required to have a connection to ITD’s network. Users can access OTIS from anywhere via the internet, with the same level of access as if they were on ITD’s network.

Here are some things to keep in mind as you work with OTIS in the web application environment:

**DO** – open multiple tabs or windows for different sections of OTIS (Home, Edit Project, Reports, etc.).

**DON’T** – open multiple sections of the same type, especially the Edit Project screen (OTIS may get confused as to which one to update).

**DO** - use the controls provided within the application

**DON’T** – use the forward and back browser buttons to navigate. Any data you entered or search results you generated may be gone when you return to them.

**DO** – use the CTRL-F hot-key combination to search for any text value on the current page.

**DON’T** – be impatient. Response time for OTIS, especially for users outside of ITD’s internal network, depends on other network traffic on your internet connections.

**DO** – use the export feature on OTIS reports to extract your report results to a PDF, spreadsheet, or other file format.
How do I get to OTIS?

There are two different web addresses for OTIS. The first is for use within ITD’s network:

http://otisweb/otis.web

Users with an ITD user name and password will be logged into OTIS automatically and taken to their Home screen when they direct their web browser to the internal address.

The second address is for users outside of ITD’s network:

https://otisweb.itd.idaho.gov

Unlike the internal address, which logs users in automatically, external users must enter their email address and OTIS password manually.

All ITD users receive read-only access automatically, so an official account is unnecessary for them. However, if you need write access, or need to access OTIS from the outside address, you will need an account.

How do you obtain an OTIS account? ITD users should send an email request to ITD-OTIS@itd.idaho.gov. External users should visit the external address and click the “Request Access” link.

Figure 1 - Logon Screen at the OTIS Internet portal

**TIP**: be sure to click on “Privacy Policy” to read and understand OTIS data privacy limitations.
After clicking on “Request Access”, the following screen displays requesting your information:

![New External User Information Screen](image)

Figure 2 - New External User Information Screen

Provide all requested information, and then click on “Submit”. Once your account is finalized, OTIS will send you a standardized “Welcome to OTIS” email.

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From: OTIS@itd.idaho.gov
Sent: Friday, July 18, 2014 4:03 PM
To: Joe Smith
Subject: Welcome to OTIS
Importance: High

Your request to access the OTIS application has been granted. Enclosed are your username and password.

Username: Joe.Smith@itd.idaho.gov

Password: X689u6B6Z2. You may reset at your earliest convenience by clicking the 'My OTIS' link in the top right corner of the application and filling out the change password information.

To access OTIS please use this link: http://otisweb/otis_web

Thank You

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Figure 3 - Sample "Welcome to OTIS" email
The welcome email includes an initial password that is only used to access OTIS via the **external** address. To change the password, log in to the external address and click on the “My OTIS” button in the upper right corner of the screen. OTIS passwords must include at least seven alpha-numeric characters plus at least one non-alpha-numeric character (!, @, #, etc.).

If you access OTIS via the **internal** address, OTIS recognizes you automatically without a password.

**Remember:** *For ITD internal users, changing your OTIS password from within My OTIS does not change your internal ITD password; and changing your ITD password from within Windows will not affect your OTIS password. Have we confused you yet??*

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**OTIS BASICS**

**TRAINING GOALS**

At the end of this training, OTIS users will be able to:

- Visit the OTIS external web logon page and request access;
- Access OTIS (and manually logon if necessary);
- Understand the different Alerts, To Do List, and Reports homepage areas;
- Search for specific projects by Key Number using the Go To feature;
- Search for a range of projects using Advanced Search;
- Use basic display grid features such as sorting and grouping;
- Identify location, budget, obligation, milestone and other information for a project; and
- Run and understand basic OTIS reports.
LOG IN TO OTIS

If inside ITD’s Network . . .

- Navigate to URL http://otisweb/otis.web
  You will be passed through OTIS security and taken to your OTIS home page automatically.

If outside ITD’s network (anywhere on the Internet) . . .

- Navigate to URL https://otisweb.itd.idaho.gov/
- Log in with a valid user ID / Password combination.
- If you haven’t logged in recently, you may be required to read the Privacy Policy first.

HOME PAGE

Your OTIS Home page provides a personalized dashboard that shows a number of features customized for you.

Let’s take a quick tour:

1. **Go To Key Number**: To get information on a project, enter a valid key number in the "Go To Key Number" field and click "Go" or press Enter.
2. **To Do**: Users with Edit permissions and who are responsible for tasks in OTIS have a “To Do” section on their homepage with links to outstanding work items such as Project Change Requests and Obligations.
3. **Alerts**: A list of updates on pending tasks, notices, overdue items, etc. Click the little circled “i” to read the alert’s text. Click the title of the alert to go directly to the affected project or request. To mark an alert as read or unread, or to delete it, click its checkbox and then the appropriate button at the bottom of the Alerts section.
4. **Reports**: Assign your favorite reports to this list for easier access. The list is controlled on the My OTIS screen.
5. **My OTIS**: Click on "My OTIS" to select personalized reports, change your password, etc. (Passwords can only be changed while logged in via the external address!).
Practice Exercise: Try entering some key numbers of interest into the **Go To Key Number** field and click on **Go**. This will send you to the Edit Project screen showing scope, location, schedule and budget details for your project. Don’t worry, we’ll spend some more time to go through the different information tabs shown on the project details screen.
OTIS MENUS

Users navigate between different sections of OTIS by using the menus that appear at the top of each screen. The exact number varies depending on user permissions, but there is a maximum of seven.

- **Home**: Jumps to the Home screen, which is described on the previous pages.
- **Reports**: Jumps to the Reports screen, where users can run reports on a variety of OTIS data.
- **Advanced Search**: Jumps to the Advanced Search screen, where users can find projects without using a key number.
- **Obligation Request**: Takes user to a list of active obligation requests.
- **Change Request**: Takes user to a list of active change requests.
- **Scenario**: Takes user to a list of draft transportation program scenarios.
- **Admin**: Takes user to a list of administrative tools.

ADVANCED SEARCH

The **Go To Key Number** search field at the top of each screen allows you to quickly retrieve information for a project, but what if you don’t know the project’s key number? That’s where the Advanced Search screen comes in handy. It contains nearly 20 different fields to mix and match as you try to locate your projects. For example, if you are trying to find a bridge replacement project in District 1 that is programmed for FY2020, set Program Year to “2020”, District to “District 1”, and Performance Program to “Bridge Restoration”, and then click “Search”.

At the top of the criteria are checkboxes for “Approved” and “Draft”. In this context Draft projects are those that haven’t been assigned key numbers yet. If your search includes a record with a blank key number, click the Approved box and search again to get rid of it.
**Key Number**: If you think you know the Key Number, but aren’t sure, try entering it here first to verify it. This field only recognizes a complete key number.

**Project Name**: Search for a fragment of the project’s name. For example, “bridge” will return all projects with “bridge” anywhere in their name.

**Reference Number**: Search for a project’s temporary key number. It is a “begins with” search, so searching for “ORN00” will return all temporary key numbers between ORN00000 and ORN00999, while searching for “999” will return nothing because all reference numbers start with a prefix like ORN or ARN.

**Work Authority**: Search for any work authority associated with a project. Like Project Name, it will search for any fragment you enter (“E17” will return E171000 through E179999; “151” will include both 0451510 and E151550).

**Federal Aid Number**: Search for any Federal aid number associated with a project. Like Project Name, it will search for any fragment you enter.

**Location Phrase**: Skip this field. It is not used consistently and may be removed in the future.

**Program Year**: Search for the program year assigned to a project. It only recognizes years from 1990 and 2999.

**Project Status**: Search by the project’s current status (Development, Awarded, Closed, etc.). Pick from a drop-down list.

**Route**: Search for a project’s primary route. Like Project Name, it will search for any fragment you enter (“33” will include both SH 33 and SMA-9833). Note that projects without a specific location might use “STATE”, “LOCAL”, or “OFFSYS” instead.

**City**: Search for any city associated with a project. It will try to find any fragment you enter (“falls” will include Twin Falls, Idaho Falls, and American Falls).

**County**: Search for a project’s primary county. Pick from a drop-down list.

**District**: Search for a project’s district. Pick from a drop-down list.

**Segment**: Search for any segment associated with a project. It will try to find any fragment you enter. Projects without a specific location may use “STATE” or “LOCAL” instead.

**Major Program**: Search by a broad measure of project funding type. For FAA funded use “Aeronautics”; for FTA funded use “Public Transportation”. Highways projects are broken out into “Federal-Aid/State highway system”, “Federal-Aid/Local road system”, and “State Funded Program”.

**Work Class**: Search by the project’s work classification. Pick from a drop-down list.

**Performance Program**: Search for any of a project’s programs (projects can have more than one), active or inactive. Pick from a drop-down list.

**Eligible Source**: Search for any funding source associated with a project, active or inactive. Pick from a drop-down list.

**Project Properties**: Search for any project property tag associated with a project. Pick from a drop-down list.
Once you enter your criteria and click “Search”, OTIS returns your results.

The number of result records is currently capped at 300, so whenever you get exactly 300, beware! There are probably more matching records that aren’t being displayed. Just keep adding criteria until you have reduced the number of records below 300. On the other hand, if you have no results at all, make sure that your various criteria are not contradicting each other. For example, searching for “I 90” and “District 4” finds nothing because I 90 only passes through District 1. Click the “Clear” button to clear all criteria at once.

Once you find your project of interest, click the “Edit” button or the hyper-linked project name to go to the Edit Project screen.

If you would like to save your results for future reference or analysis, click the “Export Results” button to export them to a CSV file.

If you still have a large number of results, you may wish to filter and sort within those records. Thankfully the “Grid” containing the search results has a number of such features.
GRID FUNCTIONALITY

- To group the results, drag a **column header** to the top of the Grid (where it says “Drag a column header and drop it here…”). You may group by more than one column at a time.
- To sort the results, click a **Column** name to toggle between sorting from low to high and high to low.
- To filter the results, click the **Funnel** and choose from the advanced filtering capabilities.

![Figure 9 - Using Funnel Filters](image)
OTIS maintains project information broken out under a series of tabs and sub-tabs.

There are six main tabs: *General, Budget, Work Authority, Obligation, History,* and *Documents*.

Two of the six main tabs—*General* and *Budget*—are further broken out into more detailed sub-tabs.

For the *General* tab, the sub-tabs are *Project, Locations, Scope,* and *Milestone & Tags.*

For *Budget,* the sub-tabs are *Summary, Program Details* and *History.*

These are the eleven tab combinations containing project information:

- **General / Project** – summarizes the entire project record.
- **General / Location** – describes the physical location of the project with the option of mapping it.
- **General / Scope** – describes the intent of the project.
- **General / Milestone & Tags** – holds the OTIS, Environmental, PSS, Right of Way, and FHWA milestones, plus Project Properties.
- **Budget / Summary** – summarizes the project schedule, obligations, and expenditures at a high level.
- **Budget / Program Details** – displays detailed schedules and obligations by phase and year, along with the share percentages.
- **Budget / History** – records changes to scheduled costs by year, phase, and program.
- **Work Authority** – details the work authorities associated with a project.
- **Obligation** – summarizes obligations by year and phase, and by work authority and appropriation code; displays obligation issue details; and allows you to initate new obligation issues.
- **History** – records the history of project changes by change requests and program updates.
- **Documents** – stores files associated with a project in electronic form.
GENERAL PROJECT INFORMATION

[Most of the following examples use Key Number 19727 to help demonstrate the project information screens.]

The General Project screen provides a quick look at how the project is defined, when it is scheduled in the Program, and provides an overview of its Scheduled, Obligated, and Expended funds.

Practice Exercise: Conduct your own Advanced Search for a Key Number of your own choosing and see if you can find the following information from the General/Project tab:

1) What is the Work Authority?
2) Which Performance Programs are associated with this project?
3) What is the total amount of Expended PE?
4) What is the total Scheduled Cost?

Figure 10 - General/Project Screen Showing Project Description, Status, Budget and Programs
PROJECT LOCATIONS

Click on the Locations tab. The resulting screen is split into two sections: The leftmost is titled Overall Project Location Characteristics and provides calculated factors for project length, number of lanes, and geographical distributions of the project across city, urban and county boundaries.

The grid on the right titled Project Location Details contains all the segments and mileposts associated with the project. The “Primary” column indicates which location will be used as the “representative” one in reports, etc.

To see the actual details themselves, click on a specific segment/milepost record in the Project Location Details grid and the lower half of the screen will fill out with the corresponding detailed location information.

The upper section (#1) summarizes the details in the sub-grids below (#2). Note that a stretch of road may pass through multiple counties, cities, etc. When faced with a choice, OTIS picks a single value as the “representative” one for a given location record.
OTIS utilizes ITD’s Linear Reference System to map project locations. The LRS requires an all-numeric Segment, and the project must have a length of at least .002 miles. (Tip: To map a point location, temporarily increase the ending milepost by .002 miles.)

Clicking the **Map It** button (#3) opens a new window showing the LRS map for that location with the specific milepost range highlighted in yellow. If the project has multiple locations, you will need to select and map each location separately. If no highlighted map appears, then either the LRS is down, or the location is not plottable.

TIP: **Simply close the web browser window containing the map to exit.**

**Practice Exercise:** Go to a project and see if you can find the following information from the **General/Locations** tab:

1) How many location records does it have?
2) Does it pass over any bridges or railroad crossings (RRX)?
3) Try the “Map It” button—Did it work for that location?
4) If the location was a single point (the beginning and ending mileposts were the same), try increasing the ending milepost by .002 miles and “Map It” again. Did it work this time?
PROJECT SCOPE

Click on the **Scope** sub-tab to find out more about a project’s intentions. In addition to the traditional Work Class and Sub Class categories, this screen also displays a Public Description written in non-technical terms.

Other fields are not quite as lay-friendly, like Budget Code and GASB Type.

**Practice Exercise**: Go to a project and click the Scope tab:

1) Does the Public Description make any sense to you?
2) How many Subclasses does the project have?
3) Is the project addressing any deficiencies?
PROJECT MILESTONES AND TAGS

Click on the Milestone & Tags tab to see the various milestones and properties associated with a project.

The OTIS Milestones are generated automatically within OTIS. The Environmental Milestones are entered by ITD’s HQ Environmental section staff. The PSS Milestones are updated from the PSS system each night. The Right of Way Milestones are updated from the ROWDI system each night. The FHWA milestone is entered manually.

BUDGET SUMMARY

Clicking on the Budget tab brings up the Budget/Summary screen, which focuses on a summary of the project’s scheduled costs by year and phase, though it also includes a similar Scheduled, Obligated, and Expended grid as found on the General/Project tab. The Scheduled Cost grid groups by Program by default, but has the option to group by Eligible Source as well.
BUDGET DETAILS

Clicking on the **Budget/Program Details** tab displays the Program Details list, the Shares list, and the Scheduled Cost and Obligation Summary grids for each selected program. There are two programs listed for Key Number 19727, Pavement Preservation and Non-Participating. Clicking on one program or the other in the Program Details list updates the rest of the screen with that program’s information.

![Budget/Program Details screen](image)

**Practice Exercise**: Click the Budget / Program Details tab for your chosen project:

1) Are there multiple programs for this project? Are they all active?
2) What portion of the cost are the Feds paying for on that particular program? What organization is paying the rest?
3) Has the project begun obligating any of its scheduled costs?
BUDGET HISTORY

Clicking on the **Budget/History** tab reveals a record of budget changes by year, phase, and program, sorted by Date. Currently this grid only allows sorting, not filtering or grouping.

![Budget/History Screen](image)

WORK AUTHORITY

Clicking on the **Work Auth** tab displays the Work Authorities grid with information on every work authority associated with the project. New work authorities are added from this screen as well.

![Work Authority Screen](image)

**Practice Exercise**: Click the Work Auth tab for your chosen project:

1) Are there multiple work authorities for this project? Are they all open?
2) When was the work authority established?
3) Does it have an expiration date?
OBLIGATIONS

Clicking the Obligation tab displays the obligation history for a project. It is broken into three sections: The **Obligation Agreement Summary** grid (#1), which shows total obligations by year and phase; the **Obligation Agreement History** grid (#2), which records each obligation issue; and the **Summary Project Total Obligations** grid (#3), which summarizes obligations by work authority and appropriation code.

To view the line item details for a specific obligation issue, click the arrowhead next to that issue number to reveal the **Line Items** grid. For more details on a specific Line Item, click the arrowhead next to it and the **Obligation Item Details** section appears.

To view the remarks and workflow history for an obligation issue, click the bar titled **Obligation Request Details**.

The green **New Issue** button in the lower right corner is used to initiate a new Obligation Request issue.

![Figure 20 – Obligation screen](image)
PROJECT HISTORY

Clicking on the **History** tab displays the project’s History grid, which records all project changes over time. Unlike most OTIS grids it cannot be sorted, filtered, or grouped.

![Figure 21 – Project History screen](image)

Clicking on the **Compare** button opens a new window with a summary of that record’s changes. Changes are broken up into four categories, with the number of changed fields in parentheses. In the case of the 3/7/2016 record, only the General Information category was affected. Clicking on it expands that category to reveal the specific changes...

![Figure 22 – Project Comparison popup window](image)
...A new Work Authority!

![Figure 23 – Portion of Project Comparison popup window with General Information category expanded](image)

**Practice Exercise:** Click the History tab for your chosen project (if it doesn’t have any records, try some different key numbers until you find one that does):

1) Pick a record and click the Compare button. How many categories have changes?
2) Open some of the categories with changes. What sort of fields were changed?
3) Did the change record’s “Summary of Change(s)” description adequately describe the recorded changes?
PROJECT DOCUMENTS

Clicking on the *Documents* tab displays a grid showing all the files currently attached to the project.

![Figure 24 - Document screen](image)

To view a file, click on its record and the Document Details sub-grid appears. Click the *View Doc* button to open the file. OTIS can accept nearly any kind of file type, as long as it is 4 MB or less in size.

![Figure 25 - Document Details screen](image)

**Practice Exercise**: Click the Documents tab for your chosen project (if it doesn’t have any records, try some different key numbers until you find one that does):

1) How many items are attached to your project?
2) What is the earliest Upload Date? How about the latest?
3) Try viewing a couple of the attached documents.
OTIS REPORTS

Click on the “Reports” menu to jump to the Reports section of OTIS.

As of this writing, there are 35 reports available or under construction (see the count at the lower right). You may need to use the slider bar along the right side to see all the reports on a page. Navigate to other pages by using the controls in the lower left corner. The Reports grid always shows the Name and Description columns, though some users may see a few administrative columns as well.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1414 History</td>
<td>Historical data from Project Tracking</td>
</tr>
<tr>
<td>1414 Report - Changed Project</td>
<td>For current change requests</td>
</tr>
<tr>
<td>1414 Report - New Project Summary</td>
<td>For new draft projects</td>
</tr>
<tr>
<td>2101 Print Report</td>
<td>2101 Issue Print Report</td>
</tr>
<tr>
<td>Appropriation Code List</td>
<td>All Appropriation Codes available in OTIS</td>
</tr>
<tr>
<td>Appropriation Reconciliation Report</td>
<td>Review Carryover, Adjustments, Available, Obligations, and Balance for selected Appropriation Codes</td>
</tr>
<tr>
<td>Appropriation Transaction Detail</td>
<td>UNDER CONSTRUCTION</td>
</tr>
<tr>
<td>Board_Program_Sheets</td>
<td>UNDER CONSTRUCTION</td>
</tr>
<tr>
<td>Corridor Financial Plan</td>
<td>Project/Corridor Financial Plan</td>
</tr>
<tr>
<td>District Schedule Sheets, Approved</td>
<td>District budgets by program, fiscal year, and phase for the Approved Program.</td>
</tr>
<tr>
<td>District Schedule Sheets, Scenario</td>
<td>District scheduled costs by program, fiscal year, and phase for Scenarios</td>
</tr>
<tr>
<td>District_Schedule_Sheets</td>
<td>UNDER CONSTRUCTION</td>
</tr>
<tr>
<td>End Step</td>
<td>Obligations at the End Step on selected days.</td>
</tr>
<tr>
<td>FHWA - Program to Date</td>
<td>UNDER CONSTRUCTION; Easy version of STIP report</td>
</tr>
<tr>
<td>Grouping Code Definition</td>
<td>UNDER CONSTRUCTION</td>
</tr>
</tbody>
</table>

For an example, click on the name “2101 Print Report”. This brings up the report’s criteria screen.

This report requires the following values:
- Key Number, and
- Issue Number.

Note that entering the Key Number and typing “Tab” or “Enter” causes the Issue Number field to fill in. If you wanted a different Issue Number from the default, simply click on it and select the correct one from the resulting list.

The “Optional Note” field is not required. If you choose to enter something, it will appear in the upper right corner of the report.
After filling in the criteria, click the “View Report” button.

In the example below, we set **Key Number** to “1004”, **Issue Number** to “5”, and **Optional Note** “File”.

![Figure 28 - Project List Report Selection Criteria Set](image)

Once the criteria is set, click “View Report” to generate the report, and it will fill up the rest of the screen below the criteria section.

![Figure 29 - Project List Report Output](image)
Note the thin navigation bar between the report criteria section and the report itself. Use the leftmost section to navigate between pages of your report (#1). Use the blank box and “Find | Next” buttons (#2) to search within the report. Click the blue floppy disk icon (#3) to save the report in one of several formats (your best bets are PDF for later printing or viewing and CSV for exporting the raw data). Ignore the circular “Refresh” button (#4). Click the printer icon (#5) to print the report.

IMPORTANT: The printer icon requires a certain piece of supporting software to be installed on your computer. If the printer icon does not work for you, save the report as a PDF first, then print that instead.

As you become more experienced with OTIS reports, you may wish to add the ones you use most frequently to your OTIS Home screen. To do so, click on “MyOTIS” and check the reports you wish to include. Then click Update Profile. Your checked reports should appear in the Home screen’s Reports section.
WRAPPING UP

PRACTICE AND QUESTIONS

At this point in the training, it is important to spend some time practicing. Be sure you are familiar with the following topics:

- Project Lookup with GoTo Key Number and Advanced Search
- Reviewing Project Information Including Budgets, Scopes of Work, Locations, and Obligations
- Extracting project information to exported files
- Running Reports
- Modifying the “My OTIS” environment

This is also a great time to ask more specific questions about the areas you will be using the most.

OTIS TROUBLESHOOTING

OTIS is highly dependent on multiple ITD servers and the network connections between those servers and your computer. Problems with these servers and/or network can slow OTIS down or even prevent it from working at all.

If OTIS is preventing you from completing your work, please contact the OTIS administrators immediately. For users outside of ITD’s network, please email or call Nathan Hesterman (Nathan.hesterman@itd.idaho.gov, 208-334-8263) or Brent Hendry (Brent.hendry@itd.idaho.gov, 208-334-8261). For users on ITD’s network, use the same contact information above, or send an email to ITD-OTIS@itd.idaho.gov.

Be sure to let the administrators know which web browser you are using, and whether or not you can access other web pages. If you are getting an error message, or are seeing something strange, take a screenshot and email it to the administrators. Some common error messages look like this:
However, the most likely problem users will experience is slow response time. In some cases this is unavoidable—some of the more complicated reports are pushing a lot of data around, so they might take a minute or two to complete. On the other hand, opening a new tab or screen should never take more than a minute. Submitting a change request or an obligation request should never take more than an hour to reappear on their respective lists. If you encounter such delays there may be a problem with one of the OTIS servers, so please let the administrators know.