# Cost Transfer Tool

The Cost Transfer Tool originated out of the Administrative Process Redesign (APR) initiative at UW-Madison in mid-2010. DoIT began working with members of APR, Accounting Services, Research and Sponsored Programs (RSP), and various campus departmental representatives in late summer of 2010 to begin work on the tool. The tool was delivered in its first release in March 2011. Several additional changes/enhancements have occurred over the years.

This document describes the **CURRENT** state of the tool and how it works.

#### Features

The Cost Transfer Tool is designed to make a balanced transfer of accounting from one funding source to another. It delivers the following high-level features:

- Captures necessary metadata about the transfer such as initiator, date, reason justification comments, documents (attached files), end-user comments, and information about jobs (if SCT).
- Gives the user the ability to search WISER (through a simplified interface) to select transaction(s) that need to be transferred, thus eliminating the possibility of creating transfers for data that never existed in the GL. This step also eliminates the tedious entry of most of the data allowing the preparer to simply focus on where the funding is being transferred to.
- Validation of the data includes combo edits, valid ChartFields and other smaller validations to ensure the data is clean and valid when going to the GL.
- Provides a custom workflow system that requests signatures for approval of the transfer based on the content of the transfer itself. Baseline approvals will be set at the Division level.
- For non-salary cost transfers, after approval, the transfer is automatically interfaced to the GL via the Journal Entry Tool (JET). This happens by leveraging the back-end of JET so that no human data entry is required. For SCT, a different process is used to format the transfer so that it is ready to be keyed into the HRS Direct Retro system. Due to the technical complexity, no direct HRS interface is provided.
- The tool also provides reporting features so users can find transfers they've made in the past. It also provides high-level reports on transfer usage and collects statistics on time elapsed to make transfers. This was desired by APR because they were interested in reducing the time taken for a transfer to be made on campus.
- Integrates to WISER so that when looking at a transaction in WISER, user can initiate a transfer right from the reporting system. The transaction is loaded into Cost Transfer Tool and basic metadata is requested. This works for SCT and NSCTs.

## SCT vs. NSCT

Cost transfers are divided into two forms – salary and non-salary. Each cost transfer has a transfer number which acts like a unique business key. Salary transfers begin with "S" and non-salary begins with "N" followed by a unique sequence number.

Salary transfers tend to be more complicated because they require capturing specific job information and work more on the salary payment/pay period unit-of-work rather than the journal line-level unit-ofwork. Salary transfers take longer to process because there is no direct connection between the tool and HRS. They can also involve more workflow rules because of effort reporting (which is specific to sponsored programs).

Non-salary transfers involve selecting lines from the GL. This process is made possible because of WISER. The tool searches the WISER database based on criteria entered by the user to allow them to make a selection. "From" accounting lines are automatically generated based on these selections. A user can elect to transfer the full or partial amount of the "from" accounting and can also choose to move that amount to one or more "to" lines that receive the negation of that amount. This creates a perfectly balanced journal every time. NSCTs also can be interfaced directly to the GL through the JET application programming interface (JETAPI). This can save a great amount of time in the entry and posting process (in fact, some NSCTs can appear in the GL the same business day as they are initiated).

#### Data Entry

We've already talked how WISER data is utilized to find transactions, so this section will focus more on data entry once everything has been selected from WISER data.

There are many convenient tools to aid in entry:

- Upon login, users see work lists such as any transfers routed to them, open transfers that are in
  process of approval or posting, transfers one must sign, and completed transfers. Accounting
  Services also sees work lists for SCTs that need entry in HRS and any transfers that failed JET
  interfacing and need to be retried.
- Look up tool allows one to see the full transaction detail from WISER data without going to WISER or query tool (and can be directly populated from WISER).
- "From" side is locked except for amount. User can perform a partial transfer if desired.
- "To" side can be split so that a single "from" line can move to multiple destination funding sources.
- A copy all tool exists so that if one needs to do many lines in a transfer where the "to" side is all the same funding (for example, to move N charges from department X to department Y).
- Transfers can be marked urgent to signal to approvers that this transfer must be expedited. Urgent transfers automatically make it to the top of work lists.
- Error messages are presented clearly in a summarized format.
- At any time, a user can check validations to see if they have any mistakes they do not need to submit to see these errors.
- Debits and Credits are listed for reference to ensure the transfer is balanced.
- Comments can be entered in the Documentation tab to further explain the transfer.
- Files such as PDFs or XLSX can be attached to the transfer along with a note for each.
- Routing exists to send the transfer to a person for review/correction. This basically sends the record to a person and gives them editing rights over it. Along with the comments system, this can facilitate on-the-record conversations between staff members to resolve issues or justify a transfer. Routing can be to any person on campus.
- A complete history is kept of all status changes and who a record was routed to, etc.

## Validations

Both SCTs and NSCTs undergo a series of validations to ensure that all data is valid and clean. The following high-level validations are performed:

- SFS combo edits are invoked. All required chartfields are checked, combination rules are applied.
- Debits and credits must be equal.
- Line descriptions must be filled in.
- The "from" amount cannot be greater than the original posted amount and cannot be zero.
- The transfer cannot be empty (it must have at least one set of balanced transfer items).
- Sponsored and non-sponsored projects cannot be mixed in the same transfer. For example, a sponsored project cannot be in set 1 of a transfer and then a non-sponsored is in set 2. A sponsored set can transfer to a non-sponsored project in the same transfer set (such as moving to a gift project).
- For sponsored programs, any transfers older than 90 days must have a standard 90-day justification form filled out. Cost Transfer Tool makes this form available electronically and captures the data. This only applies to transactions on certain sponsored funds.
- Transactions cannot be transferred a second time. For example, if 100% of the amount of an original transaction is transferred, the tool keeps a record of this and disallows any further transfer. Any remaining amount from a previous partial transfer is eligible to be transferred, however.
- Budget accounts, balance sheets (such as liabilities, deferred expense, AR, etc.), or revenues accounts are not allowed. In other words, it must be an expenditure.
- For NSCTs, salary account codes are not allowed.
- For SCTs, non-salary account codes are not allowed.
- The sign of the "from" amount must be preserved in the negated form (for example, if the original posting was for \$1, the "from" amount must be -\$1.). This prevents the user from flipping the sign accidentally.
- Transfers are limited to 50 total sets. Transfers larger than this usually must be handled via a custom journal posting through JET via Accounting Services.

If any of these rules are violated, the tool informs the user and halts any further processing until the corrective actions are taken.

## Workflow

Once the transfer completes all entry and passes validations, it then moves on to the next step – approval in the form of human review. The general high-level life cycle of the transfer is as follows:

User Entry  $\rightarrow$  Wait for Approvals  $\rightarrow$  Pending Posting  $\rightarrow$  Posted/Complete

The approvals process is dynamic and depends on the content of the transfer itself. For example, the use of sponsored projects changes the approval process when compared to a simpler department to department, non-sponsored transfer.

One core concept in CT workflow is the idea of an approval "tier". A tier is essentially a role-level where one or more signatures is required to collect to close the tier. Tiers are ordered so that the first tier must be fulfilled before the second tier, and that must be fulfilled before the third and so on. This ensures that the high-level tiers do not see the transfer on their work lists until it is ready for them to sign. Upon a rejection, the rejection usually goes to the previous tier where it must be corrected or deleted by the preparer. Each tier can collect 1 or more signatures which is usually dependent on how complicated the transfer is.

Here is the proposed Division level approval example:

- 1. User makes a simple non-salary transfer from one department to another in the same division. The transfer passes validation and is submitted for approval.
- 2. The division representative signs finalizing the approvals.
- 3. Since all signatures are collected, the transfer moves to Waiting to Post state.
- 4. The transfer is interfaced through JET to SFS. It will be posted in the next run of the posting job (usually within 15 minutes during business hours).
- 5. The Journal ID is associated with the transfer for auditing purposes. The transfer is automatically completed when the JET interface is successful.

## Person Resolution

Now that we've explained the approval item generation workflow, it is time to discuss the final component of the workflow process: person resolution. This refers to the process that the tool uses to resolve who can sign on a given approval item. Each approval item has a role associated with it (such as PI, Division, RSP, etc.). Each role requires a different technique to look up how to find people that can sign. This drives how e-mail notifications work and security for determining if a given user is able to sign or not.

It is important to note that when each new tier opens, the resolution process runs. This means that the approval item is not tied to a specific person until they actually sign. The person or persons that are determined to sign is delayed until the last possible moment and is not computed ahead of time (for example at the submission of the transfer).

For each distinct role, here is a breakdown of how the resolution process is determined:

- **Division** the tool maintains a table of divisional dept. ranges that map to employees that work in the division and what dept(s) they can sign for. This table is maintained centrally at Accounting Services. Each division can divide their workload however they desire.
- **PIs** the tool looks up the connection between Project ID and PI from a WISDM data source. This is defined in SFS when the project is setup. Since there is a day delay between when an entry is added/edited in SFS and WISDM's extract of that data, this might not be completely

current and can lead to a subtle problem. There is no workaround to that except to wait another business day.

- RSP in SFS there is a connection between "billing specialist" and the award/project. WISDM has this data as well, however, the connection between billing specialist and actual employee ID is not defined anywhere in SFS or WISDM. The tool utilizes a crosswalk table that maps billing specialist ID as defined in SFS to employee ID. This table is maintained by RSP and must be kept up-to-date to be as accurate as possible whenever staffing changes at RSP.
- **RSP Supervisor** defined exactly like for RSP but has a supervisor flag attached to the person's account. This is used for suspense account functionality.
- **Effort Reviewer** defined in a table as well. No end-user or administrative page has been written to change this. DoIT must perform data update if this changes.
- Work Study defined in a lookup table. Accounting Services can edit this table with an admin page as needed.

At the time when a tier opens, the approval items for that tier are found and then each approval item is run through the person resolution process. Ultimately, a list of people is generated and the e-mail addresses on file for those people are used to send a notification to sign.

#### Other Aspects to Workflow and Approval

- When a record is rejected and goes back to be edited, upon submission a second time, existing signatures made prior to rejection are preserved. The system "fast-forwards" to the highest, unsigned tier at that time. This was done to avoid tasking PIs with signing a second time when a minor accounting correction took place. RSP in this case ultimately ensures the transfer is valid and appropriate.
- It is possible for a division approver to make his/her own transfer and sign it as well. There is no conflict of interest considered.
- If person resolution resolves to a project with CHAIR or DEAN (a generic term) listed as the PI, no actual person can be resolved and so PI approval is not required on those projects.
- In some cases, PI tier becomes stuck because a PI that must sign has left the University. In this case, a new PI must be assigned in SFS and extracted to WISDM. The record then must be put back in edit mode and re-submitted.
- If a person is away on vacation or leave, a back-up signer can be made (a delegate). That person can sign as in lieu of that person and this fact is recorded on the approval item. Delegates can be effective dated as well.
- For rejection, pre-canned responses are made available for convenience. This is to support RSP staff that see transfers rejected for the same reasons over and over again.
- Some divisions utilize a "soft-approval" mechanism for departments. Since there is no department-level approval, this is sometimes left as a comment in the comments tab. The division can check there and then provide the signature when they are satisfied.
- After 7 days, if a user hasn't signed, they will be sent a reminder e-mail (which they can turn off). This is done in a nightly batch program.