# Effective Use of Waterfall Charts

<table>
<thead>
<tr>
<th><strong>Purpose</strong></th>
<th>This tool provides guidelines and tips on how to effectively use waterfall charts to communicate research findings.</th>
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</thead>
<tbody>
<tr>
<td><strong>Format</strong></td>
<td>This tool provides guidance on waterfall charts and their purposes, and shows examples of preferred practices and practical tips for waterfall charts.</td>
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<tr>
<td><strong>Audience</strong></td>
<td>This tool is designed primarily for researchers from the Model Systems that are funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR). The tool can be adapted by other NIDILRR-funded grantees and the general public.</td>
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</tbody>
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Waterfall Charts

- Waterfall Charts are used to visually illustrate how a starting value of something (say, a beginning monthly balance in a checking account) becomes a final value (such as the balance in the account at the end of the month) through a series of intermediate additions (deposits, transfers in) and subtractions (checks written, drafts from the account, ATM cash out).

- Illustrates the cumulative effect of sequential or categorical positive and negative values applied to the starting value.

- The additions and subtractions can either be time-based (values in and out by month) or category-based (various sources of revenues and various sources of expenses for a given time period).

- Totals and major Sub-Totals are represented by full columns, while sub-components of the incoming and outgoing streams are represented by color-coded floating blocks.

- Such a chart has the appearance of a Waterfall.
Waterfall Charts

- Waterfall Charts are most often used in business applications, but can be used to illustrate any process with additions and subtractions to a starting value.
- Waterfall charts can be created in Excel using Stacked Column Charts and by removing shading and outline on the “hidden” building blocks.
- Waterfall Charts are also called Bridge Charts.
Waterfall Charts

Chatham Food Bank - Operations Account Cash Flow - December 2014

- Starting Cash Balance in Operating Account 01 Dec 2014: $23,119
- Budgeted Operating Revenue for December: $86,465
- Additional Higher Than Expected Revenue From Cash Donations: $37,684
- Additional Pro-rated Monthly Revenue From Newly Won Grants: $8,750
- Total Start Balance Plus Revenue for December: $156,018
- Fixed Expenses [Salaries, Insurance, Rent etc] for December: $60,837
- Variable Expenses [Planned Purchases Food, Utilities etc] for December: $45,628
- Additional Expenses [Emergency Food Procurement Due to Higher Than Budgeted Demand]: $25,517
- Total Expenses for December: $131,982
- Ending Cash Balance in Operating Account 31 Dec 2014: $24,036

Source: Mock Data