What will I find in this section of the toolkit?

<table>
<thead>
<tr>
<th>Toolkit Section</th>
<th>Tools in the Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to the Toolkit</td>
<td>Why do a Needs Assessment?</td>
</tr>
<tr>
<td></td>
<td>What might your Needs Assessment Include?</td>
</tr>
<tr>
<td></td>
<td>Getting Ready: Laying the Groundwork before You Begin the Needs Assessment</td>
</tr>
<tr>
<td>Assessing Local Employer Needs</td>
<td>Assessment of Local Employer and Industry Needs</td>
</tr>
<tr>
<td>Market Sizing</td>
<td>Instructions for Sizing the Market for Plus 50 Workforce Education Programming</td>
</tr>
<tr>
<td></td>
<td>Market Sizing Tool</td>
</tr>
<tr>
<td>Survey Development</td>
<td>Survey Development Guidelines</td>
</tr>
<tr>
<td></td>
<td>Sample Survey</td>
</tr>
<tr>
<td>Survey Administration</td>
<td>Survey Administration Guidelines: How to Administer a Needs Assessment Survey</td>
</tr>
<tr>
<td>Survey Analysis</td>
<td><strong>Survey Analysis Guidelines</strong></td>
</tr>
<tr>
<td></td>
<td>Sample Survey Analysis Plan</td>
</tr>
<tr>
<td>Conducting Focus Groups and Using</td>
<td>Focus Group Guidelines: How to Plan for and Facilitate a Focus Group</td>
</tr>
<tr>
<td>Focus Group Data</td>
<td>Sample Focus Group Questions</td>
</tr>
<tr>
<td></td>
<td>Summarizing Focus Group Results</td>
</tr>
<tr>
<td>Writing your Needs Assessment Report</td>
<td>Sample Discussion Questions for Group Reflection on your Data</td>
</tr>
<tr>
<td></td>
<td>Sample Needs Assessment Report Outline</td>
</tr>
<tr>
<td></td>
<td>Sample Recommendations</td>
</tr>
</tbody>
</table>
What is Survey Analysis? It is not Rocket Science!

People often think of “data analysis,” especially when the data come from surveys, as “number crunching.” Although you will need to crunch of few numbers to analyze your survey data, we mean by “analysis” something less esoteric. Quite simply, analysis is all about using data to reveal information that is important to making decisions. When analysis is included in a report, as it is in the needs assessment you are undertaking, the term “survey analysis” includes telling the story of the survey results to others. What deeper question about plus 50 needs are you asking? How do the survey results help you answer it?

When reading these guidelines and doing your own survey analysis, continue to return to this touchstone – it will help you stay focused on what really matters in data analysis, rather than getting caught up in number crunching details. If you find yourself getting lost in the data, just ask yourself: “What is it that I really want to know? How do the survey results help me answer that question? How can I present the results to tell my readers how the survey results answer that question?”

How to Use the Survey Analysis and Presentation Guidelines

These guidelines are intended to support your college’s effort to analyze and present survey data from an assessment of plus 50 workforce programming needs in your college’s service area. These guidelines will help you to decide what questions your data can answer, what type of analyses to do, and how to present and interpret results. You can use the results of the survey analysis to present your data in many different ways and to communicate the results of your needs assessment survey to a variety of audiences. There is no one right way!

It is important to keep in mind that data analysis is an iterative process. Often results from one type of analysis may yield new questions, resulting in another round of data analysis. For instance, you may look at the results of how survey respondents answered a question about their career development needs and then wonder how those results differ between men and women. You should be prepared to engage in a few rounds of data analysis based on the types of questions you ask, how “deep” into the data you wish to go, and the types of responses you get to your survey. You may also present preliminary results to your colleagues, and they may come up with additional questions that you may take back to the data for another round of analysis.

Research Questions and Analysis Plans

Good survey analysis is always anchored in a clear “research question.” The term “research question” is simply a handy way to refer to your touchstone: the question of “what do I really want to know?” To keep your analysis organized, you should create an analysis plan that links research questions to survey questions. In the tool kit we have provided a Sample Analysis Plan that shows how the questions on the sample survey might be used to answer specific research questions. This sample plan is meant to provide you with some initial ideas. You will have your own research questions, and will tailor the survey to your college’s needs and plans.
Two Approaches to Survey Analysis and Presentation

There are two approaches to analyzing survey data that we outline here: one is relatively simple (“basic analysis”) and the other is slightly more complex but allows you more options (“advanced analysis”). The basic analysis utilizes the built-in analysis and graphing capabilities of survey software, such as Survey Monkey or Zoomerang. The advanced analysis involves using Microsoft Excel to conduct more sophisticated analyses and create more customizable charts and graphs. Depending on your background and experience with statistical analysis and graphing, you may choose either approach or a combination of both. Guidelines for basic and advanced package analysis are outlined below.

Basic Analysis and Results Presentation Using Online Survey Software Programs

If you administer your needs assessment survey using an online survey software program, then no further data entry is necessary because the data is stored in a database online. If you administered paper surveys, then you need to enter the survey responses into an online survey software program. To do this you would create an account and follow the instructions for designing an online survey. You will then manually enter responses from the paper surveys into the online survey. Many survey software programs, such as Survey Monkey or Zoomerang, have the capabilities to perform basic analysis of your survey data. For individual closed-ended questions these online survey software programs will tabulate the number and percentage of respondents who clicked each response option, such as how many men and how many women responded to your survey. They also allow you to perform comparisons on how different groups of respondents answer your survey questions. You should consult the software program’s Help Center and tutorials for further instructions on how to create custom charts.¹

Below are some sample charts created using Survey Monkey. The pie chart on the left shows the percentage of respondents in each age group. The stacked column chart on the right shows the percentage of respondents in each age group based on their gender. Survey Monkey can also create bar, line, and area charts.

Advanced Analysis and Results Presentation Using Excel

You may wish to do more customized or more complex analyses than online survey software programs will allow. In this case, we recommend that you use Excel to store, analyze, and graph your data.

¹ Please note that charting functions are not typically available with basic, free packages of online survey software programs. You will have to purchase a professional or premium subscription of a software package to receive this advanced feature.
Data Entry and Storage

- If the survey was administered online, you can download all of the responses collected into Excel. See the Help Center of your survey software program for information on instructions.
- If you administered paper surveys you will need to manually enter the survey responses into Excel.

Number Crunching and Visual Presentation

- Once the data has been exported or entered into Excel, you will use Excel’s functions to do the analysis, such as calculating averages or the frequency of responses (the pie chart above is an example of a frequency distributions).
- To make charts and other graphics, use the chart wizard or reference demos for further instructions on how to create custom charts.
- For further assistance you should engage a work study student or someone in your college’s Institutional Research Department who has knowledge of conducting analysis and creating charts in Excel. Work study students may be able to provide help with data entry and the IR Department may be able to provide technical assistance on analysis.

Getting Additional Help

- You have the distinct advantage of working on a college campus, where you are surrounded by people who have a great deal of expertise: professors; students; and staff (especially staff in your Institutional Research Department).
- If you want assistance with number crunching or charting, consider reaching out to faculty and staff on your campus, or engaging a work-study student. Individuals such as these are highly valuable sources of free or inexpensive help!

Below are some sample charts created using Excel. The bar chart on the left shows the percentage of respondents interested in pursuing each workforce training goal. The bar chart on the right shows the percentage of respondents in each age group who prefer taking classes in each time of day or week.

![Workforce Training Goals](chart1)

![Preferred Time of Day of Classes for different Age Groups](chart2)

Note, percentages do not total 100% because respondents could check all that apply.
Types of Analysis

There are several procedures you can use to analyze your needs assessment data. Below are two basic types of analyses that will provide useful information about your survey sample. You can do both of these types of analysis in online survey software programs or Excel.

For all types of analysis, it is important to keep in mind that you are analyzing the data based on the number of people who answered that particular question, not the number of people who responded to the survey. So, you might have had 120 people respond to your survey, but only 100 people answered the question about their career goals. In this case, you should make sure that Excel or your online survey software is calculating the percent of people who chose each career goal response option based on 100 people, not based on 120. (In more technical terms, you want to make sure that you are using 100 as the denominator in your calculations, not 120.) There are many reasons why the number of people who responded to the survey are not necessarily the same as the number of people who responded to any one question. Here are some example reasons why people may have not answered a particular question or skipped it: they may have felt the survey was too long and only completed some of the questions, they may not have known the answer to a particular question, or based on their response to a prior question they may have been instructed to skip certain questions.

Descriptive Statistics

Descriptive statistics describe and summarize the quantitative information from your survey about your sample. It includes such summary measures as:

- Mean (the average value – e.g. the average home price in your county);
- Median (the value at which half of the values are above, and half are below – e.g. at the median home price in your county, exactly half of the houses cost more; and the other half costs less); and
- Frequencies (the percentage of responses that fall into a set of categories – e.g. in your county, 20% of the housing prices are $200,000 or less; 50% of them fall in the $200,000-$500,000 range; and the remaining 30% are over $500,000).

Strictly speaking, you cannot use your results to describe the actual population that your survey was sent to. For example, say that 65% of your respondents said they were interested in a basic computer course. This does not mean that 65% of your target population is interested in the computer course! This is because your sample of survey respondents does not perfectly represent the larger population from which it was drawn.

Don’t worry!! This is always the case with survey data. While you cannot generalize with 100% accuracy to the larger population, you can use descriptive statistics to get an excellent idea of what the population’s needs and preferences are. Also, you will often be concerned more with comparisons between numbers than with the value of a number. For example, you may be interested in seeing what was most often marked as an obstacle to taking college courses.

Cross-tabulations

Simple cross-tabulations allow you to compare the results of two mutually exclusive groups of respondents. An example of a simple cross-tabulation would be comparing the career goals of male respondents to female respondents. You do not need to stop at two categories – you can compare as many groups as you like. For example, you can see how the career goals of respondents age 50-64, 65-74, and 75+ differ from one another.
Example Analysis and Presentation Approach Using the Sample Survey

To give you an idea of how to analyze, interpret, and present your survey results, this toolkit offers an example of how this might be done with the sample survey provided in this toolkit. Below are examples with selected questions from the sample survey (the actual survey questions are shown for your easy reference).

- This tool highlights the approach to the analysis, which always begins with the research question that you want to answer, or the information you want to bring to light with a particular survey question.
- The examples also include possible ways to present survey results with charts or tables. In the examples, we have used Excel to create all the charts.

**EXAMPLE 1**

Research Question: What is the demand for workforce training and career development services?

Survey Question 2: Which of the following are you interested in?

- Taking courses that can help me find employment, or change or advance my career.
- Career services (career counseling, job fair, etc)
- Neither. → You are done with the survey! Please follow the instructions for returning the survey to [College Name].

**Guidance for Analysis and Interpretation**

For this survey question, the research question you are examining really breaks down into two sub-questions: (1) what percentage of respondents checked that they are not interested in courses or career services (those who checked “neither”)?; and (2) for those who are interested in one or the other, what is the rate of interest in or demand for each?

What percentage of your target market is interested in workforce training and career development services?

What is the percentage that did not check “neither”? Say that 25% checked “neither.” This means that 75% of your respondents are interested in courses and/or services. You should be careful in generalizing to the population: in other words, just because 75% of your respondents are interested, this does not necessarily mean that 75% of your population or target market is interested. This is because those who are not interested in these are much less motivated to return the survey to you, especially if they filled it out on paper and can’t turn it in with a click of a mouse.

The rate of respondents interested in workforce development programming gives you an idea of demand among those in your target market. You may also want to investigate what the rate of interest is for different age groups. It is reasonable to expect that there is more demand for workforce development programming among those 50-64 but how much more? You may be surprised to find that there is actually significant demand among those 65-74, or even 75+. To investigate this, you would do a “crosstab” (see above) to separate your respondents into age categories, and find out what percent checked one or both of the first two response options. Understanding the demand in different age groups will help you decide how to tailor your programming. For example, if you have enough demand among those 65 and older that you want to specifically target their needs, you might have a greater emphasis on services that can help people address ageism during their job search.

**What is the demand for courses? For services?**

To understand the needs of your target market, you want to find out where the interest lies – whether it is in taking courses, or accessing services, or both. There are several percentages useful for analysis: (1) those interested in...
courses; (2) those interested in services; (3) those interested only in courses and not in services; (4) those interested only in services and not in courses; (4) those interested in both. Looking at all these aspects of the question will help you to decide where to concentrate resources in your programming – in workforce training programs, in career development services, or in both.

Sample Graphic and Interpretation

A majority of respondents age 50-64 reported that they are interested in career services (73%). A little over half (54%) have an interest in taking courses that will help them find employment, change, or advance their careers. There is less interest in either of these offerings in the older age cohorts.

EXAMPLE 2

Research Question: What are the barriers to taking college courses, perceived by the plus 50 population?

Survey Question 5: Which of the following do you believe might be obstacles to your taking courses at [name of community college]? (Check all that apply.)

- When classes are at times that do not fit my schedule.
- Classrooms are not physically very accessible (up stairs, desks uncomfortable, etc)
- Courses too expensive
- To register, I might need to find my high school transcript
- No access to easy transportation to campus
- Concern about returning to a school environment after many years out of school
- Limited knowledge of how to use computers
- The professors might be gearing their teaching style to young adults
- I need help choosing classes, and advising might be geared to young adults
- I need to brush up on math skills
- I need to brush up on writing skills
- I need to brush up on my study skills
- None of the above

Guidance for Analysis and Interpretation

This question is designed to help you identify what the people in your target market perceive as obstacles to coming to your college for coursework. Understanding their perceptions about this will guide decisions regarding how your program should provide support or remove these obstacles if possible. It can also provide guidance for marketing
your program. For example, if those in your target market fear that courses are too expensive, but in fact courses are affordable or financial assistance is available, you should include this information in your marketing materials.

In analyzing this question, you will be investigating what percentage of respondents checked each response. What responses were checked the most often? These are the most common obstacles that your target market perceives. You should also separate out your sample by age group, and see what percentage checked each response within each age group. For example, you may want to know if physical accessibility is a far more frequent issue among those in the older age cohorts, or if it is a widespread issue.

Sample Graphic and Interpretation

Responses to questions about barriers to taking courses reveal that many of the potential students do in fact perceive that they face multiple challenges. They most frequently reported that enrolling in courses that fit their schedules could be challenging (79%). Other common challenges are: taking courses after having been out of the school environment for many years (68%); cost (63%); and the perception that professors gear their teaching styles towards younger students (62%).

EXAMPLE 3

Research Question: What type of tailoring will make the plus 50 population feel welcome?

Survey Question:

<table>
<thead>
<tr>
<th>12. Career services can be tailored to those 50 and older in a variety of ways. What are the ways that are personally important to you?</th>
<th>Not very important</th>
<th>Important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least some of the staff there are 50 or older.</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Career counselors have been trained specifically to understand the specific assets and challenges of a 50+ job seeker.</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Job fairs include only, or mostly, employers that are “plus 50 friendly.”</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
12. Career services can be tailored to those 50 and older in a variety of ways. What are the ways that are personally important to you?

The paper and electronic resources available focus on the job search and career issues specific to those who are 50+

There are “brush-up” classes for adults getting ready to return to the classroom or workforce, helping them to refresh skills they have but have not used recently.

<table>
<thead>
<tr>
<th>Guidance for Analysis and Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>How people answered this question will help you to see what is really important to them in tailoring services. The first thing to look at is whether high rates of people (for example, over 50%) say that a particular way of tailoring services is not very important. If a majority of your target market does not find a particular aspect important, then you may decide not to include it in your program design. However, your “cutoff” percentage is something you should choose yourself. A majority may not find something important, but you may still consider an aspect of tailoring important if 40% of your respondents check “important” or “extremely important.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample Graphic and Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>When asked about the importance of tailoring career services to the needs of students age 50 or older, respondents indicated that tailored services are personally important to them. Respondents particularly value career counselors who are knowledgeable about and understanding of the needs of adults age 50 or older: a majority (83%) of respondents reported that it is either “important” or “extremely important” that career counselors have been trained specifically to understand the specific assets and challenges of a 50 or older job seeker. In addition, respondents reported that it is either “important” or “extremely important” for the college to host job fairs that only or mostly include employers that are “plus 50 friendly” (78%) and for the college to provide paper and electronic resources that focus on the job search and career issues specific to those who are 50+ (77%).</td>
</tr>
</tbody>
</table>
The sample plan provided here uses the sample survey also provided in the toolkit to provide you with ideas about how to go about linking survey questions to research questions, and what you might think about in making your plans to slice and dice the data.

<table>
<thead>
<tr>
<th>Research Question, or: Information the Survey Can Uncover</th>
<th>Survey Questions</th>
<th>Using the Survey Question to Answer the Research Question, or: To Highlight Specific Information</th>
</tr>
</thead>
</table>
| What does the survey sample look like? How representative is the survey sample of the target population? | Q1: Questions on gender, age, zip code, and household income | • For each of these demographic items, look at the distribution of responses among the choices.  
• This first tells you the demographic profile of those who returned the survey.  
• It is also a good idea to use this information to compare your sample with the demographics of the area, which are available from census data. Please see the Market Sizing Instructions and Using Publically Available Data sections of this tool kit for more specific information about where to find that information and how to use it.  
• Understanding the extent to which your survey represents your local plus 50 population will help you when you draw inferences from the data. You can remind those who read the needs assessment that this sample may under-represent or over-represent certain age or gender groups. |
<table>
<thead>
<tr>
<th>Research Question, or: Information the Survey Can Uncover</th>
<th>Survey Questions</th>
<th>Using the Survey Question to Answer the Research Question, or: To Highlight Specific Information</th>
</tr>
</thead>
</table>
| What is the demand for workforce training and career development services? | Q2: Which of the following are you interested in? | • Look at the percentage of respondents that checked each answer option.  
• Look first at how many checked *either* the first or the second response. This gives you an idea of what percentage of those in your target population are interested in workforce development programming. However, remember that if this survey was administered on paper, this percentage is likely to be greater than the true percentage – since those who checked “neither” are less likely to have gone to the trouble of turning in the survey.  
• Next look at the percentage of respondents checking “courses” or “services” to understand their relative popularity.  
• Also run crosstabs to see what the overlap is – what percentage of the population wants both? |
| In what fields is the plus 50 population interested in pursuing a career? This information helps you decide the fields in which to develop workforce training courses. | Q3: In which of the following fields do you have an interest? | • Look at the percentage of respondents that checked each answer option. Rank them from high to low.  
• This highlights the fields that are the most popular among your respondents. |
| What are the goals of plus 50 population in taking courses: to upgrade specific skills, or to obtain a credential or certificate? | Q4: Which of the following would you like to pursue? | • Look at the percentage of respondents that checked each answer option. Rank them from high to low.  
• The relative frequency with which each item is checked will tell you whether respondents are interested in a program of courses leading to a credential or certificate, or whether they are more interested in taking a few courses in order to upgrade some specific skills.  
• The frequency with which people check the first option will tell you what the need is for a specific type of course that helps plus 50 individuals become competitive in the workplace: a basic computer course. |
| What are the barriers to taking college courses, perceived by the plus 50 population? | Q5: Which of the following do you believe might be obstacles to your taking courses at [name of community college]? | • Look at the percentage of respondents that checked each answer option. Rank them from high to low.  
• The frequency with which these items are checked will tell you about those things that might deter them from taking courses as the college.  
• The more frequently something is identified as a barrier, the more you may want to take it into consideration when developing and marketing your program. |
<table>
<thead>
<tr>
<th>Research Question, or: Information the Survey Can Uncover</th>
<th>Survey Questions</th>
<th>Using the Survey Question to Answer the Research Question, or: To Highlight Specific Information</th>
</tr>
</thead>
</table>
| What scheduling works best for the plus 50 population? | Q6: What time of day or week would you like to take classes? | • Look at the percentage of people who check “daytime” vs. “evening,” and “weekday” vs. “weekend.”  
• You should also select just those respondents who checked “weekday,” and – within that group – look at the percentage that checked “daytime” vs. “evening.” You should then do the same for “weekend” (select only those checking “weekend” and look at the percentage for “daytime” and “evening”).  
• Looking at these results will give you an idea of what type of scheduling is the most convenient for your local plus 50 population. |
| Is the plus 50 population willing to spend more hours per week in class in order to take accelerated courses? | Q7: How much time per week would you be able to attend classes? | • Look at the distribution of responses among the choices.  
• Note that the respondents were allowed to check only one answer – this tells us the most hours that people are willing to spend per week in order to accelerate their progression.  
• Looking at these results will provide information that will help you decide on course length. |
| What delivery mode for classes is most attractive to the plus 50 population? | Q8: What delivery mode of classes would interest you? | • Look at the percentage of respondents that checked each answer option. Rank them from high to low.  
• This will show you what delivery modes are most popular, and help you decide what mode(s) you will use in creating offerings for your local plus 50 population. |
| What are the employment needs and goals of the plus 50 population? Is the need concentrated among those who do not have a job and need one, among people who are looking to advance their careers, or people who want to start a business? | Q9: Please tell us about your current career goals? | • Look at the percentage of respondents that checked each answer option. Rank them from high to low.  
• Those who answered “I am unemployed and want to find a job,” or “I have to go back to work,” are those who are in the position of needing employment and possibly having lost their jobs as a result of the economic downturn. They will need career services focused on getting back into employment as soon as possible, and on keeping a positive attitude.  
• Those who answered “I want to start or grow my own business” will be most interested in services for entrepreneurs.  
• Those who provided other answers will be interested in services that can help them figure out the right next steps to take in their career such as career assessment. |
<table>
<thead>
<tr>
<th>Research Question, or: Information the Survey Can Uncover</th>
<th>Survey Questions</th>
<th>Using the Survey Question to Answer the Research Question, or: To Highlight Specific Information</th>
</tr>
</thead>
</table>
| What specific career services would the plus 50 population find to be the most useful? | Q10: Here is a list of services that can be tailored specifically to the needs and interests of those 50 or older? Which of the following would you use? | • Look at the percentage of respondents that checked each answer option. Rank them from high to low.  
• This survey question builds on question #9, and shows what types of services are likely to be the most popular. |
| What are the specific job search skills that the plus 50 population really needs? | Q11: What are you interested in learning about? | • For each option in question 11, look at how answers are distributed among “not very interested,” “interested,” and “extremely interested.”  
• You may find that there is little interest in starting a business or writing a cover letter, but a great deal of interest in using the internet for a job search, or locating jobs to apply for. Information such as this will help you to understand where it makes sense to focus your career services.  
• Seeing that fairly large percentages check “not very interested” for some items will help you know that programming in this area may not be a good use of your resources (and this can be very useful information, since resources are scarce). |
| What type of tailoring will make the plus 50 population feel welcome? | Q12: Career services can be tailored to those 50 and older in a variety of ways. What are the ways that are personally important to you? | • For each option in question 12, look at how answers are distributed among “not very important,” “important,” and “extremely important.”  
• The results will show how important specific types of tailoring are. For example, respondents may care a lot about having access to “brush-up” classes, but they may care little about having staff on site who are in their age group. |