

# TURNING YOUR DATA INTO KNOWLEDGE AND ACTION

---

Garrett Lee Smith National Outcomes Evaluation  
ICF

# Contents

Defining the Purpose.....	2
What is your Goal? .....	2
Who is your Audience?.....	3
What is the Message?.....	4
Interpreting what you have .....	5
GLS NOE Data .....	5
A closer look at your GLS NOE data .....	5
Secondary Data.....	6
Social Math .....	7
Creating Shareable Information.....	8
Visualization Tools .....	9
Color.....	9
Font .....	9
Icons and Graphs.....	10
Flow and Layout .....	11
Planning Your Visualization .....	12
Appendix A – GLS NOE Evaluation Questions .....	13
Appendix B – Secondary Data Resources.....	16

## Defining the Purpose

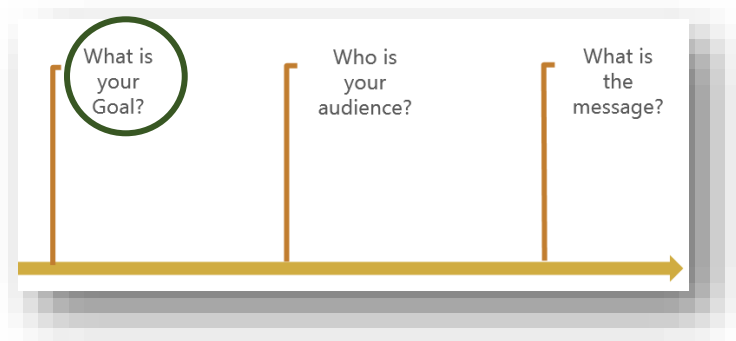
The data you have collected for the National Outcomes Evaluation of the Garrett Lee Smith (GLS) Youth Suicide Prevention and Early Intervention Program, as well as available secondary datasets can be powerful tools to assist you in connecting with others regarding the importance of suicide prevention programming. This guide will walk you through the steps of taking your data and turning it into something understandable, useable, and shareable. The purpose of this guide is to help you to determine:

- ◆ What is the goal of sharing my data/findings?
- ◆ Who is the appropriate audience?
- ◆ Where can I find data?
- ◆ How do I interpret and use the data?
- ◆ How should I present my data to share my findings?

### What is your Goal?

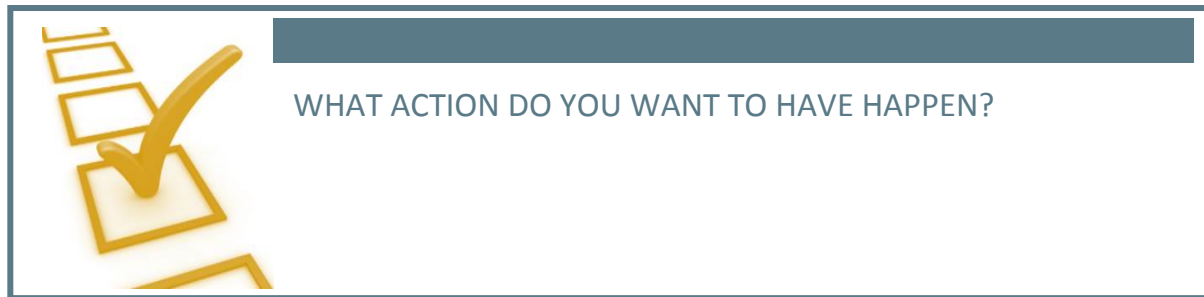
From social media and infographics to stakeholder reports and public presentations, there are many ways to share your program data/findings. In addition to the many *ways* to share your data/findings there are many *whys*. To find your goal, think about what you are trying to accomplish by sharing your program data/findings. There are several reasons why you may want to share data/findings from your GLS grant. You may want to:

- ◆ Raise awareness about suicide and suicide prevention;
- ◆ Increase knowledge or change attitudes about suicide and your work;
- ◆ Engage potential funders, partners, and supporters;
- ◆ Share successes;
- ◆ Share findings presented in an academic/professional setting with a broader audience.



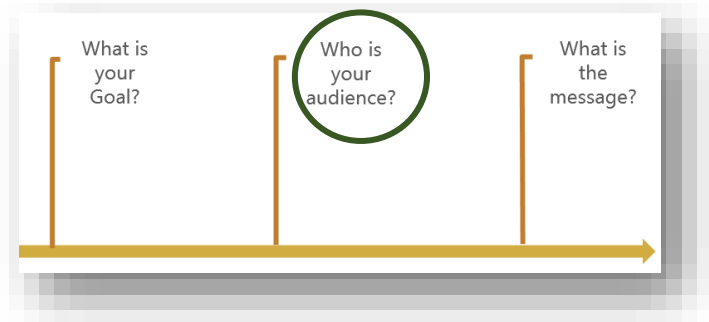
Along with defining the goal of sharing your data, think about the desired outcomes of sharing this data. What would you like the audience to do? For example:

- ◆ Increased funding to expand program offerings;
- ◆ Get more people involved with programs;
- ◆ Programmatic changes to create a zero suicide environment;



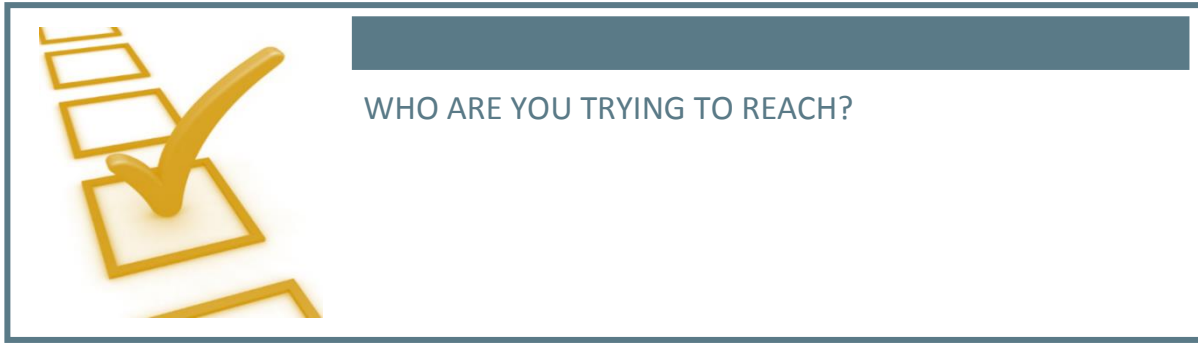
## Who is your Audience?

Once you have the goal and the desired action defined, the next step is to identify the audience. Selecting your audience will help you determine the key information that you need to gather to achieve the goals for action. Knowing your audience will determine how you frame your message.



The following questions will help you identify your audience:

1. What key audience(s) do you want to reach and influence?
2. Who do you want to know about suicide in your state/tribe/campus?  
Ex. State politicians, policy-makers
3. Who do you want to know about your program?  
Ex. Program managers, parents seeking help
4. Who can take action to meet your goals?  
Ex. State politicians, local policy-makers, program managers



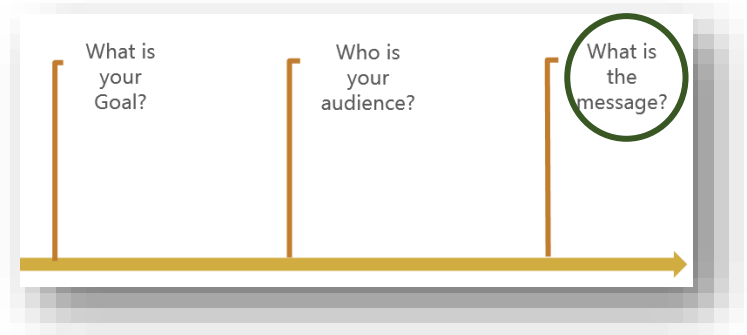
Take a moment to really think about your audience. *Remember you are not the intended audience.* Put yourself in their mindset. Who are they? What is important to them in their professional role? What information do they need to see? What information do they trust?

**RESTATE THE OVERALL GOAL:**

Audience (Be Specific)	What do they need to know/hear?	What information do they trust?	What are the specific data points?	What will they need to hear to get on board?

**What is the Message?**

After you have identified a goal and the audience who can take your desired action, it is time to think about your message. When developing your message it is important to think about 1) the types of information needed to *persuade your audience to take action* (i.e. what will resonate with the audience), as well as 2) the information they will need to *be able to take action*.



# Interpreting what you have

## GLS NOE Data

Now that you have a goal of what you want to share and who you want to share it with, let's review your GLS-related data and other sources of information. You have collected vast amounts of data as part of the National Outcomes Evaluation (NOE). This data can help you communicate to your audience the things you have accomplished in your suicide prevention program. Sources of GLS data include:

- ✓ Instrument Datasets
- ✓ Grantee Summary Reports
- ✓ Previous Infographics

A full list of evaluation questions addressed by GLS data can be found in Appendix A.

## A closer look at your GLS NOE data

The worksheet below walks you through where to locate data elements from the GLS NOE data that you have already collected.

---

**Directions:** Fill-in the number below by locating the data from your Grantee Summary Report (GSR).

---

Number of people trained through Gatekeeper training program (TASP)

Number of youth screened through suicide screening program (EIRF-S)

Percent of trainees who used training to identify youth at risk for suicide (TUP-S)

Number of youth identified as at-risk through a screening activity or by a gatekeeper (EIRF-S)

Percent of youth who receive mental health services following referral out of youth referred to mental health services (EIRF-I)

Percent reduction in suicide/suicide attempts among youth reached by your program (SBHF)

## Secondary Data

In addition to the data collected for the NOE, there are numerous sources for secondary data (See Appendix B). Before jumping into all the secondary data think about the following questions and make some notes.

- 1.) What do you want to share with your audience?
  
- 2.) Do you want to share national/state/local data?
  
- 3.) Now, restate your data communication goal and audience:
  
- 4.) Which data sources (NOE or Secondary data) will be useful in supporting your message?

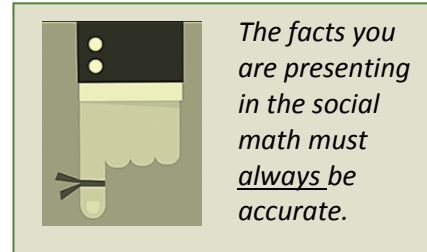
As a reminder, here are some examples of things you can find from secondary data:

- ✓ Suicide death rate (per 100,000) by county
- ✓ Comparison of state suicide death rate to national average
- ✓ Number of self-reported suicide attempts
- ✓ Mental health service use

## Social Math

To help put some of these statistics into everyday context, we can use social math. The comparison you make should be easy to understand.

- ✓ Break a number by time/place
- ✓ Compare an abstract number to something familiar



Ex: If one less suicide occurred each day, society would recover about \$300 million in total lifetime costs, enough to cover 4 years of college tuition, room and board for 17,000 students.

Below is an example to help you work through a social math problem.

*DO YOUR MATH HOMEWORK!*

What is your BIG number?  
*(I.e. number of suicides, number of people trained)*

---

What can you compare this to that will make it meaningful to your audience?

This is your social math result!



## Creating Shareable Information

Visualization can help you to communicate with and engage your audience. At this point you have a goal of what you want to share, who you want to share with, what data you have to support your message, and an idea of how to break that data down. In this section we will review how to take your message and your data and turn it into something visually appealing and easy to understand. As you begin to make your plans, think about the following:

1. Who is your audience?
2. What key message do you want to share/convey? What information needs to be displayed?
3. What is the data telling you? What is your 'social math'?

## Visualization Tools

While thinking about your design there are certain elements that can enhance what you are developing. The main visual tools to think about are color, font, icons/graphs, and flow/layout. These elements are described below with tips, best practices, and links to additional resources.

### Color

Set a color palate with the colors you need to use (based on an agency style guide or personal preferences)

- ✓ Clearly define your color palette
- ✓ Avoid bringing in too many colors
- ✓ Rely on online tools that help with color palettes
- ✓ Consider complimentary colors, and use them to highlight information, or tie together different information



Use the Eyedropper tool in PPT to apply the color you need to your new data visualization scheme

#### Best Practices for Using Color

- ✓ Use color consistently, and be purposeful with the colors you select (usually, less is more)
- ✓ Use gray for less important elements to make sure the critical elements stand out

### Resources for Selecting Colors

[Color palette helper https://colors.co/](https://colors.co/)

[Color palette helper https://www.canva.com/color-palette/](https://www.canva.com/color-palette/)

[Color palette helper https://color.adobe.com/](https://color.adobe.com/)

Color contrast checker: <https://webaim.org/resources/contrastchecker/>

Color blind accessibility: <http://colorbrewer2.org/#type=sequential&scheme=BuGn&n=3>

Desktop color eye dropper <http://instant-eyedropper.com/>

Color blender: <http://meyerweb.com/eric/tools/color-blend/#::hex>

Random color generator: <https://www.webfx.com/web-design/random-color-picker/>

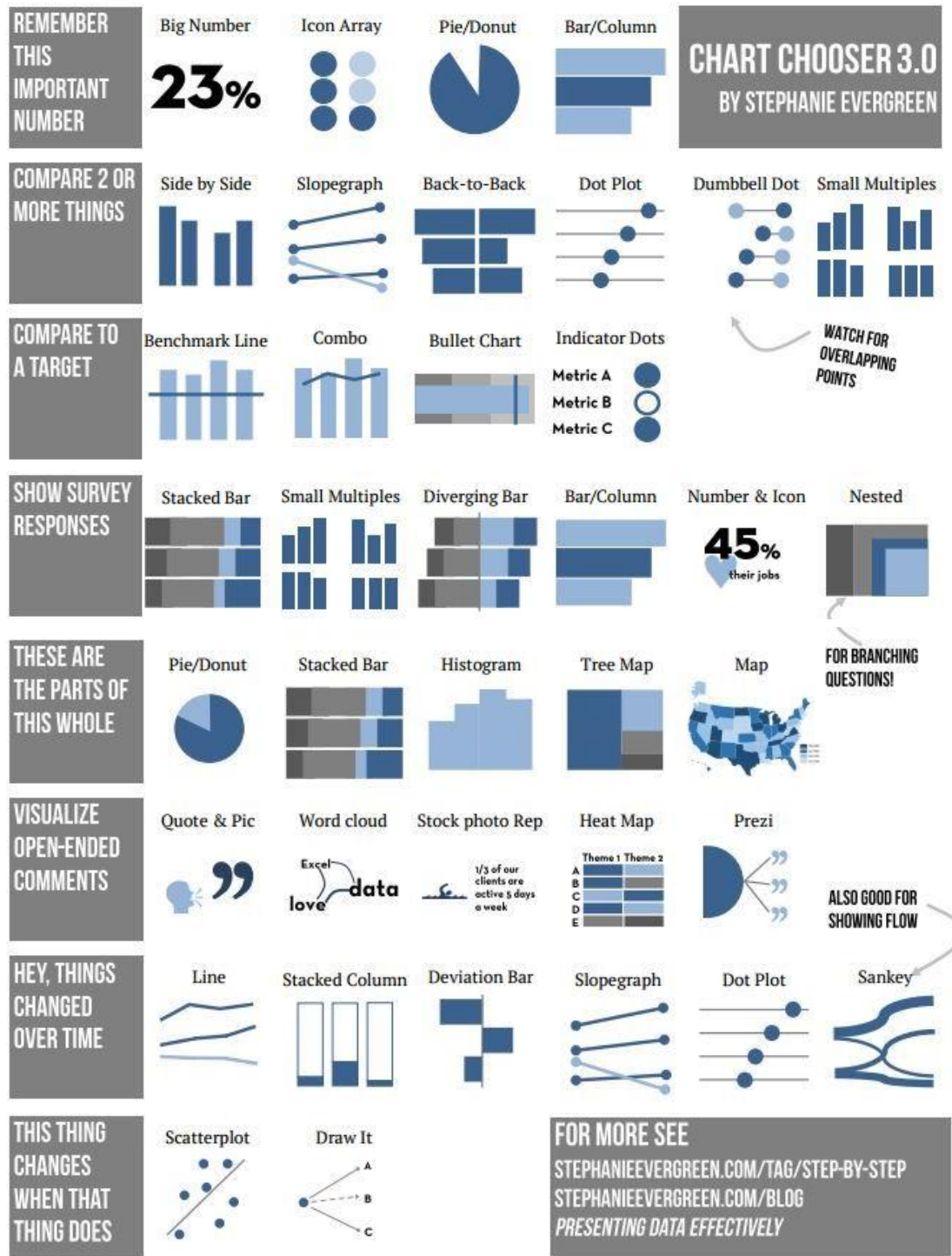
### Font

Fonts are important for drawing attention to parts of your visualization.

- ✓ Use different font sizes and CAPITALIZATION to call attention to particular text
- ✓ Bold or use large fonts to call attention to important numbers

## Icons and Graphs

- ✓ Use icons and graphs to break up the text
- ✓ Vary the types of charts or graphs as appropriate
- ✓ Consider the type of data and the graph you are using



### Best Practices and Tips for Charts and Graphs

- ✓ Keep charts and tables minimal– remove chart junk (grid lines, titles that don't add value)
- ✓ Consider how to include a threshold/target/benchmark – A benchmark gives the reader the context to understand questions like “is this number reflective of something positive?”
- ✓ Bars should be in a meaningful order:
  - High to low
  - Logical (alphabetical, ordinal)

### Resources for Choosing the Right Chart for Your Data

Visualizing Health <http://www.vizhealth.org/> / <http://www.vizhealth.org/gallery/>

Interactive Chart Chooser <https://depictdatastudio.com/charts/>

Qualitative Chart Chooser <http://stephanieevergreen.com/tag/chart-chooser/>

Visualization Rater: <https://datavizchecklist.stephanieevergreen.com/rate>  
<https://www.fusioncharts.com/resources/charting-best-practices/selecting-the-right-chart-type-for-your-data>

### Resources for Figure and Infographic Makers

Piktochart <https://piktochart.com/>

Infogram <https://infogram.com/>

Venngage <https://venngage.com/blog/infographic-design/>

Canva <https://www.canva.com/create/infographics/>

People Graph Maker <http://www.iconarray.com/>

Professional Vector Graphics <https://inkscape.org/en/>

### Flow and Layout

- ✓ Consider the way you line up data
- ✓ Use the *align button* so everything is lined up
- ✓ Use headers to guide the reader through the information
- ✓ Arrows may help the reader to understand the flow of information
- ✓ Create balance
- ✓ Make sure you have white space. White space improves readability and reduces cognitive overload

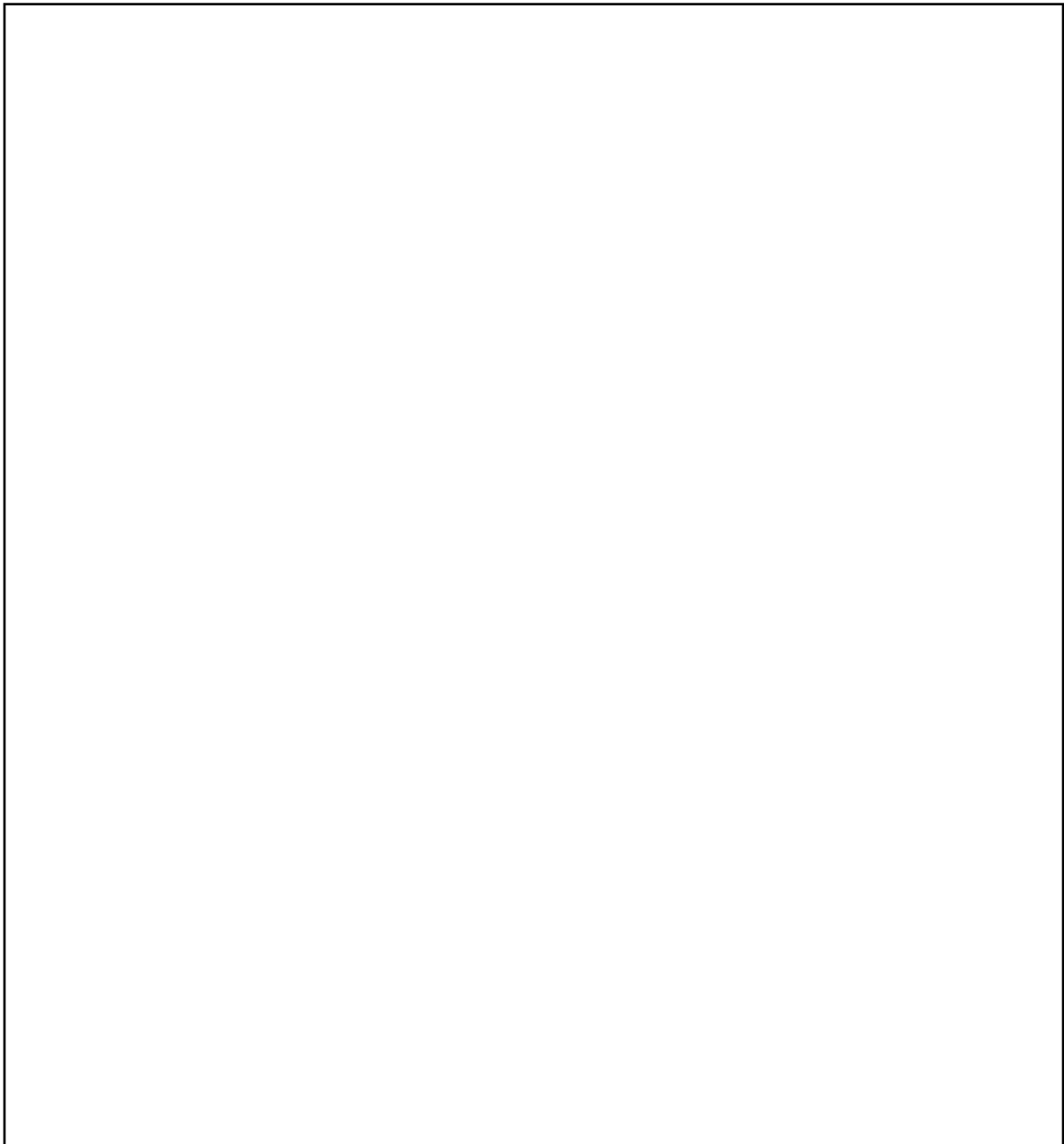


The align tool is a great option in PPT which helps ensure your icons and objects in your visualization are aligned to the top, center or bottom (or to the left, center, right) where needed. In addition, the align tool helps you make sure everything is distributed equally either horizontally or vertically.

## Planning Your Visualization

- ✓ What are the elements you want to include?
- ✓ What is a meaningful title for this visualization?
- ✓ Is there a research question that should be included?
- ✓ What supporting text do you need?
- ✓ What data will be displayed in a graph and what type of graph?

Once you know the elements you need and want to include, think about how this will be arranged on the page (use paper and pencil to sketch it out!)

A large, empty rectangular box with a thin black border, intended for sketching the visualization. The box is currently blank.

## Appendix A – GLS NOE Evaluation Questions

Evaluation Questions and Sub questions	Primary Data Sources									Secondary Data Sources				
	PSI	TES/TASP	TUP-S	TUP-S Enhanced	EIRF-I	EIRF-S	YESI	SBHF/MIS	BHPS	Medicaid	HCUP	NSDUH	NCHA/CSMH	CDC Mortality Files
<b>EQ 1: Are certain training approaches effective in building capacity to increase youth identification (when compared with more basic trainings)?</b>														
1.1: What type of training curricula are grantees implementing?	X	X												
1.2: Which population(s) are being trained?	X	X	X											
1.3: What are the expected outcomes associated with training participation?		X												
1.4: What factors related to the training (e.g., use of active learning strategies), the trainee (e.g., 'natural gatekeepers'), and the setting (e.g. 'threshold effects') predict differences in gatekeeper behavior following participation?		X	X											
<b>EQ 2: Are GLS prevention activities effective in developing continuity of care from identification, to referral of youth at risk for suicide, to the provision of needed services?</b>														
2.1: What proportion of youth identified by GLS grantees receive follow-up support?					X									
2.2: Do youth characteristics predict follow-up support and adherence to follow-up care (e.g., gender, race-ethnicity) or setting of identification?					X									
2.3: Does the proportion of youth receiving follow-up care increase over the duration of GLS program activities?					X									
2.4: What are the practices and supports used by the grantees to ensure that identified youth receive referral and follow-up?	X				X				X					
2.5: What are the gaps in support for youth identified as at risk for suicide?					X									
2.6: What are the patterns of identification, referral, and follow-up for youth identified as at risk for suicide?					X	X		X						
2.7: What are the follow-up services received by at-risk youth?					X			X						

2.8: How does the identification, referral, and service experience impact follow-up adherence after an early identification for youth/students who remain in care compared to those who drop out of care or do not seek follow-up care?								X										
2.9: What factors are associated with continuity of care/adherence from the youth' perspective?								X										
2.10: What early identification and referral practices are effective from youth perspectives in ensuring follow-up care adherence for youth who stay in follow-up care compared to youth who do not seek follow-up care or drop out of care?								X										
2.11: What are the service experiences for youth/students identified as at risk through the GLS Suicide Prevention Program who remain in follow-up after referral compared to youth/students who do not remain in follow-up care?								X										
2.12: What are the barriers and facilitators to service access and utilization for youth/students after identification and referral?								X										

**EQ 3: Does the provision of services by GLS behavioral health provider networks implementing a Zero Suicide framework reduce suicide attempts, hospitalization, and associated costs (return on investment) compared to non-GLS behavioral health providers?**

3.2: What suicide safer environment care activities are being implemented by campus health services?	X								X									
3.3: Are access and utilization of campus behavioral health services higher for students on campuses that integrate clinical screenings or suicide assessments into campus primary and behavioral health care?	X								X									
3.4: Are suicide ideation, attempts, and completions lower for students on campuses that are more fully implementing the suicide safer environment framework activities?	X								X								X	
3.5: Are suicide attempts reduced for youth receiving services by GLS behavioral health providers compared to non-GLS providers?											X	X						
3.6: Are hospital readmissions and in-hospital deaths by suicide lower for youth (at risk for suicide) who use services from providers that have implemented NSSP Goals 8 and 9 activities?											X	X						

**EQ 4: Was there a reduction in suicide behavior in the areas exposed to GLS interventions compared with similar areas that were not exposed to those interventions?**

4.1: Was there a reduction in suicide mortality in youth aged 10–18 following implementation of school-based suicide prevention strategies during 2006–2011?	X	X	X									X		X
4.1a: Was the difference associated with the level of ‘saturation’ of teachers and school staff with trainings?	X	X	X									X		X
4.2: Was there a reduction in suicide mortality and attempts in youth aged 19–24 following the implementation of higher-education–based prevention strategies during 2006–2011?	X	X	X									X	X	X
4.3: Was there a reduction in self-inflicted injury requiring hospitalization in youth aged 10–24 following GLS training implementation in 20 States?*		X	X									X		X
4.4: Was there a reduction in suicide mortality and attempts in youth aged 19–24 following the implementation of GLS trainings in community settings?*		X	X									X		X
<b>EQ 5: What is the anticipated impact (in terms of averted suicide attempts and suicide deaths) of specific GLS interventions (e.g., increased use of role-play in gatekeeper trainings, implementation of follow-up contact after identification at school)?</b>														
5.1: What is the anticipated impact of using longer gatekeeper trainings instead of brief gatekeeper trainings?	X	X	X	X								X		X
5.2: What is the anticipated impact of incorporating role-playing in every brief gatekeeper training and/or booster intervention following gatekeeper training?	X	X	X	X								X		X
5.3: What is the anticipated impact of incorporating follow-up contact after identification at school?	X				X	X	X					X		X
5.4: What is the anticipated impact of implementing Zero Suicide in a number of mental health organizations?	X							X	X	X	X	X		X
<b>EQ 6: What are the positive and negative unintended consequences of suicide prevention activities (e.g., identification and referral of at-risk adults into care)?</b>														
6.1: What are the potential unintended consequences documented in the literature? Is there any indication of the magnitude of these consequences within GLS based on extant instruments?	X	X	X	X		X			X			X		X
6.2: How many adults are served by behavioral health providers partnering with GLS grantees? How frequently did GLS trainees use the training to work with adults at risk? How frequently did GLS trainees disseminate information from the training among their personal/professional network?	X	X	X	X		X			X			X		X



## Appendix B – Secondary Data Resources

Data Source	Items Available	Years
Centers for Disease Control and Prevention - WONDER Online Databases ( <a href="#">CDC WONDER</a> )	<ul style="list-style-type: none"> <li>• Compressed mortality</li> <li>• Multiple cause of death</li> <li>• Population totals</li> <li>• Demographic breakdowns</li> </ul>	1999-2017
Centers for Disease Control and Prevention - Web-based Injury Statistics Query and Reporting System ( <a href="#">WISQARS</a> )	<ul style="list-style-type: none"> <li>• Fatal and nonfatal injury</li> <li>• Violent death</li> <li>• Cost of injury</li> <li>• National level data</li> </ul>	2000-2017
National Survey on Drug Use and Health ( <a href="#">NSDUH</a> )	<ul style="list-style-type: none"> <li>• Substance use</li> <li>• Mental health</li> <li>• Health behaviors</li> <li>• State level data</li> </ul>	1971-2016
United States Census Bureau – Small Area Health Insurance Estimates ( <a href="#">SAHIE</a> )	<ul style="list-style-type: none"> <li>• Uninsured rates</li> </ul>	2005-2017
United States Census Bureau – Small Area Income and Poverty Estimates - <a href="#">SAIPE</a>	<ul style="list-style-type: none"> <li>• Poverty rates</li> </ul>	2005-2017
Bureau of Labor Statistics – Local Area Unemployment Statistics ( <a href="#">BLS</a> )	<ul style="list-style-type: none"> <li>• Unemployment rates</li> </ul>	1999-2017
Area Health Resources Files ( <a href="#">AHRF</a> )	<ul style="list-style-type: none"> <li>• Health care providers</li> <li>• Health care facilities</li> </ul>	1999-2016
National Center for Education Statistics ( <a href="#">NCES</a> )	<ul style="list-style-type: none"> <li>• Enrollment</li> <li>• Faculty</li> <li>• Institutional offerings</li> </ul>	
American College Health Association – National College Health Assessment ( <a href="#">ACHA-NCHA</a> )	<ul style="list-style-type: none"> <li>• Substance use and mental health</li> <li>• Health behaviors</li> <li>• Membership/participation required</li> </ul>	
Healthy Minds Network Healthy Minds Study ( <a href="#">Healthy Minds</a> )	<ul style="list-style-type: none"> <li>• Mental health and use of services</li> <li>• Health behaviors</li> <li>• Membership/participation required</li> </ul>	