

### Analytics Challenge Data Discovery Process

1. Workshop two possible problems - at the end of the Kickoff Event select one as your focus for the competition
- 2 - Individual section instructions are intended to help you think at a High-Level. Specifically, the "Scope" and "Key Metrics" follow "Solution" to ensure your project can be completed in a month and you have tangible outcomes

DATA Review Inventory and Identify Questions for Agencies/Data Providers			FEEDBACK Responses to Data Questions from Agencies/Data Providers		
<b>PROBLEM</b> Current Mitigations					
	<b>DATA</b> Relevant		<b>SOLUTION</b> Outline	<b>SCOPE</b> Project Tasks with Timeline	<b>KEY METRICS</b> Measurable Indicators
	<b>DATA</b> Relevant		<b>SOLUTION</b> Outline	<b>SCOPE</b> Project Tasks with Timeline	<b>KEY METRICS</b> Measurable Indicators

### Before the Kickoff Event:

1. Look at the Analytics Challenge [Data Inventory](#), and the [Colorado Information Marketplace](#)
2. Review resources in the [Colorado Data Analytics Challenge Knowledge Base](#)
3. Have questions prepared to talk with [Data Providers](#)
  - a. Fill out the “Data” section at the top of the worksheet to prepare for the event
  - b. Enter answers you receive in the “Feedback” area at the top of the tool
  - c. If you don’t know where to start, try using these sample questions:
    - i. Ask them about their research - What information do you use? What kind of research do you conduct? What are the gaps that you would like filled?
    - ii. Ask them about their datasets - How the data was created? How is the data collected and what is the historical context? How frequently the data is updated? What is update process? How many people have contributed to or edited this data since its creation (ie one editor, or many people entering info)? Who are the primary data users, how does the data currently inform decisions?
    - iii. Create descriptive stats on interesting data - What categories are in the data? What stories does the data tell from basic exploration? What datasets can be combined by a theme or direct relation/join?

### During the Kickoff Event:

1. At the Kickoff Event, a presentation will be given by the a representative of each Competition Track. \*\*Your work investigating the inventory will help you identify/articulate problems to solve as you listen to the presentations.
2. Use tool to workshop two possible problems to (1) identify your focus for the competition, (2) get good info from data providers and (3) find a problem that can be solved with public data.

### Using the Tool:

*Data (top):* Fill with any questions you have about available datasets from your discovery research.

*Feedback (top):* Ask your data questions to the Data Providers and document on the worksheet.

Workshop two possible problems to narrow your focus and build requirements for your analysis

1. *Problem (x2):* Identify a problem you want to answer, keeping in mind the three categories
  - a. Evaluate if the problem statement is solvable from public data
  - b. Goal is to identify a single clear compelling message of identified problem and solution
  - c. Identify problem’s existing alternatives and status quo to better understand challenges
2. *Data (x2):* Identify what data you can use to answer your problem
3. *Solution (x2):* What solution(s) can you foresee coming from solving the problem
  - a. Outline a possible solution for each problem
  - b. Review solutions with data providers
4. *Scope (x2):* Outline the workflow and timeline of your project
  - a. Determine if it can be completed in a month
5. *Metrics/Output (x2):* What is the outcome of your solution and the data used, and how will it be measured?
  - a. Identify measurable indicators, read articles that help identify key indicators
  - b. Talk with Data Providers about key indicators in datasets
6. Pursue the more viable of the two solutions, and proceed with analysis and competition entry

**Checkpoint:** be sure to participate in the [virtual checkpoint](#)