



# *Water Systems in New Jersey Practicing Asset Management: A Baseline Assessment*

September 2016



# The Survey



This presentation provides the results from a survey of a large segment of New Jersey’s water systems (both drinking water and wastewater). The goal was to identify the extent to which asset management is occurring in the State amongst water utilities. The survey addressed the basic components of asset management (AM)\*.

The Asset Management (AM) Baseline Assessment survey was conducted from January 5 – May 16, 2016 and presents the status of 440 water systems in the State in conducting aspects of asset management.

For the purposes of this survey, “water systems” included community drinking water utilities serving greater than 500 residents and wastewater utilities handling greater than 2,000 gallons per day of residential waste. There are 368 and 212 of these systems in the State, respectively, therefore the results . The results do not represent all water systems in the State.

The survey was developed with the assistance of a work group consisting of water industry representatives from across the State.

**Disclaimer:** The survey did not ask specifically if systems have a formalized AM Plan. And, although definitions of many terms were provided with the survey, it is possible that survey respondents interpreted the questions differently based on their understanding of AM. Asset management is commonly talked about amongst the water industry, there are many resources available of the subject, and there are different ways and terms to describe the aspects of Asset Management. Although effort was made to provide clarity in the questions in order to acquire accuracy and conformity in responses, it is possible that the survey respondents may have interpreted the questions differently.

*\*For information and resources on asset management for water utilities and detail about the survey please visit: [www.nj.gov/dep/assetmanagement](http://www.nj.gov/dep/assetmanagement)*



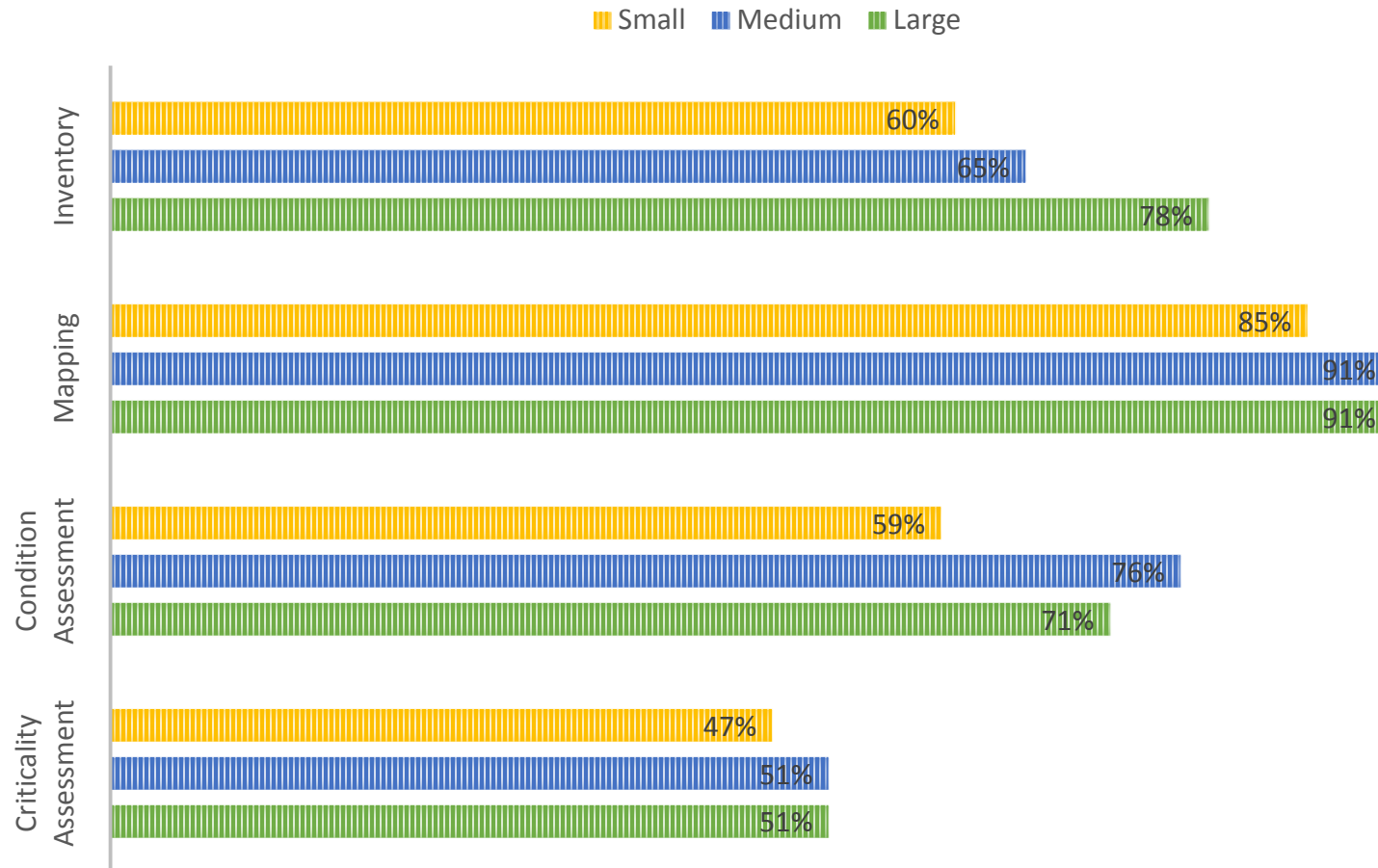
# Survey Response

## *Asset Management Baseline Assessment Survey*

Total Surveys Issued	580
- DW System Surveys Issued	368
- WW System Surveys Issued	212
Total Systems Responding	440
% Rate of Responses	76%
Surveys Received Providing Usable Data	725
- DW Systems (Treatment, Distribution)	443
- WW Systems (WW Treatment, WW Conveyance/Collection)	282



# Percentage of responding drinking water (DW) systems that have completed an aspect of the following AM components



## Total DW Surveys Received By Size of System:

Small = 120

Medium = 99

Large = 224

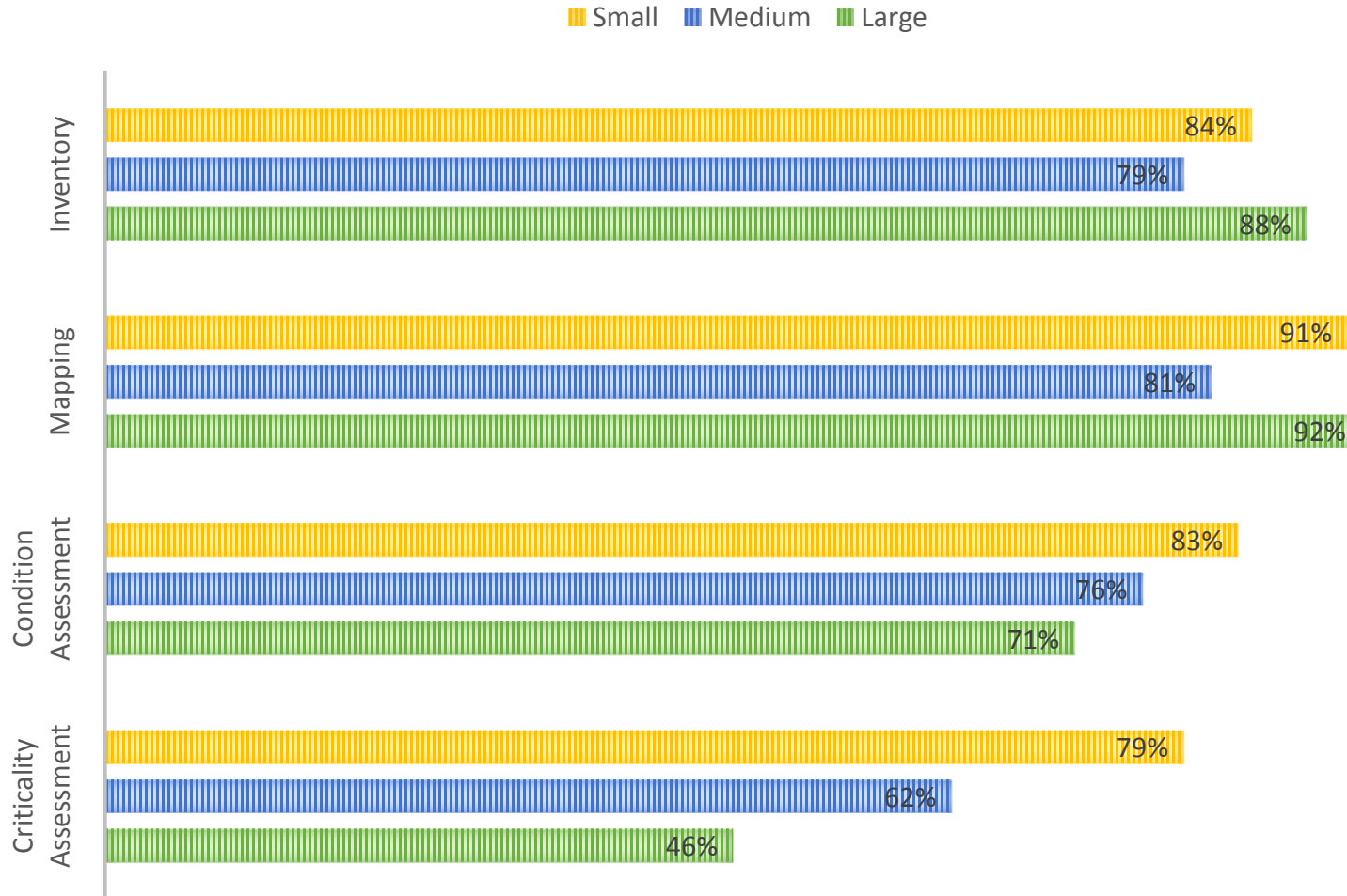
TOTAL = 443 Respondents

*Note: The size of the DW Systems are based on the population served by that system:*

- Small = 501-3,300 people served
- Medium = 3,301-10,000
- Large = 10,001 or more



# Percentage of responding wastewater (WW) systems that have completed an aspect of the following AM components



## Total WW Surveys Received By Size of System:

Small = 70

Medium = 58

Large = 154

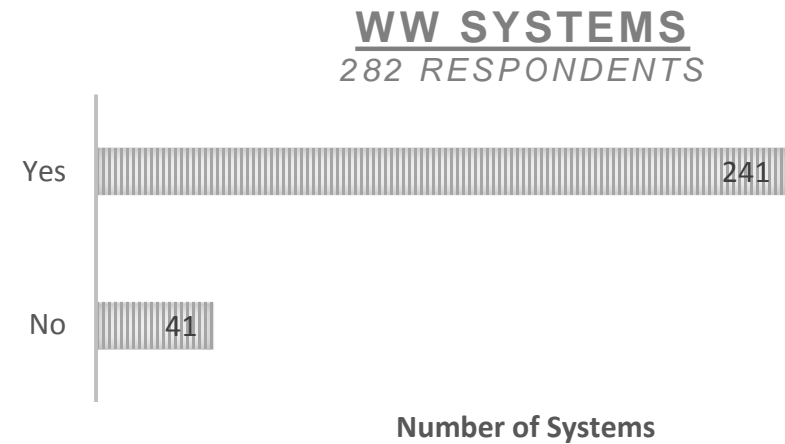
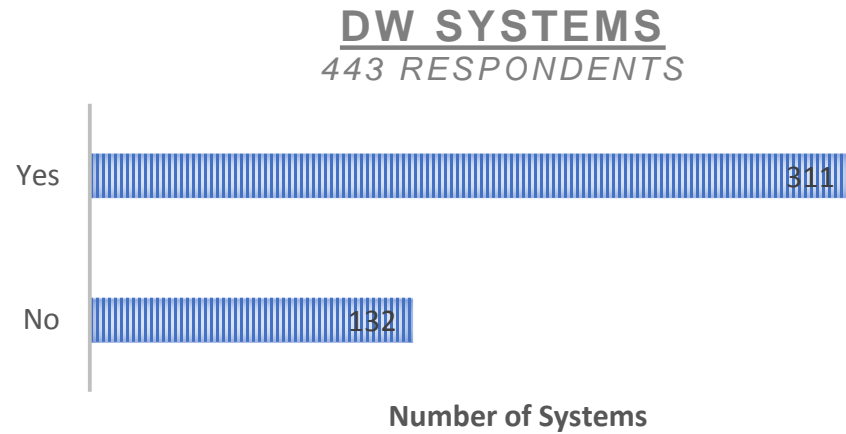
TOTAL = 282 Respondents

*Note: The size of the WW Systems is determined by the average daily flow handled in million gallons per day (MGD) by the processing plant:*

- Small = Less than 0.1 MGD
- Medium = Greater than or equal to 0.1 MGD and less than 1.0 MGD
- Large = Greater than 1.0 MGD

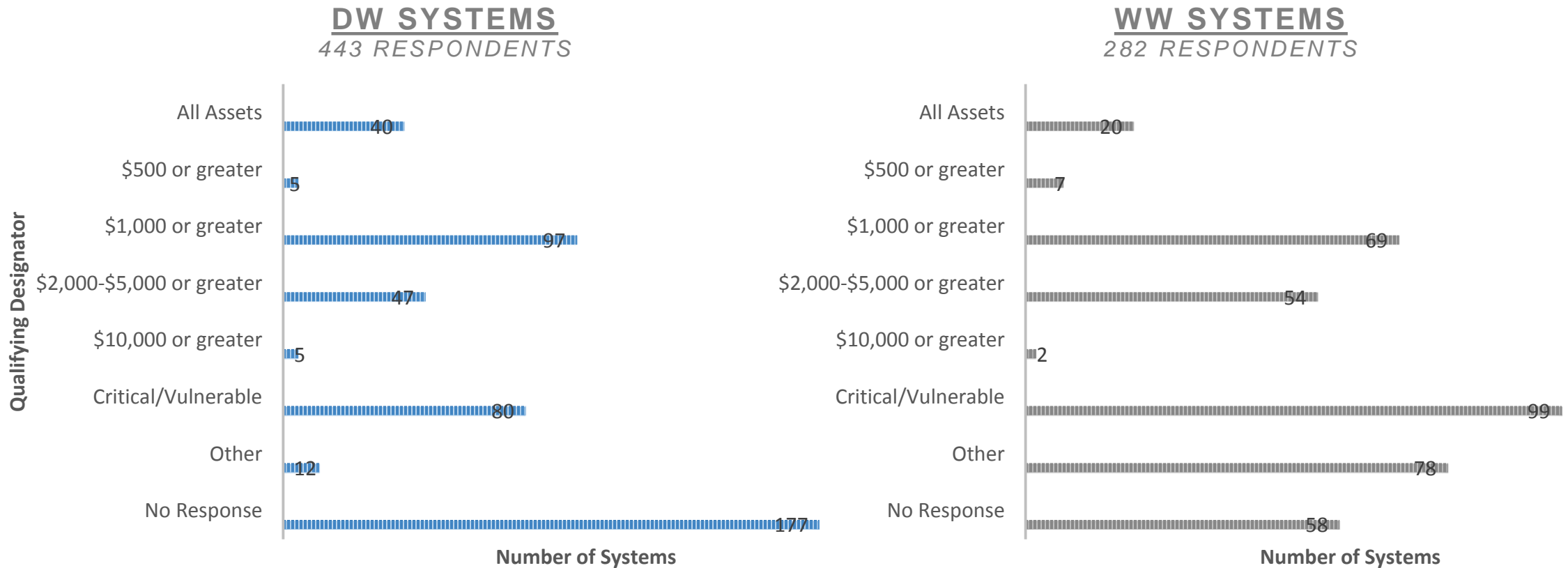


# Number of systems that have inventoried assets





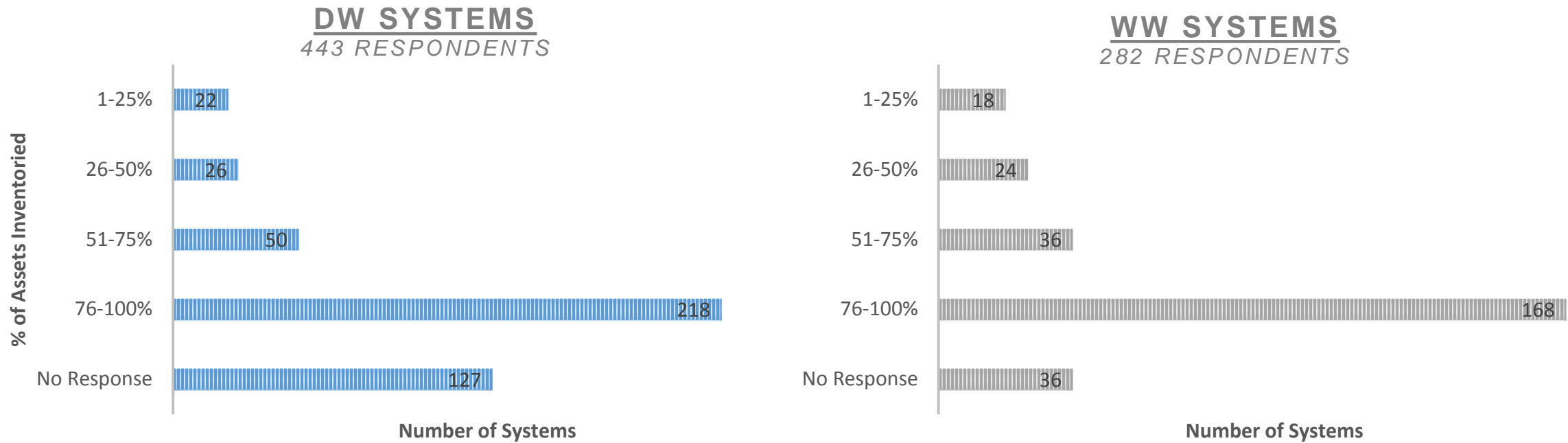
# Qualifiers used for determining which assets have been inventoried



Note: If a system had not inventoried any of their assets, respondents were instructed to skip this question, giving reason to the 'No Response' category



# Number of systems that have inventoried a certain percentage of their total assets

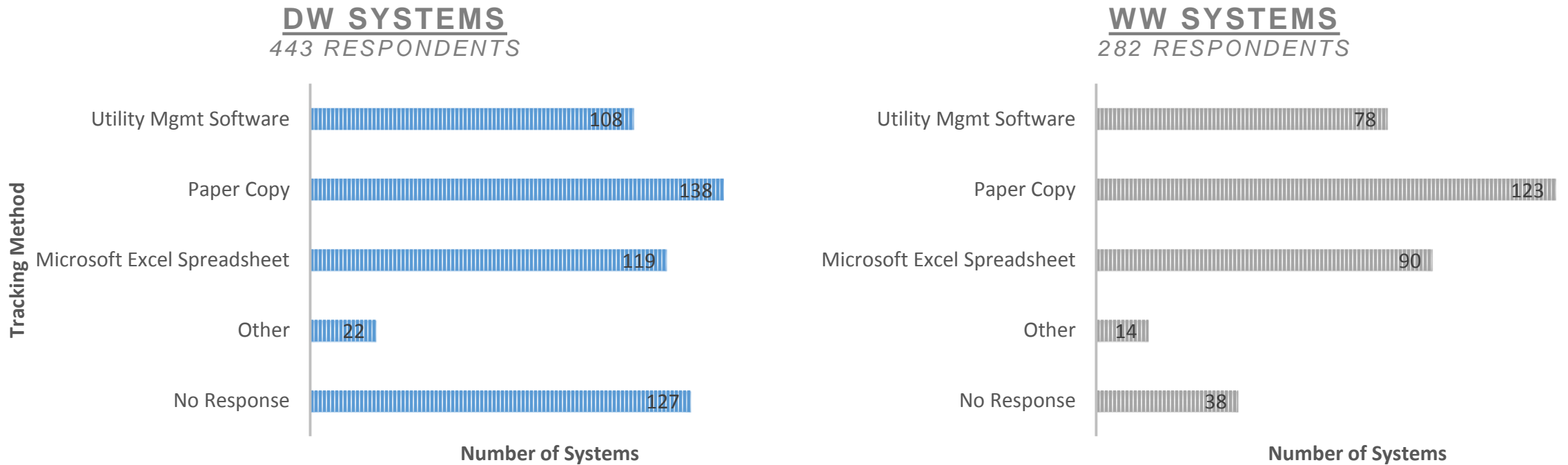


Note: If a system had not inventoried any of their assets, respondents were instructed to skip this question, giving reason to the 'No Response' category





# Number of systems that are using a certain method of tracking their inventory

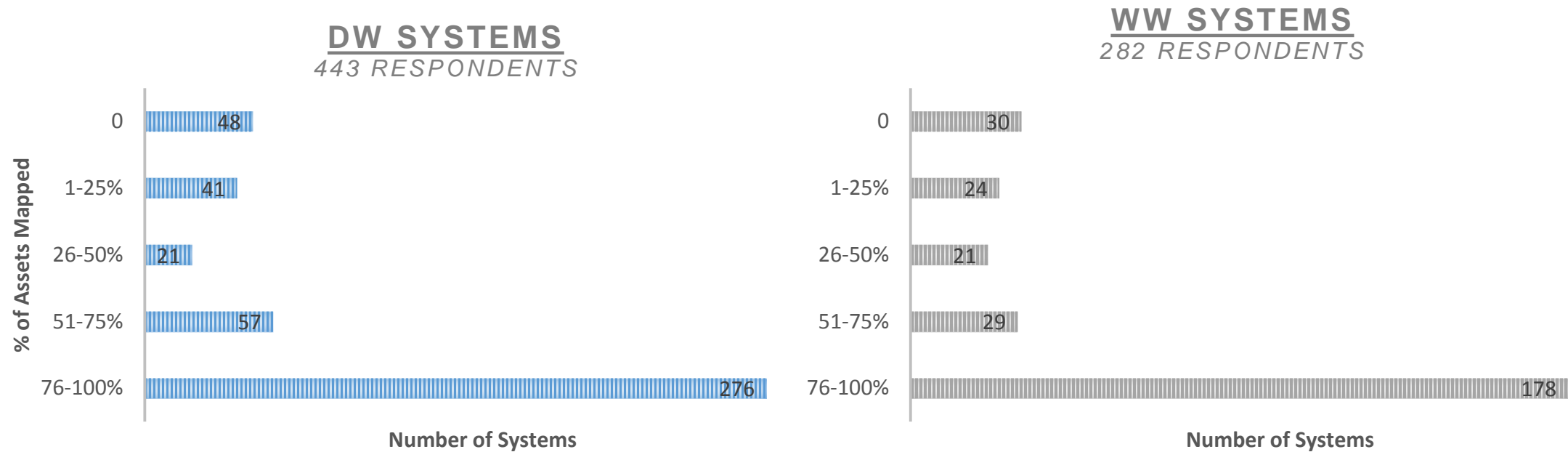


Note: A number of systems are using more than one method to inventory/track system assets

*If a system had not inventoried any of their assets, respondents were instructed to skip this question, giving reason to the 'No Response' category*



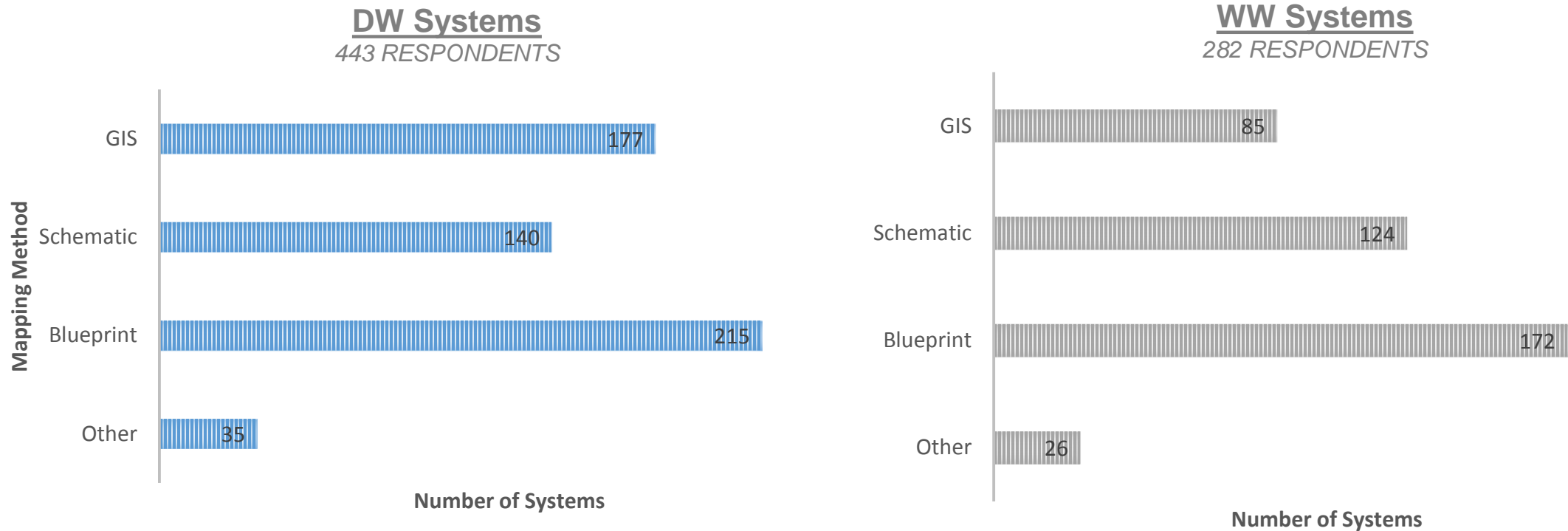
# Number of systems that have mapped a certain proportion of total assets



*Note: Assets may be mapped using a Geographic Information System (GIS) or schematic/blueprint*



# Number of systems that are using a certain method of mapping assets



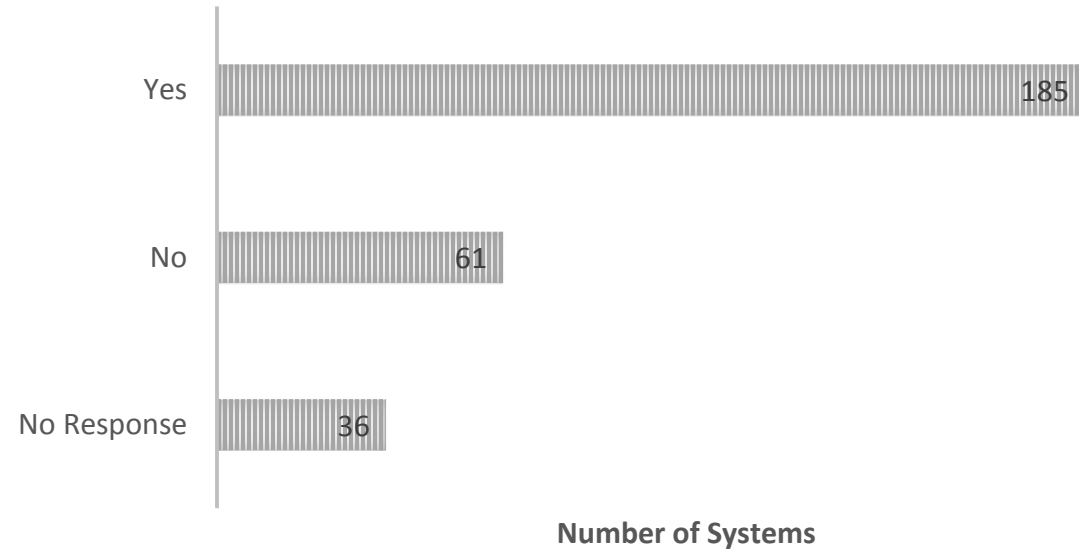
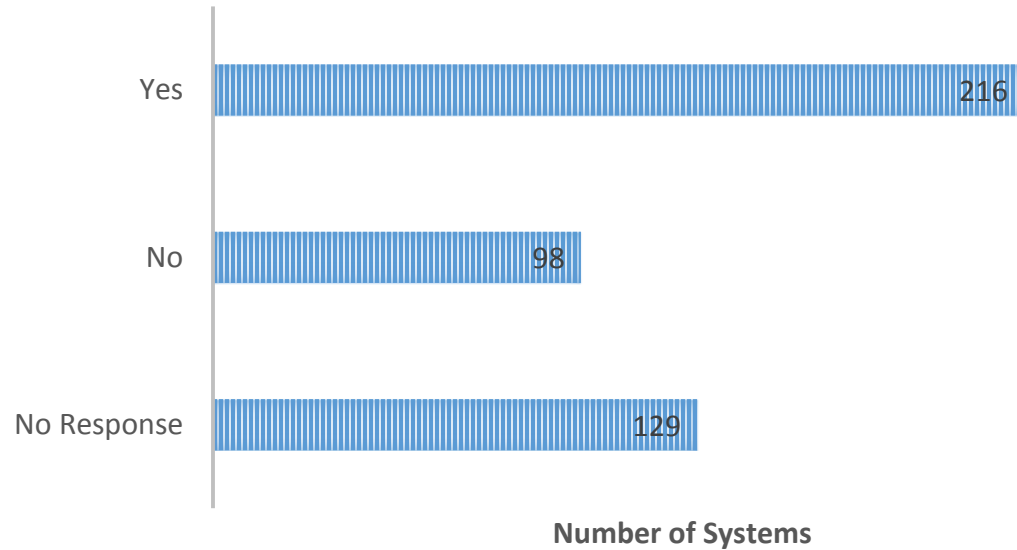
*Note: There are a number of systems using more than one method to map system assets*



# Number of systems that have assessed the condition of more than 50% of their inventoried assets

**DW SYSTEMS**  
443 RESPONDENTS

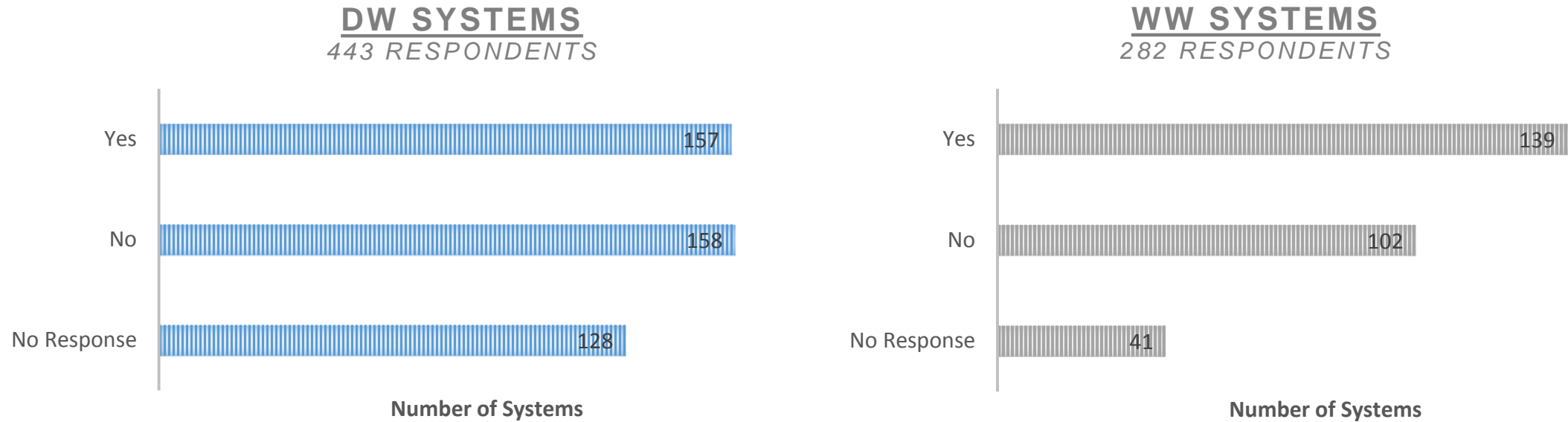
**WW SYSTEMS**  
282 RESPONDENTS



*Note: If a system had not inventoried any of their assets, respondents were instructed to skip this question, giving reason to the 'No Response' category*



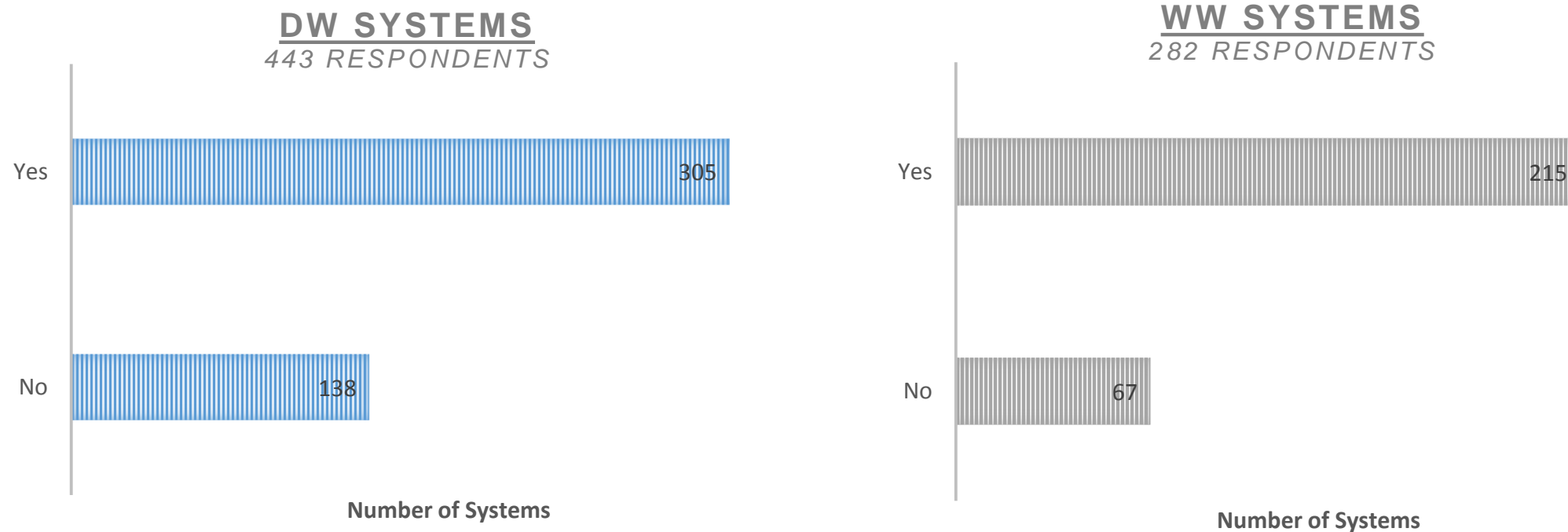
# Number of systems that have done a criticality assessment of more than 50% of their inventoried assets



*Note: If a system had not inventoried any of their assets, respondents were instructed to skip this question, giving reason to the 'No Response' category*



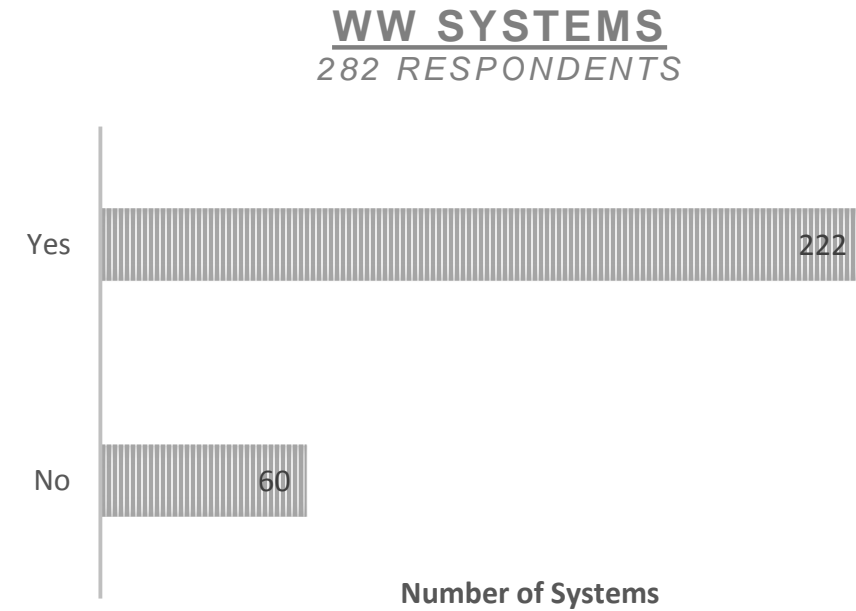
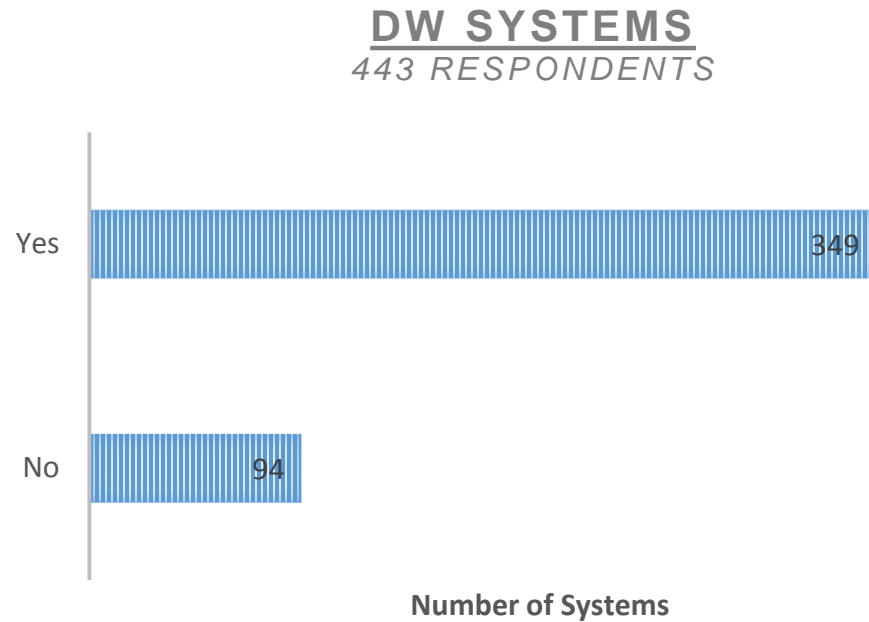
# Number of systems that have a long-term funding strategy\* associated with asset management



\* Examples of a long-term funding strategy include dedicated funding for: O&M, rehabilitation, repair and replacement of prioritized system components, inventory and mapping, condition assessment, etc.

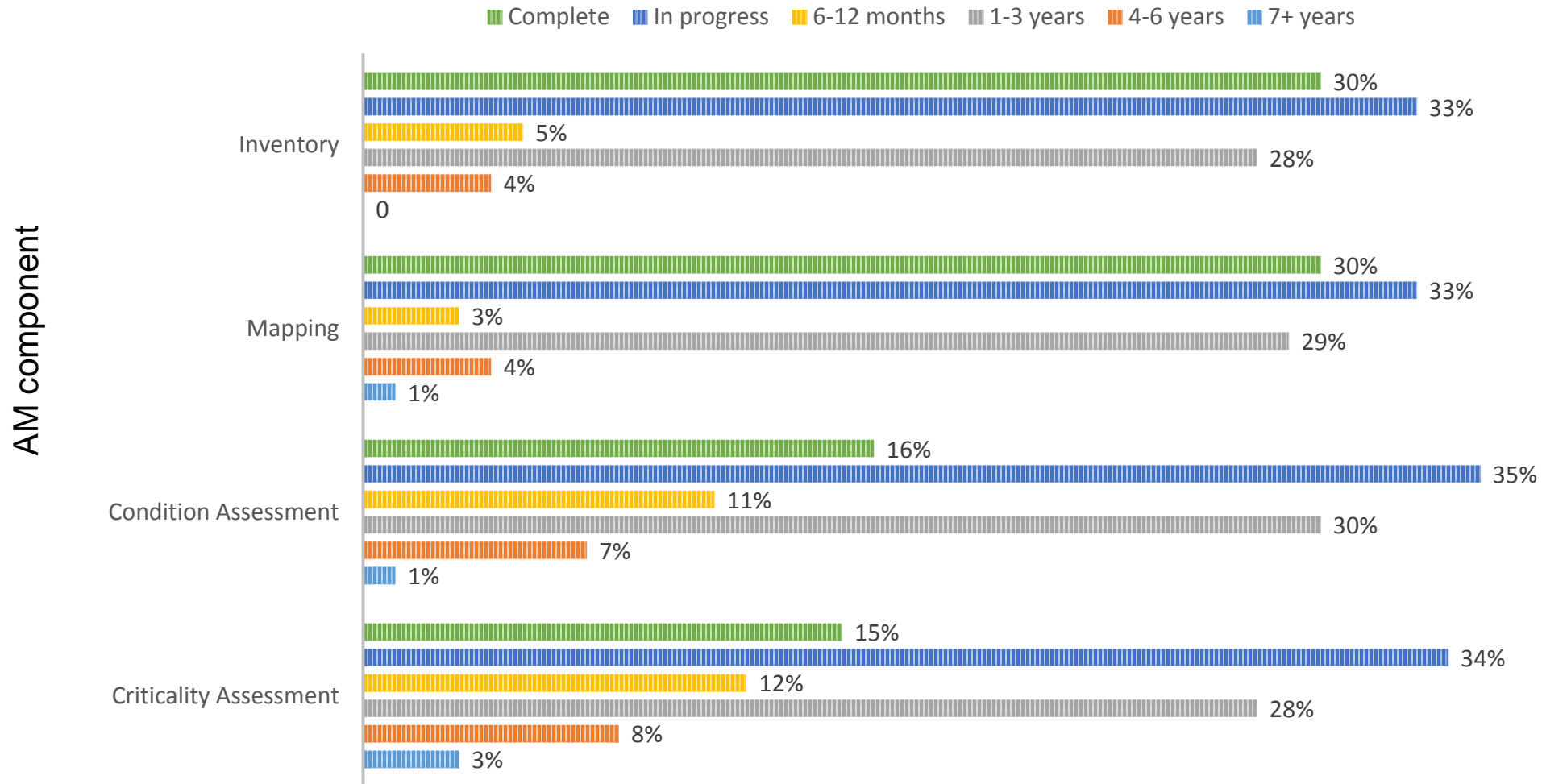


# Number of systems with the intent to complete AM components





# Percent of responding Drinking Water (DW) systems that estimate a certain time to complete components of AM







# Percent of responding Wastewater (WW) systems that estimate a certain time to complete components of AM

