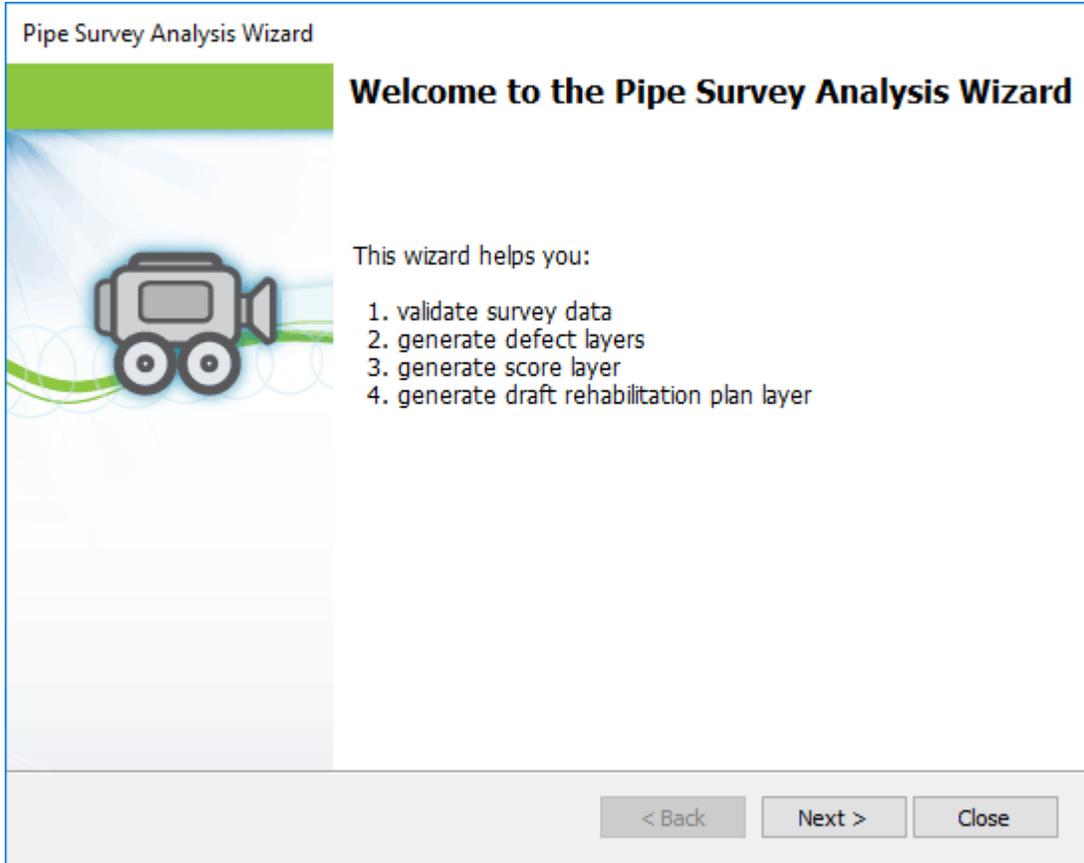


# Survey Analysis Wizard

After importing CCTV or other survey import data to the gravity mains, manholes, or laterals, users may run the survey analysis wizard to extract data from the import and relate it to the facilities. The wizard must be run in order to use the Condition Assessment window and see the internal view.

To access the wizard, either double-click on the survey import dataset, or right-click on the dataset and select the **Run** option. After selecting this option the following window will appear. If running the wizard on manhole or lateral survey imports the window will be customized to those facilities, but will follow the same process.



This first window simply summarizes the four steps involved in the wizard. Users can simply click **Next** to go to Step 1. The four steps are described below.

## Step 1: Validate Pipe Survey Data

In this first step, three basic, but critical, validations are performed on the imported survey data:

1. Survey import inspections are matched to the GIS data.
2. Import defect code data is validated against InfoAsset Planner's internal defect codes.
3. Inspections are classified as either Active or not.

To tie the tabular surveys to the facility data, InfoAsset Planner will first try to match the inspection to the GIS using the **Upstream/Downstream Manhole ID** in the Inspections table and the **From/To Structure** fields in the GIS. If no sets of matching manhole IDs can be found, InfoAsset Planner will try to match inspections using the **Pipe Segment Reference** field in the Inspections table and the **Facility ID** in the gravity main, manhole, or lateral facility. InfoAsset Planner will always prioritize matching via manholes before matching via pipe segment reference. InfoAsset Planner will create a simple text file describing any inspections which had to be linked via pipe segment reference or inspections which could not be linked at all.

The second rule checks the defect codes in the imported Conditions table. InfoAsset Planner compares the codes found to the Defect Codes table in the Edit CapPlan options. If any codes are outside of the expected codes in the table, InfoAsset Planner will generate a text file detailing the unexpected codes.

Finally, this first window will also activate inspections. Active inspections are inspections which you want scored and are generally considered most relevant to current analysis. Inactive inspections are still joined to a facility, but are not scored. Inactive inspections are generally considered background, historical data which is less relevant to current system conditions.

InfoAsset Planner will always activate the most recent inspection joined to a facility by looking at the **Date** field in the Inspections table. In addition, you can direct InfoAsset Planner to activate additional inspections depending on how close they are to the most recent inspection. If the settings below were specified and the most recent inspection on Pipe 1 occurred on 1/10/2018, InfoAsset Planner would also activate any inspections performed as far back as 1/1/2018. If the second radio button were specified, InfoAsset Planner would only activate one additional inspection performed as far back as 1/1/2018 and only if it were in the reverse direction of the latest inspection. This is a useful way to only include reverse setups as active.

### Pipe Survey Analysis Wizard

#### Step1: Validate Pipes Survey Data



		Rule
▶ 1	<input checked="" type="checkbox"/>	Locate pipe based on upstream manhole ID and downstream manhole ID
2	<input checked="" type="checkbox"/>	Check defect codes in condition table.

Activate all inspections  
 Activate one additional reverse direction inspection

Within  days of latest inspection

[Skip This Step](#)

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Next >
Close

Once these options are set, you should click **Next** to move on to Step 2.

## Step 2: Geocode Pipe Survey Data

This second step reads the Conditions Table and geocodes the tabular data to the map based on the distances specified in the table. InfoAsset Planner reads the **Distance**, **Continuous**, and **DistanceToGo** fields in the Conditions table and places the defects on the applicable facility. Only conditions which are related to inspections that found a corresponding GIS facility will be geocoded. Active and Inactive conditions will be geocoded.

You may determine to geocode all inspections or only those which may be new and haven't been geocoded yet. In addition, you can prompt InfoAsset Planner to generate a warning when a defect is supposed to occur, for example, at 200 ft in the Conditions table, but the facility it is tied to is only 190 ft long. You can specify the buffer width until InfoAsset Planner prompts you that an error may have occurred and should be reviewed. Defects beyond the facility length will be placed at the very end of the facility.

Note: It is not uncommon for CCTV defects to have an error range of approximately 0 - 10 ft. The largest issues often seen here occur when an inspection spans multiple GIS segments. For example, an inspection may cover 200 ft when in the GIS there are two 100 ft pipes and the 200 ft inspection has been tied to one of the 100 ft pipes. In this case, you must either split their inspection or combine their pipes using options outside of InfoAsset Planner.

Pipe Survey Analysis Wizard

**Step2: Geocode Pipes Survey Data**



Generate point defect layer, continuous layer and connection layer.

Geocode all inspections

Only geocode inspections which have not been geocoded yet

Number of inspections which need to be geocoded: 69

Give a warning when defect distance exceeds total length

Feet

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Once these options are set, you should click **Next** to move on to Step 3. After clicking **Next**, you may receive additional text files with messages detailing defect codes issues.

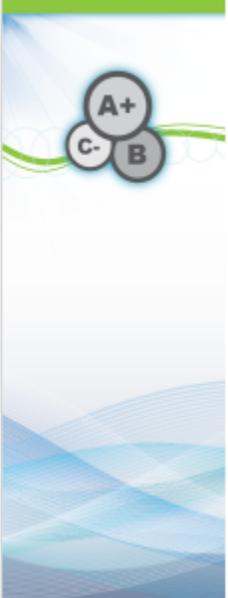
### Step 3: Score Pipes

This third step looks at the defect scores on the pipes and runs certain summation analyses to generate an overall score for the pipe. The Defect Codes table is referenced in this step so that InfoAsset Planner can match defect codes to their appropriate scores. For NASSCO imports, this step will calculate the four character Quick Scores for each main, manhole, or lateral. Other scores such as Peak Score, Mean Score, Total Score, Peak Structural Score, etc. are calculated in this step. Only **Active** facilities are evaluated in this step. Note that for Linear Reference System surveys these scores will not be calculated for a pipe or linear facility but the scores for individual defects will be geocoded if the scoring information is available and mapped under the Score System Field during import.

You can decide whether they want to score all the pipes on only pipes with new or changed data. After deciding, you may click **Next** to move on to Step 4.

Pipe Survey Analysis Wizard

**Step3: Score Pipes**



Generate score layer.

Calculate scores for all facilities

Only calculate scores for those facilities which have new imported data or changed data

Number of Pipes which need to be processed: 35

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#### Step 4: Generate Draft Rehab Plan

The fourth and final step in the wizard generates a draft rehabilitation plan for each facility based on the defects read and the rehab methods specified in the Defect Codes table. In this step, only **Active** facilities are evaluated. For each defect read a single rehab method may be specified. This is the draft report because no other logic has been included besides this simple lookup. In the final rehabilitation, users may include their own custom logic. Note that for Linear Reference System surveys, a custom Rehab Method will need to be specified for each defect in Defect Codes table to generate a Rehab Plan. For more information on creating Rehab Methods please go to the [Rehab Method/Cost Component](#) section.

After clicking **Next** InfoAsset Planner may generate a text file detailing rehab method errors. After this final step, a table listing all the inspections from the dataset will be listed in the Dashboard window.

Pipe Survey Analysis Wizard

**Step4: Generate Draft Rehab Plan**

 Generate rehabilitation draft plan layer.

Generate draft rehab. plan for all facilities

Only generate draft rehab. plan for those facilities which have new imported data or changed data

Number of Pipes which need to be processed: 35

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After running the wizard, a green check mark should be seen above the dataset icon in the Operation Center. If the dataset has only run through part of the wizard, but not all four steps, a blue arrow may be shown above the dataset. If any part of the dataset has not been run through the wizard, so if a user imports new inspections to the dataset, an 'X' will be shown above the dataset. These different icons are shown below.

