
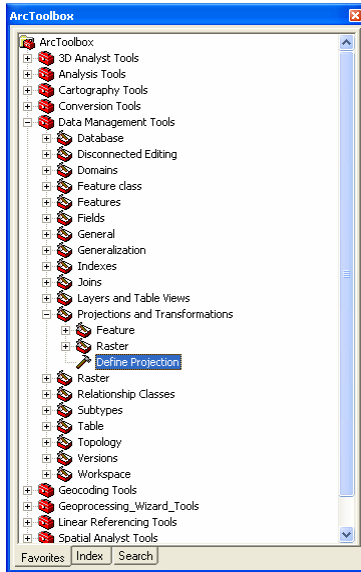


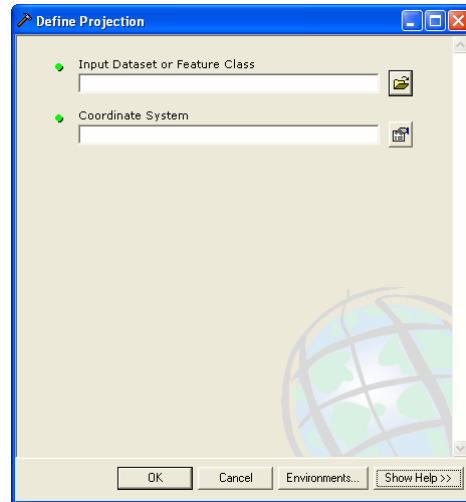
## Defining a projection in ArcGIS 9.1

Before any reproduction of data can be done in ArcView 9.1, the projection of the spatial data must be defined. One way of defining a projection is using ArcToolbox. If the ArcToolbox window is not already open, activate it by pressing the ArcToolbox icon in either ArcMap or ArcCatalog. 

Once ArcToolbox is open, navigate to the *Define Projection* tool by opening the *Data Management Tools* toolbox and the *Projections and Transformations* toolset.

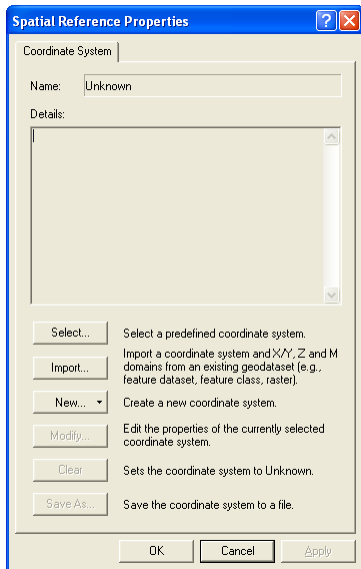


After the *Define Projection* tool has been initiated, select the spatial dataset to be used by either dragging the layer from an ArcMap or ArcCatalog window to the *Input Dataset or Feature Class* input area, or by browsing to the dataset using the browse button.

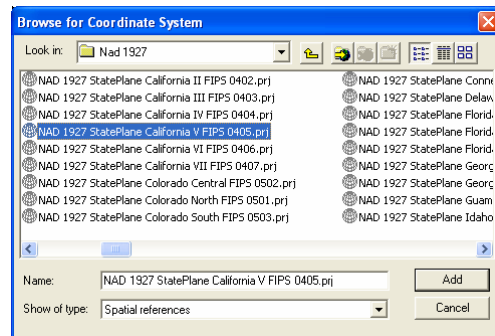


The *Coordinate System* can be selected using the same methods as the input dataset was selected: drag the desired coordinate system from ArcCatalog or by browsing.

If using the browsing method, the following selections are available: *Select...*, *Import...*, and *New...*. *New...* allows the creation of a new coordinate system, *Import...* uses a previously defined dataset as an input, and *Select...* chooses a coordinate system from a list.



Press the *Select...* button and navigate through *Projected Coordinate Systems*, *State Plane*, *NAD 1927*, and select *NAD 1927 StatePlane California V FIPS 0405.prj* and press *Add*. Select *OK* on the *Spatial Reference*



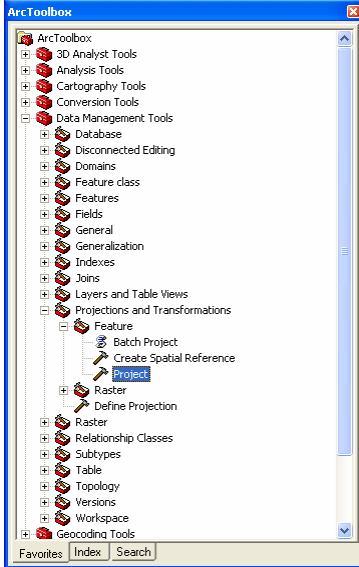
*Properties* window and select *OK* on the *Define Projection* tool to finish the process.

# Projecting Data in ArcGIS 9.1

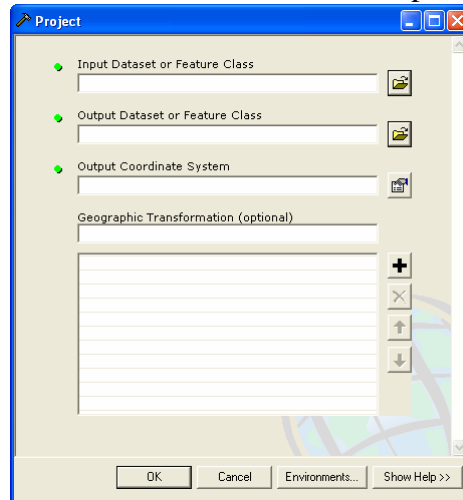
If the dataset to be projected has a defined projection, open the ArcToolbox window, if it is not already open, by pressing the ArcToolbox icon in either ArcMap or ArcCatalog.



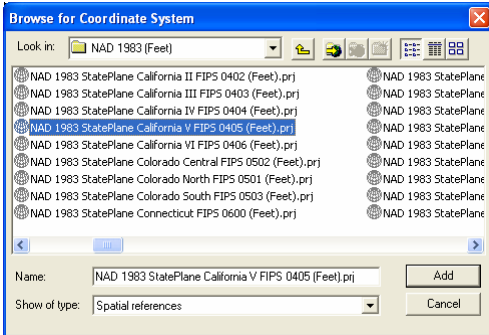
Once ArcToolbox is open, navigate to the *Project* tool by opening the *Data Management Tools* toolbox, the *Projections and Transformations* toolset, and the *Feature* toolset.



After the *Project* tool has been initiated, select the spatial dataset to be used by either dragging the layer from an ArcMap or ArcCatalog window to the *Input Dataset or Feature Class* input area, or by browsing to the dataset using the browse button.



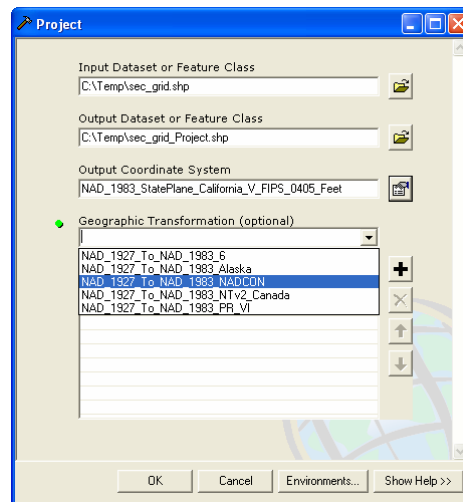
Accept the default name and location in the *Output Dataset or Feature Class* input area or



use the browse button to make changes. The *Output Coordinate System* can be selected using the same methods as the input dataset was selected: drag the desired coordinate system from ArcCatalog or by browsing. If using the browsing method, navigate through *Projected Coordinate Systems, State Plane, NAD 1983 (Feet)*, and select

*NAD 1983 StatePlane California V FIPS 0405 (Feet).prj* and press *Add*.

In the case of NAD 1927 to NAD 1983, a geographic transformation is needed. Select *NAD\_1927\_To\_NAD\_1983\_NADCON* from the dropdown list in the *Geographic Transformation* box.



Select *OK* on the *Project* tool to finish the process.