ARCGIS PRO LICENSING

I. TOOLBOXES LICENSING

1. 3D Analyst toolbox

Toolset/Tool	Basic	Standard	Advanced			
3D Features toolset						
Enclose Multipatch	Requires 3D Analyst	Requires 3D Analyst	Requires 3D Analyst			
Enforce River Monotonicity	Requires 3D Analyst	Requires 3D Analyst	Requires 3D Analyst			
Is Closed 3D	Requires 3D Analyst	Requires 3D Analyst	Requires 3D Analyst			
LAS Building Multipatch	Requires 3D Analyst	Requires 3D Analyst	Requires 3D Analyst			
Simplify 3D Line	Requires 3D Analyst	Requires 3D Analyst	Requires 3D Analyst			
Conversion toolset						
ASCII 3D To Feature Class	ightleftarrow	✓	V			
Feature Class Z To ASCII	ightleftarrow	✓	V			
Feature To 3D By Attribute	\checkmark	V	V			
Features From CityEngine Rules	\checkmark	V	V			
Import 3D Files	ightleftarrow	V	V			
Layer 3D To Feature Class	\checkmark	V	V			
Extraction toolset						
Extract Multipatch From Mesh	Requires 3D Analyst	Requires 3D Analyst	Requires 3D Analyst			
Extract Power Lines From Point Cloud	Requires 3D Analyst	Requires 3D Analyst	Requires 3D Analyst			
LAS Building Multipatch	Requires 3D Analyst	Requires 3D Analyst	Requires 3D Analyst			
Multipatch Footprint	\checkmark	V	V			
Regularize Adjacent Building	Requires 3D	Requires 3D	Requires 3D			

Footprint	Analyst	Analyst	Analyst
Regularize Building Footprint	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Interpolation toolset			
Interpolate Polygon t	Requires 3D Analyst	Requires 3D	Requires 3D
Multipatch		Analyst	Analyst
Interpolate Shape	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Update Feature Z	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
3D Intersections toolset			
Fence Diagram	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Intersect 3D	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Intersect 3D Line With Multipatch	Requires 3D Analyst	Requires 3D Analyst	Requires 3D Analyst
Intersect 3D Line With Surface	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Intersect 3D Lines	Requires 3D Analyst or ArcGIS Location Referencing	Requires 3D Analyst or ArcGIS Location Referencing	Requires 3D Analyst or ArcGIS Location Referencing
Stack Profile	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
3D Proximity toolset	1		
Buffer 3D	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Generate Clearance Surface	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Difference 3D	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Inside 3D	Requires 3D	Requires 3D	Requires 3D

	Analyst	Analyst	Analyst
Locate LAS Points By Proximity	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Near 3D	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Union 3D	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Area and Volume toolset			
Cut Fill	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
Extrude Between	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Minimum Bounding Volume	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Polygon Volume	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Surface Difference	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Surface Volume	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Point Cloud toolset			,
Colorize LAS	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Extract LAS	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Extract Objects From Point Cloud	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Thin LAS	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Tile LAS	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Classification toolset		1	

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Change LAS Class Codes	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Classify LAS Building	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Classify LAS By Height	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Classify LAS Ground	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Classify LAS Noise	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Classify LAS Overlap	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Set LAS Class Codes Using Features	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Set LAS Class Codes Using	Requires 3D	Requires 3D	Requires 3D
Raster	Analyst	Analyst	Analyst
Classification (Deep Learning) t	oolset		
Classify Point Cloud Using	Requires 3D	Requires 3D	Requires 3D
Trained Model	Analyst	Analyst	Analyst
Evaluate Point Cloud	Requires 3D	Requires 3D	Requires 3D
Classification Model	Analyst	Analyst	Analyst
Prepare Point Cloud Training	Requires 3D	Requires 3D	Requires 3D
Data	Analyst	Analyst	Analyst
Train Point Cloud Classification	Requires 3D	Requires 3D	Requires 3D
Model	Analyst	Analyst	Analyst
Conversion toolset			
LAS To Multipoint	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
LAS Dataset To TIN	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Classification (Deep Learning) t	oolset		,
Detect Objects From Point	Requires 3D	Requires 3D	Requires 3D
Cloud Using Trained Model	Analyst	Analyst	Analyst

Prepare Point Cloud Training	Requires 3D	Requires 3D	Requires 3D				
Data	Analyst	Analyst	Analyst				
Train Point Cloud Object	Requires 3D	Requires 3D	Requires 3D				
Detection Model	Analyst	Analyst	Analyst				
Raster toolset	Raster toolset						
	Conversion tools	set					
Raster Domain	Requires 3D	Requires 3D	Requires 3D				
	Analyst	Analyst	Analyst				
Raster to Multipoint	Requires 3D	Requires 3D	Requires 3D				
	Analyst	Analyst	Analyst				
Raster to TIN	Requires 3D	Requires 3D	Requires 3D				
	Analyst	Analyst	Analyst				
Interpolation toolset							
IDW	Requires 3D	Requires 3D	Requires 3D				
	Analyst or	Analyst or	Analyst or Spatial				
	Spatial Analyst	Spatial Analyst	Analyst				
Kriging	Requires 3D	Requires 3D	Requires 3D				
	Analyst or	Analyst or	Analyst or Spatial				
	Spatial Analyst	Spatial Analyst	Analyst				
Natural Neighbor	Requires 3D	Requires 3D	Requires 3D				
	Analyst or	Analyst or	Analyst or Spatial				
	Spatial Analyst	Spatial Analyst	Analyst				
Spline	Requires 3D	Requires 3D	Requires 3D				
	Analyst or	Analyst or	Analyst or Spatial				
	Spatial Analyst	Spatial Analyst	Analyst				
Spline with Barriers	Requires 3D	Requires 3D	Requires 3D				
	Analyst or	Analyst or	Analyst or Spatial				
	Spatial Analyst	Spatial Analyst	Analyst				
Topo to Raster	Requires 3D	Requires 3D	Requires 3D				
	Analyst or	Analyst or	Analyst or Spatial				
	Spatial Analyst	Spatial Analyst	Analyst				
Topo to Raster by File	Requires 3D	Requires 3D	Requires 3D				
	Analyst or	Analyst or	Analyst or Spatial				
	Spatial Analyst	Spatial Analyst	Analyst				

Trend	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
Math toolset			
Divide	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
<u>Float</u>	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
<u>Int</u>	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
Minus	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
<u>Plus</u>	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
<u>Times</u>	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
Reclass toolset			
<u>Lookup</u>	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
Reclass by ASCII File	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
Reclass by Table	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
Reclassify	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst

Slice	Requires 3D	Requires 3D	Requires 3D			
	Analyst or	Analyst or	Analyst or Spatial			
	Spatial Analyst	Spatial Analyst	Analyst			
Surface toolset						
Aspect	Requires 3D	Requires 3D	Requires 3D			
	Analyst or	Analyst or	Analyst or Spatial			
	Spatial Analyst	Spatial Analyst	Analyst			
Contour	Requires 3D	Requires 3D	Requires 3D			
	Analyst or	Analyst or	Analyst or Spatial			
	Spatial Analyst	Spatial Analyst	Analyst			
Contour List	Requires 3D	Requires 3D	Requires 3D			
	Analyst or	Analyst or	Analyst or Spatial			
	Spatial Analyst	Spatial Analyst	Analyst			
Contour with Barriers	Requires 3D	Requires 3D	Requires 3D			
	Analyst or	Analyst or	Analyst or Spatial			
	Spatial Analyst	Spatial Analyst	Analyst			
Curvature	Requires 3D	Requires 3D	Requires 3D			
	Analyst or	Analyst or	Analyst or Spatial			
	Spatial Analyst	Spatial Analyst	Analyst			
Hillshade	Requires 3D	Requires 3D	Requires 3D			
	Analyst or	Analyst or	Analyst or Spatial			
	Spatial Analyst	Spatial Analyst	Analyst			
Slope	Requires 3D	Requires 3D	Requires 3D			
	Analyst or	Analyst or	Analyst or Spatial			
	Spatial Analyst	Spatial Analyst	Analyst			
Surface Parameters	Requires 3D	Requires 3D	Requires 3D			
	Analyst or	Analyst or	Analyst or Spatial			
	Spatial Analyst	Spatial Analyst	Analyst			
Statistics toolset						
Add Surface Information	Requires 3D	Requires 3D	Requires 3D			
	Analyst	Analyst	Analyst			
Add Z Information	V	V	V			
LAS Height Metrics	Requires 3D	Requires 3D	Requires 3D			
	Analyst	Analyst	Analyst			
LAS Point Statistics By Area	Requires 3D	Requires 3D	Requires 3D			

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	Analyst	Analyst	Analyst
Point File Information	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Terrain Dataset toolset			
Add Feature Class To Terrain	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Add Terrain Pyramid Level	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Append Terrain Points	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Build Terrain	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Change Terrain Reference Scale	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
<u>Change Terrain Resolution</u>	Requires 3D	Requires 3D	Requires 3D
<u>Bounds</u>	Analyst	Analyst	Analyst
<u>Create Terrain</u>	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Delete Terrain Points	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Remove Feature Class From Terrain	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Remove Terrain Pyramid Level	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Replace Terrain Points	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Conversion toolset			
Terrain To Points	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Terrain to Raster	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Terrain to TIN	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst

TIN Dataset toolset			
Copy TIN	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Create TIN	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Decimate TIN Nodes	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Delineate TIN Data Area	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Edit TIN	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Conversion toolset			
LandXML to TIN	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
TIN Domain	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
TIN Edge	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
TIN Line	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
TIN Node	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
TIN Polygon Tag	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
TIN To Raster	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
TIN Triangle	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Triangulated Surface toolset	•		
Locate Outliers	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Surface Aspect	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst

Surface Contour	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Surface Slope	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Visibility toolset			
Construct Sight Lines	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Geodesic Viewshed	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
Intervisibility	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Line of Sight	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Skyline	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Skyline Barrier	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Skyline Graph	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Sun Shadow Frequency	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Sun Shadow Volume	Requires 3D	Requires 3D	Requires 3D
	Analyst	Analyst	Analyst
Observer Points	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
Viewshed	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst
Visibility	Requires 3D	Requires 3D	Requires 3D
	Analyst or	Analyst or	Analyst or Spatial
	Spatial Analyst	Spatial Analyst	Analyst

2. AllSource toolbox

Toolset/Tool	Basic	Standard	Advanced
Analysis toolset			
Find Overlaps		\checkmark	\checkmark
Blind Spot toolset		I	I
Generate Blind Spot Areas		V	\checkmark
Generate Coverage Areas		\checkmark	\checkmark
Suitability toolset	I	ı	1
DOF To Obstacle Features	Requires 3D Analyst and Spatial Analyst	Requires 3D Analyst and Spatial Analyst	Requires 3D Analyst and Spatial Analyst
Drop Zone Suitability	Requires Spatial Analyst	Requires Spatial Analyst	Requires Spatial Analyst
Generate HLZ Suitability	Requires 3D Analyst and Spatial Analyst	Requires 3D Analyst and Spatial Analyst	Requires 3D Analyst and Spatial Analyst
Generate Obstacle Features	Requires 3D Analyst and Spatial Analyst	Requires 3D Analyst and Spatial Analyst	Requires 3D Analyst and Spatial Analyst
Least Cost Path	Requires Spatial Analyst	Requires Spatial Analyst	Requires Spatial Analyst
Conversion toolset		1	1
Create Location File From Text File		\checkmark	\checkmark
Batch Import Data		\checkmark	\checkmark
Points To Track Segments	✓	V	V
Movement toolset	I	ı	I
Compare Areas			\checkmark
Find Cotravelers			V
Find Frequented Locations			\checkmark

Toolset/Tool	Basic	Standard	Advanced
Find Meeting Locations			\checkmark
Classify Movement Events		V	$ \checkmark $
Select Movement Tracks		V	\checkmark

3. Analysis toolbox

Toolset/Tool	Basic	Standard	Advanced
Extract toolset			
Clip	\checkmark	V	\checkmark
Select	\checkmark	V	\checkmark
Split			v
Split By Attributes	\checkmark	V	\checkmark
Table Select	\checkmark	V	\checkmark
Overlay toolset		I	I
Apportion Polygon	\checkmark	V	\checkmark
Count Overlapping Features	\checkmark	V	\checkmark
<u>Erase</u>			\checkmark
Identity			\checkmark
Intersect			
Some parameters are limited by license level—see the tool reference page for more detail.			✓
Remove Overlap (multiple)	\checkmark	V	\checkmark
Spatial Join	\checkmark	V	\checkmark
Symmetrical Difference			\checkmark
<u>Union</u>			
Some parameters are limited by license level—see the tool reference page for more detail.			✓

Toolset/Tool	Basic	Standard	Advanced
<u>Update</u>			✓
Pairwise Overlay toolset		1	
Pairwise Buffer	\checkmark	\checkmark	\checkmark
Pairwise Clip	\checkmark	V	\checkmark
Pairwise Dissolve	\checkmark	V	\checkmark
Pairwise Erase	\checkmark	\checkmark	\checkmark
Pairwise Integrate	\checkmark		
Pairwise Intersect			
Proximity toolset			
<u>Buffer</u>			
Some parameters are limited by license level—see the tool reference page for more detail.		✓	✓
Create Thiessen Polygons			✓
Generate Near Table			✓
Generate Origin Destination Links		\checkmark	4
Graphic Buffer			✓
Multiple Ring Buffer	\checkmark	V	\checkmark
<u>Near</u>			

Toolset/Tool	Basic	Standard	Advanced
Polygon Neighbors	\checkmark	✓	✓
Statistics toolset			
<u>Enrich</u>	V	V	\checkmark
<u>Frequency</u>	V	V	V
Summary Statistics	\checkmark	\checkmark	✓
Summarize Nearby		✓	✓
Summarize Within			✓
Tabulate Intersection			✓

4. Aviation toolbox

Toolset/Tool	Basic	Standard	Advanced
Airports toolset			
Analysis toolset			
Analyze Airport Features		Requires Airports	Requires Airports
Analyze LAS Runway Obstacles		Requires Airports, 3D Analyst	Requires Airports, 3D Analyst
Analyze Runway Obstacles		Requires Airports	Requires Airports
Generate OIS Obstacle Data		Requires Airports or ArcGIS Aviation Charting	Requires Airports or ArcGIS Aviation Charting
Generate OIS Profile Data		Requires Airports or	Requires Airports or ArcGIS

Toolset/Tool	Basic	Standard	Advanced
		ArcGIS Aviation Charting	Aviation Charti
Data Exchange toolset		I	I
Export FAA 18B Shapefiles		Requires Airports	Requires Airpor
Import FAA 18B Shapefiles		Requires Airports	Requires Airpo
Heliport Obstruction Identification	on Surfaces tools	set	I
FAA 2C		Requires Airports or ArcGIS Aviation Charting	Requires Airpor or ArcGIS Aviation Charti
ICAO Annex 14 Heliports		Requires Airports or ArcGIS Aviation Charting	Requires Airpo or ArcGIS Aviation Charti
Obstruction Identification Surfac	es toolset	I	I
Create Curved Approach		Requires Airports or ArcGIS Aviation Charting	Requires Airpo or ArcGIS Aviation Charti
FAA13		Requires Airports or ArcGIS Aviation Charting	Requires Airpo or ArcGIS Aviation Charti
FAA 13 Runway Protection Surfaces		Requires Airports or ArcGIS Aviation Charting	Requires Airpo or ArcGIS Aviation Charti
FAA 18B		Requires Airports or ArcGIS Aviation Charting	Requires Airpo or ArcGIS Aviation Charti

Toolset/Tool	Basic	Standard	Advanced
FAA FAR 77		Requires Airports or ArcGIS Aviation Charting	Requires Airports or ArcGIS Aviation Charting
Generate OIS Intersection		Requires Airports or ArcGIS Aviation Charting	Requires Airports or ArcGIS Aviation Charting
ICAO Annex 14		Requires Airports or ArcGIS Aviation Charting	Requires Airports or ArcGIS Aviation Charting
ICAO Annex 15		Requires Airports or ArcGIS Aviation Charting	Requires Airports or ArcGIS Aviation Charting
ICAO Annex 4 Surfaces		Requires Airports or ArcGIS Aviation Charting	Requires Airports or ArcGIS Aviation Charting
Light Signal Clearance Surface		Requires Airports or ArcGIS Aviation Charting	Requires Airports or ArcGIS Aviation Charting
PAPI Obstacle Clearance Surface		Requires Airports or ArcGIS Aviation Charting	Requires Airports or ArcGIS Aviation Charting
Unified Facilities Criteria		Requires Airports or ArcGIS Aviation Charting	Requires Airports or ArcGIS Aviation Charting
Charting toolset	I	I	I
Cartography toolset			

Toolset/Tool	Basic	Standard	Advanced
Add Aviation Line Bypass		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Aggregate Obstacles		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Generate Airway Corridors		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Rotate Aviation Features		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
<u>Update Aviation Annotation</u>		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Data Exchange toolset		ı	
Export AIXM 5.1 Message		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Import AIXM 5.1 Message		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Import DCDT Change File		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Import Digital Obstacle File		Requires Airports or ArcGIS Aviation Charting	Requires Airports or ArcGIS Aviation Charting
Data Management toolset		-	
Calculate ATS Route Attributes		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting

Toolset/Tool	Basic	Standard	Advanced
Generate Airspace Areas			Requires ArcGIS Aviation Charting
Generate Airspace Lines		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Generate Aviation Cartographic Features		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Generate Changeover Points		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Generate Derived Airspace Geometry		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Generate Summary Table Data		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Group Route Segments		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Prepare Aviation Data		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Process Air Traffic Service Routes		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Report Aviation Chart Changes		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting
Layout toolset	I	I	
Generate Aviation Chart Leads		Requires ArcGIS Aviation Charting	Requires ArcGIS Aviation Charting

5. Bathymetry toolbox

Bathymetry toolbox		1	
Toolset/Tool	Basic	Standard	Advanced
BIS Data toolset			
BIS To Mosaic Dataset		Requires ArcGIS Bathymetry	Requires ArcGIS Bathymetry
BIS Management toolset			
Add Data To BIS		Requires ArcGIS Bathymetry	Requires ArcGIS Bathymetry
Add Point Data To BIS		Requires ArcGIS Bathymetry	Requires ArcGIS Bathymetry
Analyze BIS		Requires ArcGIS Bathymetry	Requires ArcGIS Bathymetry
<u>Create BIS</u>		Requires ArcGIS Bathymetry	Requires ArcGIS Bathymetry
Remove Data From BIS		Requires ArcGIS Bathymetry	Requires ArcGIS Bathymetry
Utilities toolset		I	
Reduce Point Density		Requires ArcGIS Bathymetry	Requires ArcGIS Bathymetry
Smooth Bathymetric TIN		Requires ArcGIS Bathymetry	Requires ArcGIS Bathymetry

6. Business Analyst toolbox

Toolset/Tool	Basic	Standard	Advanced
Analysis toolset			
Calculate Market Penetration	_	Requires Business Analyst	Requires Business Analyst
Color Coded Layer	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst
Enrich Layer			
Support for locally installed Business Analyst data requires a Business Analyst license.			✓
Find Nearby Locations	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst
Generate Desire Lines	Requires Business Analyst, ArcGIS Network Analyst extension	Requires Business Analyst, ArcGIS Network Analyst extension	Requires Business Analyst, ArcGIS Network Analyst extension
Generate Grids and Hexagons	Requires Business Analyst, ArcGIS Network Analyst extension	Requires Business Analyst, ArcGIS Network Analyst extension	Requires Business Analyst, ArcGIS Network Analyst extension
Generate Points from Business Listings	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst
Modeling toolset	I	I	
Huff Model	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst
Huff Model Calibration	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst
Reports toolset	I	I	

Toolset/Tool	Basic	Standard	Advanced	
Import Business Analyst Report Template	Requires Business Analyst		Requires Business Analyst	
Summary Reports	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst	
Statistical Data Collections toolse	et			
Generate SDCX Index	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst	
Suitability Analysis toolset	I		I	
Add Field Based Suitability Criteria	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst	
Add Point Layer Based Suitability Criteria	Requires Business Analyst, ArcGIS Network Analyst extension	Analyst Arcuils	Requires Business Analyst, ArcGIS Network Analyst extension	
Add Variable Based Suitability Criteria	_	Requires Business Analyst	Requires Business Analyst	
Calculate Suitability Score	_	Requires Business Analyst	Requires Business Analyst	
Make Suitability Analysis Layer	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst	
Remove Suitability Criteria	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst	
Set Criteria Properties	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst	
Target Marketing toolset				
Analyze Market Area Gap	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst	

Toolset/Tool	Basic	Standard	Advanced
Additional data requirement. See Target Marketing overview.			
Analyze Market Potential	Requires	Requires	Requires Business
Additional data requirement. See Target Marketing overview.	Business Analyst	Business Analyst	Analyst
Create Target Group	Requires	Requires	Requires Business
Additional data requirement. See Target Marketing overview.	_	Business Analyst	_
Export Segmentation Profile	Requires	Requires	Requires Business
Additional data requirement. See Target Marketing overview.	_	Business Analyst	-
Generate Customer Segmentation Profile	Description	D	D D
Additional data requirement. See Target Marketing overview.	Requires Business Analyst	•	Requires Business Analyst
Generate Market Area Segmentation Profile	Requires	Requires	Requires Business
Additional data requirement. See Target Marketing overview.	Business Analyst	Business Analyst	Analyst
Generate Segmentation Profile Report	Requires	Requires	Requires Business
Additional data requirement. See Target Marketing overview.	Business Analyst	=	_
Generate Survey Report For Profile	Doguiros	Doguiros	Doguiros Dusinos
Additional data requirement. See Target Marketing overview.	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst
Generate Survey Report For	Requires	Requires	Requires Business

Toolset/Tool	Basic	Standard	Advanced
Targets Additional data requirement. See Target Marketing overview.	Business Analyst	Business Analyst	Analyst
Generate Target Group Layer Additional data requirement. See Target Marketing overview.	_	Requires Business Analyst	Requires Business Analyst
Generate Target Layer Additional data requirement. See Target Marketing overview.	_	Requires Business Analyst	Requires Business Analyst
Generate Target Penetration Layer Additional data requirement. See Target Marketing overview.	_	Requires Business Analyst	Requires Business Analyst
Import Segmentation Profile Additional data requirement. See Target Marketing overview.		Requires Business Analyst	Requires Business Analyst
Import Survey Profiles Additional data requirement. See Target Marketing overview.	_	Requires Business Analyst	Requires Business Analyst
Trade Areas toolset	I		
Assign Customers By Distance	Requires Business Analyst, ArcGIS Network Analyst extension	_	Requires Business Analyst, ArcGIS Network Analyst extension
Generate Approximate Drive <u>Times</u>	_	Requires Business Analyst, ArcGIS Network Analyst	Requires Business Analyst, ArcGIS Network Analyst extension

Toolset/Tool	Basic	Standard	Advanced
	extension	extension	
Generate Customer Derived Trade <u>Areas</u>	_	Requires Business Analyst	Requires Business Analyst
Generate Drive Time Trade Area	Requires Business Analyst, ArcGIS Network Analyst extension	Requires Business Analyst, ArcGIS Network Analyst extension	Requires Business Analyst, ArcGIS Network Analyst extension
Generate Geographies From Overlap	_	Requires Business Analyst	Requires Business Analyst
Generate Standard Geography Trade Areas	_	Requires Business Analyst	Requires Business Analyst
Generate Threshold Drive Times	_	Requires Business Analyst	Requires Business Analyst
Generate Threshold Rings		Requires Business Analyst	Requires Business Analyst
Generate Trade Area Rings	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst
Measure Cannibalization	_	Requires Business Analyst	Requires Business Analyst
Remove Overlap	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst
Remove Overlap (multiple)	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst

7. Cartography toolbox

Toolset/Tool	Basic	Standard	Advanced
Annotation toolset			

Toolset/Tool	Basic	Standard	Advanced
Annotate Selected Features	\checkmark	V	V
Contour Annotation	\checkmark	V	V
Convert Labels To Annotation	\checkmark	V	V
Convert Labels To Graphics	\checkmark	V	V
Map Server Cache Tiling Scheme To Polygons		\checkmark	✓
Tiled Labels To Annotation	\checkmark	V	V
Update Annotation Reference Scale			V
Cartographic Refinement toolset		l	
Align Marker To Stroke Or Fill			\checkmark
Calculate Line Caps		\checkmark	\checkmark
Calculate Polygon Main Angle		V	\checkmark
Convert Control Points To Vertices			\checkmark
Convert Marker Placement To Points			
Create Overpass			V
Create Underpass			V
<u>Disperse Markers</u>			V
Generate Hachures For Defined Slopes			✓
Set Control Point At Intersect			V
Set Control Point By Angle			$ \overline{\checkmark} $
Generalization toolset		ı	ı

Toolset/Tool	Basic	Standard	Advanced
Aggregate Points			✓
Aggregate Polygons			\checkmark
Collapse Dual Lines To Center Lines			✓
Collapse Hydro Polygon			
Collapse Road Detail			
Create Cartographic Partitions			
Delineate Built-Up Areas			
Merge Divided Roads			
Simplify Building			
Simplify Line		V	
Simplify Polygon		V	
Simplify Shared Edges		V	
Smooth Line		V	
Smooth Polygon		V	
Smooth Shared Edges		V	\checkmark
Thin Road Network			\checkmark
Graphic Conflicts toolset	I	I	
Detect Graphic Conflict			\checkmark
Propagate Displacement			\checkmark
Resolve Building Conflicts			\checkmark
Resolve Road Conflicts			\checkmark
Map Series toolset	I		

Toolset/Tool	Basic	Standard	Advanced
Calculate Adjacent Fields	\checkmark	V	V
Calculate Central Meridian And Parallels	\checkmark		✓
Calculate Grid Convergence Angle	\checkmark	V	
Calculate UTM Zone	\checkmark	V	v
Grid Index Features	\checkmark	V	v
Strip Map Index Features	\checkmark	V	
Masking toolset		I	
<u>Cul-de-Sac Masks</u>			
Feature Outline Masks			
Intersecting Layers Masks			V

8. Conversion toolbox

Toolset/Tool	Basic	Standard	Advanced
Excel toolset			
Excel To Table	\checkmark	\checkmark	\checkmark
Table To Excel	\checkmark	\checkmark	
From PDF toolset		I	
PDF To TIFF	\checkmark	\checkmark	\checkmark
From Raster toolset		ı	
Raster To ASCII	\checkmark	V	\checkmark
Raster To Float	\checkmark	V	
Raster To Point	\checkmark	V	\checkmark
Raster To Polygon	~	V	✓

Toolset/Tool	Basic	Standard	Advanced		
Raster To Polyline	V	\checkmark	\checkmark		
From WFS toolset					
WFS To Feature Class	V	\checkmark	\checkmark		
GPS toolset					
Features To GPX	V	\checkmark	$\overline{\checkmark}$		
GPX To Features	V	\checkmark	\checkmark		
Graphics toolset					
Features To Graphics	V	\checkmark	\checkmark		
Graphics To Features	V	\checkmark	v		
JSON toolset					
Features To JSON	V	\checkmark	v		
JSON To Features	V	\checkmark	v		
KML toolset					
Layer to KML	V	\checkmark	✓		
Map To KML	V	\checkmark	v		
KML To Layer					
Some parameters are limited by license level—see the tool reference page for more detail.		\checkmark	✓		
LAS toolset					
Convert LAS	Requires Spatial Analyst or 3D Analyst		~		
LAS Dataset To Raster	Requires Spatial Analyst or 3D	\checkmark			

Toolset/Tool	Basic	Standard	Advanced			
	Analyst					
Point Cloud To Raster	Requires Spatial Analyst or 3D Analyst	\checkmark	✓			
SAS toolset						
SAS To Table	v	V	V			
Table To SAS	\checkmark	V	v			
To CAD toolset						
Add CAD Fields	\checkmark	\checkmark	\checkmark			
Export To CAD	\checkmark	V	v			
To Collada toolset						
Multipatch To Collada	\checkmark	\checkmark	v			
To dBASE toolset						
Table to dBASE	\checkmark	\checkmark	\checkmark			
To Geodatabase toolset						
BIM File to Geodatabase	\checkmark	\checkmark	v			
CAD to Geodatabase	\checkmark	V	v			
Export Features	V	V	V			
Export Table	V	V	7			
Extract BIM File Floorplan	V	V	V			
Extract Locations from Document	Requires LocateXT	Requires LocateXT	Requires LocateXT			
Extract Locations from Text	Requires LocateXT	Requires LocateXT	Requires LocateXT			

Toolset/Tool	Basic	Standard	Advanced
Feature Class To Geodatabase	V	V	\checkmark
Mobile Geodatabase To File Geodatabase	\checkmark		
Raster To Geodatabase	V	V	\checkmark
Table To Geodatabase	V	V	\checkmark
To GeoPackage toolset	I		
Add Raster To GeoPackage	V	V	\checkmark
To Raster toolset	I	I	
Feature To Raster	V	V	\checkmark
Multipatch to Raster	V	V	
Point to Raster	Requires Spatial Analyst or 3D Analyst	Requires Spatial Analyst or 3D Analyst	
Polygon To Raster	Requires Spatial Analyst or 3D Analyst	Requires Spatial Analyst or 3D Analyst	
Polyline To Raster	Requires Spatial Analyst or 3D Analyst	Requires Spatial Analyst or 3D Analyst	
Raster To Other Format	V	V	\checkmark
To Shapefile toolset	I	I	
Feature Class To Shapefile	V	V	V

9. Crime Analysis and Safety toolbox

Toolset/Tool	Basic	Standard	Advanced
80-20 Analysis	\checkmark	\checkmark	

Toolset/Tool	Basic	Standard	Advanced
Add Date Attributes	V	V	\checkmark
Features To 3D By Time	v	v	V
Find Space Time Matches	V	v	v
Join Attributes From Polygon	V	V	V
Select Layer By Date And Time	V	V	V
Summarize Incident Count	V	V	V
Summarize Percent Change	v	v	v
<u>Update Features With Incident</u> <u>Records</u>	v		
Cell Phone Analysis toolset			
Cell Phone Records to Feature Class	✓	✓	✓
Cell Site Records To Feature Class	V		v
Generate Call Links	V	v	v
Generate Sector Lines	\checkmark	\checkmark	~

10. Data Interoperability toolbox

Toolset/Tool	Basic	Standard	Advanced
()iiick Export	Requires Data Interoperability	_	Requires Data Interoperability
Quick Import	Requires Data Interoperability		Requires Data Interoperability

11. Data Management toolbox

Toolset/Tool	Basic	Standard	Advanced
3D Objects toolset			
Add 3D Formats		V	V
Export 3D Objects		v	v
Import 3D Objects		v	v
Remove 3D Formats		V	v
Archiving toolset			
Disable Archiving		\checkmark	v
Enable Archiving		V	v
Trim Archive History		V	v
Attachments toolset			
Add Attachments	\checkmark	\checkmark	v
Disable Attachments	V	V	v
Downgrade Attachments	V	V	v
Enable Attachments	V	V	v
Export Attachments	v	V	v
Generate Attachment Match <u>Table</u>	V	\checkmark	v
Remove Attachments	V	V	V
<u>Upgrade Attachments</u>	V	V	V
Attribute Rules toolset			
Add Attribute Rule		v	7
Alter Attribute Rule		v	7
Delete Attribute Rule		\checkmark	

Toolset/Tool	Basic	Standard	Advanced
Disable Attribute Rules		V	V
Enable Attribute Rules		V	\checkmark
Evaluate Rules		V	\checkmark
Export Attribute Rules		V	\checkmark
Import Attribute Rules		V	\checkmark
Reorder Attribute Rule		V	\checkmark
Catalog Dataset toolset			
Add Items To Catalog Dataset	\checkmark	v	v
Add Portal Items To Catalog Dataset	V		v
Create Catalog Dataset	v	V	✓
Contingent Values toolset			
Add Contingent Value	\checkmark	V	\checkmark
Alter Field Group	v	v	v
Create Field Group	v	v	v
Delete Field Group	v	v	v
Export Contingent Values	v	v	v
Import Contingent Values	v	v	v
Remove Contingent Value	v	v	\checkmark
Data Comparison toolset			
Detect Feature Changes			\checkmark
Feature Compare	v	v	v
File Compare	V		

Toolset/Tool	Basic	Standard	Advanced
Raster Compare	✓	V	\checkmark
TIN Compare	\checkmark	V	\checkmark
Table Compare	v	V	\checkmark
Data Loading toolset			
Create Data Loading Workspace	\checkmark	V	\checkmark
Generate Mapping Table	\checkmark	V	\checkmark
Load Data To Preview	\checkmark	v	v
Load Data Using Workspace	\checkmark	v	v
Update Data Loading Workspace Schema	$ \overline{\checkmark} $		
Distributed Geodatabase toolset	[
Compare Replica Schema		V	\checkmark
Create Replica		V	\checkmark
Create Replica From Server		v	v
Disable Replica Tracking		v	v
Enable Replica Tracking		v	v
Export Acknowledgement Message		✓	v
Export Data Change Message		V	
Export Replica Schema		V	
Import Message		V	✓
Import Replica Schema		V	✓
Re-Export Unacknowledged Messages		✓	✓

Toolset/Tool	Basic	Standard	Advanced
Synchronize Changes		\checkmark	V
Unregister Replica		\checkmark	V
Domains toolset	I		
Alter Domain	V	\checkmark	V
Add Coded Value To Domain	v	\checkmark	V
Assign Domain To Field	v	\checkmark	V
Create Domain	V	\checkmark	V
Delete Coded Value From Domain	\checkmark	\checkmark	V
<u>Delete Domain</u>	v	\checkmark	V
Domain To Table	v	\checkmark	V
Remove Domain From Field	v	\checkmark	V
Set Value For Range Domain	v	\checkmark	\checkmark
Sort Coded Value Domain	v	\checkmark	V
Table To Domain	v	\checkmark	V
Feature Binning toolset			
Disable Feature Binning	\checkmark	\checkmark	\checkmark
Enable Feature Binning	v	\checkmark	V
Manage Feature Bin Cache	V	\checkmark	V
Feature Class toolset			
Append Annotation Feature Classes		\checkmark	\checkmark
Some parameters are limited by license level — see the tool			

Toolset/Tool	Basic	Standard	Advanced
reference page for more detail.			
Create Feature Class	V	V	V
Create Unregistered Feature Class	\checkmark		
<u>Integrate</u>	v	v	v
Recalculate Feature Class Extent		V	v
Set Feature Class Split Model	v	\checkmark	\checkmark
Features toolset	I	I	I
Add XY Coordinates	V	V	V
Adjust 3D Z	V	V	V
Bearing Distance To Line	V	V	V
Calculate Geometry Attributes	V	V	V
Check Geometry			
Some parameters are limited by license level — see the tool reference page for more detail.		✓	✓
Copy Features	V	V	V
Delete Features	V	V	V
<u>Dice</u>			V
Feature Envelope To Polygon			V
Feature Vertices To Points			V
Feature To Line		V	v
Feature To Point	v	V	v
Feature To Polygon		\checkmark	\checkmark

Toolset/Tool	Basic	Standard	Advanced
Geodetic Densify		V	\checkmark
Minimum Bounding Geometry	\checkmark	V	V
Multipart To Singlepart	\checkmark	$\overline{\checkmark}$	V
Points To Line	\checkmark	V	v
Polygon to Line			v
Repair Geometry			
Some parameters are limited by license level — see the tool reference page for more detail.		✓	✓
Split Line At Point			V
Split Line At Vertices			V
Subdivide Polygon	v	V	V
Table To Ellipse	\checkmark	V	v
Unsplit Line			V
XY Table To Point	\checkmark	$\overline{\checkmark}$	V
XY To Line	\checkmark	V	v
Fields toolset			I
Add Field	\checkmark	\checkmark	v
Add Fields	\checkmark	V	v
Add Global IDs	\checkmark	V	v
Add GPS Metadata Fields	\checkmark	V	v
Add Incrementing ID Field		$\overline{\checkmark}$	V
Alter Field	\checkmark	V	v
Assign Default To Field	\checkmark	V	✓

Toolset/Tool	Basic	Standard	Advanced
Batch Update Fields	✓	V	V
Calculate End Time	v	\checkmark	V
Calculate Field	V	\checkmark	$\overline{\checkmark}$
<u>Calculate Fields</u>	V	\checkmark	$\overline{\checkmark}$
Convert Temporal Field	V	V	$\overline{\checkmark}$
Convert Time Zone	V	V	$\overline{\checkmark}$
Delete Field	V	\checkmark	$\overline{\checkmark}$
<u>Disable COGO</u>		\checkmark	$\overline{\checkmark}$
Disable Editor Tracking	V	\checkmark	$\overline{\checkmark}$
Enable COGO		\checkmark	$\overline{\checkmark}$
Enable Editor Tracking	V	V	$\overline{\checkmark}$
Encode Field	V	\checkmark	$\overline{\checkmark}$
Field Statistics To Table	V	V	\checkmark
Migrate Data Field To High Precision		\checkmark	V
Reclassify Field	V	\checkmark	V
Standardize Field	V	\checkmark	V
Transform Field	V	\checkmark	V
<u>Transpose Fields</u>	V	\checkmark	$\overline{\checkmark}$
File Geodatabase toolset			
Compact	\checkmark	\checkmark	\checkmark
Compress File Geodatabase Data	V	\checkmark	V
Generate File Geodatabase License			V

Toolset/Tool	Basic	Standard	Advanced
Generate Licensed File Geodatabase		V	V
Recover File Geodatabase	\checkmark	V	✓
Uncompress File Geodatabase	v	V	V
<u>Data</u>	V	▼	V
General toolset			ı
Analyze Tools For Pro	\checkmark	V	\checkmark
Append	\checkmark	V	•
Copy	\checkmark	V	v
Create Database View		V	V
<u>Delete</u>	\checkmark	V	V
<u>Delete Identical</u>	\checkmark	V	V
Export Report To PDF	\checkmark	V	V
Extract Data From Geodatabase		V	V
Find Identical	\checkmark	V	v
<u>Merge</u>	\checkmark	V	V
<u>Rename</u>	\checkmark	V	v
Sort			
With ArcGIS Pro Basic and ArcGIS Pro Standard, you will only be allowed to sort on one attribute field. To sort on the geometry field or multiple fields, you need ArcGIS Pro Advanced.		✓	✓
<u>Transfer Files</u>	\checkmark	v	V

Toolset/Tool	Basic	Standard	Advanced
<u>Upload File To Portal</u>	V	V	V
Generalization toolset	I	I	I
Dissolve	V	V	V
Eliminate			V
Eliminate Polygon Part			V
Geodatabase Administration to	olset		1
Analyze Datasets		\checkmark	V
Change Privileges		V	V
<u>Compress</u>		V	V
Configure Geodatabase Log File Tables		V	V
Create Database Sequence		$\overline{\checkmark}$	V
Create Database User		V	V
Create Enterprise Geodatabase		$\overline{\checkmark}$	V
<u>Create Role</u>		$\overline{\checkmark}$	V
Delete Database Sequence		V	V
Delete Schema Geodatabase		V	V
Diagnose Version Metadata		V	V
Diagnose Version Tables		V	V
Enable Enterprise Geodatabase		$\overline{\checkmark}$	V
Export Geodatabase Configuration Keywords		\checkmark	V
Import Geodatabase Configuration Keywords		V	V

Toolset/Tool	Basic	Standard	Advanced	
Migrate ObjectID To 64-Bit	\checkmark	V	V	
Migrate Storage		V	V	
Rebuild Indexes		V	V	
Register With Geodatabase		V	V	
Repair Version Metadata		V	V	
Repair Version Tables		V	V	
Update Enterprise Geodatabase License			\checkmark	
Update Portal Dataset Owner		V	V	
Upgrade Dataset				
ArcGIS Desktop Standard or Desktop Advanced license is required to upgrade mosaic datasets.			✓	
Upgrade Geodatabase				
Only file geodatabases can be appraded at the ArcGIS Desktop Basic license level. ArcGIS Desktop Desktop Standard or Desktop Advanced license is required to apprade enterprise geodatabases.	✓	✓	✓	
Indexes toolset				
Add Attribute Index	\checkmark	\checkmark	V	
Add Spatial Index	\checkmark	V	V	
Remove Attribute Index	\checkmark	\checkmark	V	
Remove Spatial Index	\checkmark	\checkmark	V	

Toolset/Tool	Basic	Standard	Advanced
Joins and Relates toolset			
Add Join	\checkmark	\checkmark	V
Add Relate	v	\checkmark	V
Add Spatial Join	v	\checkmark	V
Join Field	v	\checkmark	V
Remove Join	v	\checkmark	V
Remove Relate	v	\checkmark	V
Validate Join	v	\checkmark	V
LAS Dataset toolset			
	Requires 3D Analyst or Spatial Analyst		~
	Requires 3D Analyst or Spatial Analyst		$\overline{\checkmark}$
Create LAS Dataset	Requires 3D Analyst or Spatial Analyst		$\overline{\checkmark}$
	Requires 3D Analyst or Spatial Analyst		\checkmark
	Requires 3D Analyst or Spatial Analyst	\checkmark	
Remove Files From LAS Dataset	Requires 3D Analyst or Spatial Analyst	\checkmark	~

Toolset/Tool	Basic	Standard	Advanced
Layers and Table Views toolset			
Apply Symbology From Layer	V	V	V
Make Aggregation Query Layer			v
Make Building Layer	V	V	v
Make Feature Layer	V	V	v
Make Image Server Layer	V	V	V
Make LAS Dataset Layer	V	V	v
Make Mosaic Layer	V	V	V
Make Query Layer	V	V	V
Make Query Table	V	V	V
Make Raster Layer	V	V	V
Make Scene Layer	V	V	V
Make Table View	V	V	V
Make TIN Layer	V	V	V
Make Trajectory layer		V	v
Make WCS Layer	V	V	v
Make XY Event Layer	V	V	v
Match Layer Symbology To A Style	V		
Save To Layer File	V	V	V
Select Layer By Attribute	V	V	v
Select Layer By Location	V	V	V
Package toolset		I	I

Toolset/Tool	Basic	Standard	Advanced
Consolidate Layer	V	V	V
Consolidate Locator	\checkmark	V	v
Consolidate Map	\checkmark	V	V
Consolidate Toolbox	\checkmark	V	V
Create Map Tile Package	\checkmark	v	v
Create Mobile Map Package			
Some parameters are limited by the Publisher extension—see the tool reference page for more detail.		✓	
Create Mobile Scene Package			
Some parameters are limited by the Publisher extension—see the tool reference page for more detail.		✓	
Create Vector Tile Index	\checkmark	V	
Create Vector Tile Package	\checkmark	V	\checkmark
Consolidate Project	\checkmark	V	v
Extract Package	\checkmark	V	v
Package 3D Tiles	\checkmark	V	V
Package Layer	\checkmark	V	v
Package Locator	\checkmark	V	v
Package Map	\checkmark	V	v
Package Project	\checkmark	V	v
Package Result	\checkmark	\checkmark	V

Toolset/Tool	Basic	Standard	Advanced			
Share Package	\checkmark	\checkmark	V			
Package/Scene Layers toolset						
Create 3D Object Scene Layer Package	\checkmark	\checkmark	~			
Create Building Scene Layer Package	\checkmark	\checkmark	~			
Create Integrated Mesh Scene Layer Package	\checkmark	\checkmark	~			
Create Point Cloud Scene Layer Package	\checkmark	\checkmark				
Create Point Scene Layer Package	\checkmark	\checkmark	~			
Create Voxel Scene Layer Content	\checkmark	\checkmark	~			
Upgrade Scene Layer	\checkmark	\checkmark	v			
Validate Scene Layer	\checkmark	\checkmark	V			
Photos toolset						
GeoTagged Photos To Points	\checkmark	\checkmark	V			
Match Photos To Rows By Time	\checkmark	\checkmark	V			
Projections and Transformation	s toolset					
Batch Project	\checkmark	\checkmark	V			
Convert Coordinate Notation	\checkmark	\checkmark	V			
Create Custom Geographic Transformation		\checkmark	\checkmark			
Create Custom Vertical Transformation	\checkmark	~	V			

Toolset/Tool	Basic	Standard	Advanced
Create Spatial Reference	V	V	V
Define Projection	\checkmark	v	v
<u>Project</u>	v	V	V
Raster toolset			
Flip	\checkmark	\checkmark	\checkmark
Mirror	\checkmark	V	v
<u>Project Raster</u>	\checkmark	v	v
Register Raster	\checkmark	v	v
Rescale	\checkmark	v	v
Rotate	\checkmark	v	v
Shift	\checkmark	V	V
<u>Warp</u>	\checkmark	v	v
Warp From File	\checkmark	v	v
Raster toolset			
Mosaic Dataset toolset			
Add Rasters To Mosaic Dataset		V	V
Alter Mosaic Dataset Schema		v	v
Analyze Mosaic Dataset		v	v
Build Boundary		v	v
Build Footprints		V	v
Build Mosaic Dataset Item Cache		V	v
Build Overviews		v	v
Build Seamlines		\checkmark	

Toolset/Tool	Basic	Standard	Advanced
Calculate Cell Size Ranges		V	V
Clear Pixel Cache	V	V	V
Color Balance Mosaic Dataset		V	V
Compute Dirty Area		V	V
Compute Mosaic Candidates		V	V
Create Mosaic Dataset		V	V
Create Referenced Mosaic Dataset		\checkmark	V
Define Mosaic Dataset NoData		V	\checkmark
<u>Define Overviews</u>		V	$\overline{\checkmark}$
Delete Mosaic Dataset		V	$\overline{\checkmark}$
Edit Raster Function		V	$\overline{\checkmark}$
Export Mosaic Dataset Geometry		V	$\overline{\checkmark}$
Export Mosaic Dataset Items		V	$\overline{\checkmark}$
Export Mosaic Dataset Paths		V	$\overline{\checkmark}$
Generate Exclude Area		V	$\overline{\checkmark}$
Generate Raster Collection	V	V	$\overline{\checkmark}$
Import Mosaic Dataset Geometry		V	V
Merge Mosaic Dataset Items		V	$\overline{\checkmark}$
Mosaic Dataset To Mobile Mosaic Dataset	V	V	V
Remove Rasters From Mosaic Dataset		V	v
Repair Mosaic Dataset Paths		V	V

Toolset/Tool	Basic	Standard	Advanced
Set Mosaic Dataset Properties		V	\checkmark
Split Mosaic Dataset Items		V	\checkmark
Synchronize Mosaic Dataset		V	\checkmark
Ortho Mapping toolset			
Analyze Control Points		\checkmark	\checkmark
Append Control Points		V	\checkmark
Apply Block Adjustments		V	\checkmark
Build Stereo Model	\checkmark	V	\checkmark
Compute Block Adjustments			
The tool requires the ArcGIS Desktop Advanced license when the Transformation Type value is set to RPC or Frame.		✓	$ \checkmark$
Compute Camera Model		Requires ArcGIS Reality for ArcGIS Pro	
Compute Control Points		V	\checkmark
Compute Depth Map		V	\checkmark
Compute Fiducials		Requires ArcGIS Reality for ArcGIS Pro	
Compute Tie Points		V	\checkmark
Export Frame And Camera Parameters	\checkmark	\checkmark	
Generate Block Adjustment Report	\checkmark	✓	\checkmark

Toolset/Tool	Basic	Standard	Advanced
Generate Point Cloud		Requires ArcGIS Reality for ArcGIS Pro	
Interpolate From Point Cloud		Requires ArcGIS Reality for ArcGIS Pro	
Match Control Points		V	\checkmark
Remove Depth Map		V	\checkmark
<u>Update Interior Orientation</u>		Requires ArcGIS Reality for ArcGIS Pro	
Raster Dataset toolset		1	
Copy Raster	V	V	\checkmark
Create Random Raster	Requires 3D Analyst or Spatial Analyst	Requires 3D Analyst or Spatial Analyst	v
Create Raster Dataset	V	V	\checkmark
Download Rasters	V	V	\checkmark
Generate Raster From Raster Function	v	✓	v
<u>Mosaic</u>	V	V	\checkmark
Mosaic To New Raster	V	V	\checkmark
Workspace To Raster Dataset	V	V	\checkmark
Raster Processing toolset			
Clip	V	V	\checkmark
Composite Bands	V	✓	\checkmark

Toolset/Tool	Basic	Standard	Advanced
Compute Pan-sharpening Weights		\checkmark	\checkmark
Create Color Composite	V	\checkmark	V
Create Ortho Corrected Raster Dataset	V		V
Create Pan-Sharpened Raster Dataset	~		V
Extract Subdataset	V	\checkmark	V
Generate Table From Raster Function	V		V
Raster To DTED	V	\checkmark	V
Resample	V	\checkmark	V
Split Raster	V	\checkmark	V
Raster Properties toolset	I		
Add Colormap	V	\checkmark	V
Batch Build Pyramids	V	\checkmark	V
Batch Calculate Statistics	V	\checkmark	V
Build Pyramids	V	\checkmark	V
Build Pyramids and Statistics	V	\checkmark	V
Build Raster Attribute Table	V	\checkmark	V
Calculate Statistics	V	\checkmark	V
Convert Raster Function Template	V	\checkmark	V
Delete Colormap	V	\checkmark	V
Delete Raster Attribute Table	\checkmark	\checkmark	\checkmark

Toolset/Tool	Basic	Standard	Advanced
Export Raster World File	V	V	V
Get Cell Value	V	V	V
Get Raster Properties	\checkmark	V	V
Set Raster Properties	\checkmark	V	V
Relationship Classes toolset			
Add Rule to Relationship Class	\checkmark	V	V
Create Relationship Class	V	V	v
Migrate Relationship Class	V	V	V
Remove Rule From Relationship Class	v		\checkmark
Set Relationship Class Split Policy	V	\checkmark	V
Table To Relationship Class	V	V	V
Sampling toolset	I		
Create Fishnet	\checkmark	V	V
Create Random Points	\checkmark	V	V
Create Spatial Sampling Locations	v		\checkmark
Create Spatially Balanced Points	Requires Geostatistical Analyst	Requires Geostatistical Analyst	✓
Generate Points Along Lines	V	V	V
Generate Rectangles Along Lines	\checkmark	V	V
Generate Tessellation	V	V	V
Generate Transects Along Lines	$\overline{\checkmark}$	V	

Toolset/Tool	Basic	Standard	Advanced
Subset Features	\checkmark	\checkmark	\checkmark
Subtypes toolset		I	1
Add Subtype	\checkmark	\checkmark	\checkmark
Remove Subtype	\checkmark	\checkmark	\checkmark
Set Default Subtype	\checkmark	\checkmark	\checkmark
Set Subtype Field	\checkmark	\checkmark	\checkmark
Table toolset			I
Analyze		\checkmark	\checkmark
Copy Rows	\checkmark	\checkmark	\checkmark
Create Table	\checkmark	\checkmark	\checkmark
Create Unregistered Table	\checkmark	\checkmark	\checkmark
Delete Rows	\checkmark	\checkmark	\checkmark
Get Count	\checkmark	\checkmark	\checkmark
<u>Pivot Table</u>			\checkmark
<u>Truncate Table</u>		\checkmark	\checkmark
Tile Cache toolset		I	I
Export Tile Cache	\checkmark	\checkmark	\checkmark
Generate Tile Cache Tiling Scheme	v	\checkmark	\checkmark
Import Tile Cache	\checkmark	\checkmark	v
Manage Tile Cache	\checkmark	\checkmark	\checkmark
Toolbox toolset		I	I
Analyze Toolbox For Version	\checkmark	\checkmark	\checkmark

Toolset/Tool	Basic	Standard	Advanced
Analyze Tools For Pro	V	V	V
Save Toolbox To Version	V	V	V
Topology toolset			I
Add Feature Class To Topology		V	V
Add Rule To Topology		V	V
Create Topology		V	V
Export Topology Errors	V	V	V
Remove Feature Class From Topology		\checkmark	\checkmark
Remove Rule From Topology		V	V
Set Cluster Tolerance		V	V
Validate Topology		V	V
Trajectory toolset			
Add Data To Trajectory Dataset		V	V
Create Trajectory Dataset		V	V
Repair Trajectory Dataset		V	V
Versions toolset			
Add Field Conflict Filter		\checkmark	V
Alter Version			
Some additional license restrictions apply—see the tool reference page for more details.		✓	
Change Version		V	V
<u>Create Version</u>		v	

Toolset/Tool	Basic	Standard	Advanced
Some additional license restrictions apply—see the tool reference page for more details.			
Delete Version			
Some additional license restrictions apply—see the tool reference page for more details.		✓	
Reconcile Versions			
Some additional license restrictions apply—see the tool reference page for more details.		✓	
Register As Versioned		V	V
Remove Field Conflict Filter		V	V
Unregister As Versioned		V	V
Workspace toolset			
Create Cloud Storage Connection File	\checkmark		\checkmark
Create Database Connection		V	V
Create Database Connection String	\checkmark		\checkmark
Create Feature Dataset	\checkmark	V	V
Create File Geodatabase	\checkmark	v	V
Create Folder	\checkmark	V	V
Create Mobile Geodatabase	\checkmark	v	v
		V	V
Create Spatial Type			

Toolset/Tool	Basic	Standard	Advanced
Clear Workspace Cache	V	V	$\overline{\checkmark}$
Convert Schema Report	\checkmark	V	
Export XML Workspace Document	√	✓	✓
Generate Schema Report	V	V	\checkmark
Import XML Workspace Document		✓	✓
Refresh Excel	\checkmark	V	v
Update Geodatabase Connection Properties To Branch			

12. Data Reviewer toolbox

Toolset/Tool	Basic	Standard	Advanced
Data Validation toolset			
Execute Reviewer Batch Job	Requires Data	Requires Data	Requires Data
	Reviewer	Reviewer	Reviewer
Write To Reviewer Table	Requires Data	Requires Data	Requires Data
	Reviewer	Reviewer	Reviewer
Result Management toolset	I	I	
Create Reviewer Session	Requires Data	Requires Data	Requires Data
	Reviewer	Reviewer	Reviewer
Delete Reviewer Session	Requires Data	Requires Data	Requires Data
	Reviewer	Reviewer	Reviewer

Toolset/Tool	Basic	Standard	Advanced
Enable Data Reviewer	Requires Data Reviewer	_	Requires Data Reviewer

13. Defense toolbox

Toolset/Tool	Basic	Standard	Advanced			
Conversion toolset						
Coordinate Table To 2-Point Line	\checkmark	\checkmark	V			
Coordinate Table To Ellipse	V	\checkmark	~			
Coordinate Table To Line Of Bearing	✓		✓			
Coordinate Table To Point	✓	\checkmark	v			
Coordinate Table To Polygon	V	v	7			
Coordinate Table To Polyline	V	\checkmark	v			
Generate Coordinate Notations	v	V	7			
Distance and Direction toolset						
Generate Range Fans	V	\checkmark	V			
Generate Range Fans From Features	\checkmark	\checkmark	\checkmark			
Generate Range Rings	v	\checkmark	7			
Generate Range Rings From Features	✓		✓			
Gridded Reference Graphic too	Gridded Reference Graphic toolset					
Generate Grid From Area	V	\checkmark	V			
Generate Grid From Point			V			

Toolset/Tool	Basic	Standard	Advanced
Generate Reference System Grid From Area	V	V	✓
Number and Letter toolset		I	I
<u>Letter Features</u>			\checkmark
<u>Letter Intersections</u>			\checkmark
Number Features			\checkmark
Number Features By Sector			\checkmark
Visibility toolset			
Find Highest Or Lowest Point			\checkmark
Find Local Peaks Or Valleys			\checkmark
Linear Line Of Sight			\checkmark
Radial Line Of Sight			\checkmark
Radial Line Of Sight And Range			\checkmark

14. Editing toolbox

Toolset/Tool	Basic	Standard	Advanced
<u>Densify</u>		V	\checkmark
Erase Point		V	\checkmark
Extend Line		V	\checkmark
Flip Line		V	\checkmark
<u>Generalize</u>		V	\checkmark
Simplify By Straight Lines and Circular Arcs		✓	✓

Toolset/Tool	Basic	Standard	Advanced
Snap		V	V
Trim Line		V	v
<u>Update COGO</u>		V	V
Conflation toolset	I		
Align Features			
Calculate Transformation Errors			V
Edgematch Features			
Generate Edgematch Links			✓
Generate Rubbersheet Links			✓
Rubbersheet Features			V
Split Line By Match			
<u>Transfer Attributes</u>			V
<u>Transform Features</u>			✓

15. GeoAI toolbox

Toolset/Tool	Basic	Standard	Advanced
Features and Tabular Analysis toolset			

Toolset/Tool	Basic	Standard	Advanced
Predict Using AutoML			
Spatial Analyst is required to use the Explanatory Rasters parameter or when the Prediction Type parameter is set to Predict raster.			✓
Train Using AutoML			
Spatial Analyst is required to use the Explanatory Training Rasters parameter.			✓
Imagery AI toolset			
Extract Features Using AI			
<u>Models</u>			
3D Analyst, Spatial Analyst, and Production Mapping extension licenses are required for			Requires Imag Analyst
postprocessing.			
Train Using AutoDL			Requires Imag Analyst
Text Analysis toolset			
Classify Text Using Deep Learning			
Extract Entities Using Deep Learning			V
Train Entity Recognition Model			V
Train Text Classification Model			V
Train Text Transformation Model			V
Transform Text Using Deep			~

Toolset/Tool	Basic	Standard	Advanced
Learning			
Time Series AI toolset			
Forecast Using Time Series Model			v
Train Time Series Forecasting Model			

16. GeoAnalytics Desktop toolbox

Toolset/Tool	Basic	Standard	Advanced
Analyze Patterns toolset			
Calculate Density			\checkmark
Find Hot Spots			
Find Point Clusters			
Forest-based Classification and Regression			v
Generalized Linear Regression			\checkmark
Data Enrichment toolset			
Calculate Motion Statistics			
Find Locations toolset	l l		
Detect Incidents			\checkmark
Find Dwell Locations		\checkmark	
Find Similar Locations			
Manage Data toolset	1		
Calculate Field			

Toolset/Tool	Basic	Standard	Advanced
Clip Layer			\checkmark
Dissolve Boundaries			\checkmark
Overlay Layers			\checkmark
Summarize Data toolset			
Aggregate Points			\checkmark
Describe Dataset			✓
Join Features			✓
Reconstruct Tracks			✓
Summarize Attributes			
Summarize Center And			✓
<u>Dispersion</u>			
Summarize Within			✓
Use Proximity toolset	'		
Create Buffers			V
Group By Proximity			\checkmark
Snap Tracks			
Trace Proximity Events			\checkmark
Utilities toolset			
Multifile Feature Connections to	oolset		
Copy Dataset From Multifile Feature Connection		\checkmark	
Create Multifile Feature Connection			✓

Toolset/Tool	Basic	Standard	Advanced
Duplicate Dataset From Multifile Feature Connection			\checkmark
Preview Dataset From Multifile Feature Connection			✓
Refresh Multifile Feature Connection			✓
Remove Dataset From Multifile Feature Connection			✓
Update Multifile Feature Connection Dataset Properties			✓

17. GeoAnalytics Server toolbox

Toolset/Tool	Basic	Standard	Advanced
Analyze Patterns toolset			
Calculate Density	Requires	Requires	Requires
	ArcGIS	ArcGIS	ArcGIS
	GeoAnalytics	GeoAnalytics	GeoAnalytics
	Server	Server	Server
Create Space Time Cube	Requires	Requires	Requires
	ArcGIS	ArcGIS	ArcGIS
	GeoAnalytics	GeoAnalytics	GeoAnalytics
	Server	Server	Server
Find Hot Spots	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server
Find Point Clusters Available with ArcGIS Enterprise 10.6.1	Requires	Requires	Requires
	ArcGIS	ArcGIS	ArcGIS
	GeoAnalytics	GeoAnalytics	GeoAnalytics

Toolset/Tool	Basic	Standard	Advanced
	Server	Server	Server
Forest-based Classification and Regression Available with ArcGIS Enterprise 10.7	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server
Generalized Linear Regression Available with ArcGIS Enterprise 10.7	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server
Geographically Weighted Regression (GWR) Available with ArcGIS Enterprise 10.8.1	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server
Data Enrichment toolset			
Calculate Motion Statistics Available with ArcGIS Enterprise 10.9	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server
Find Locations toolset	I		I
Detect Incidents Available with ArcGIS Enterprise 10.6	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server
Find Dwell Locations Available with ArcGIS Enterprise10.8 Find Similar Locations	Requires ArcGIS GeoAnalytics Server Requires ArcGIS GeoAnalytics	Requires ArcGIS GeoAnalytics Server Requires ArcGIS GeoAnalytics	Requires ArcGIS GeoAnalytics Server Requires ArcGIS GeoAnalytics

Toolset/Tool	Basic	Standard	Advance
	Server	Server	Server
Manage Data toolset		I	I
Append Data	Requires	Requires	Requires
Available with AugCIC Enterprise	ArcGIS	ArcGIS	ArcGIS
Available with ArcGIS Enterprise 10.6.1	GeoAnalytics	GeoAnalytics	GeoAnalyti
10.0.1	Server	Server	Server
Calculate Field	Requires	Requires	Requires
Associable a side Associa Estassocia	ArcGIS	ArcGIS	ArcGIS
Available with ArcGIS Enterprise	GeoAnalytics	GeoAnalytics	GeoAnalyti
10.6	Server	Server	Server
<u>Clip Layer</u>	Requires	Requires	Requires
	ArcGIS	ArcGIS	ArcGIS
Available with ArcGIS Enterprise	GeoAnalytics	GeoAnalytics	GeoAnalyti
10.7	Server	Server	Server
	Requires	Requires	Requires
Conv. To Data Store	ArcGIS	ArcGIS	ArcGIS
Copy To Data Store	GeoAnalytics	GeoAnalytics	GeoAnalyti
	Server	Server	Server
Dissolve Boundaries	Requires	Requires	Requires
	ArcGIS	ArcGIS	ArcGIS
Available with ArcGIS Enterprise	GeoAnalytics	GeoAnalytics	GeoAnalyti
10.7	Server	Server	Server
Merge Layers	Requires	Requires	Requires
Ç Ç	ArcGIS	ArcGIS	ArcGIS
Available with ArcGIS Enterprise	GeoAnalytics	GeoAnalytics	GeoAnalyti
10.7	Server	Server	Server
Overlay Layers	Requires	Requires	Requires
	ArcGIS	ArcGIS	ArcGIS
Available with ArcGIS Enterprise	GeoAnalytics	GeoAnalytics	GeoAnalyti
10.6.1	Server	Server	Server

Toolset/Tool	Basic	Standard	Advanced
Aggregate Points	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server
Describe Dataset	Requires	Requires	Requires
Available with ArcGIS Enterprise 10.7	ArcGIS GeoAnalytics Server	ArcGIS GeoAnalytics Server	ArcGIS GeoAnalytics Server
Join Features	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server
Reconstruct Tracks	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server
Summarize Attributes	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server
Summarize Center And Dispersion	Requires	Requires	Requires
Available with ArcGIS Enterprise 10.9	ArcGIS GeoAnalytics Server	ArcGIS GeoAnalytics Server	ArcGIS GeoAnalytics Server
Summarize Within	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server	Requires ArcGIS GeoAnalytics Server
Use Proximity toolset	I	I	
Create Buffers	Requires	Requires	Requires

Toolset/Tool	Basic	Standard	Advanced
	ArcGIS	ArcGIS	ArcGIS
	GeoAnalytics	GeoAnalytics	GeoAnalytics
	Server	Server	Server
Group By Proximity	Requires	Requires	Requires
A ILLI VI A CIG	ArcGIS	ArcGIS	ArcGIS
Available with ArcGIS	GeoAnalytics	GeoAnalytics	GeoAnalytics
Enterprise10.9.1	Server	Server	Server
Snap Tracks	Requires	Requires	Requires
	ArcGIS	ArcGIS	ArcGIS
Available with ArcGIS	GeoAnalytics	GeoAnalytics	GeoAnalytics
Enterprise11.0	Server	Server	Server
Trace Proximity Events	Requires	Requires	Requires
	ArcGIS	ArcGIS	ArcGIS
Available with ArcGIS Enterprise	GeoAnalytics	GeoAnalytics	GeoAnalytics
10.9	Server	Server	Server

18. Geocoding toolbox

Toolset/Tool	Basic	Standard	Advanced
Add Polygon Fields To Locator	\checkmark	V	\checkmark
Clip Locator	\checkmark	V	V
Create Composite Address Locator	\checkmark	\checkmark	~
Create Feature Locator	V	V	v
Create Locator	\checkmark	\checkmark	\checkmark
Delete Polygon Fields From Locator		\checkmark	✓
Geocode Addresses	v	V	\checkmark
Rebuild Address Locator	V	\checkmark	✓

Toolset/Tool	Basic	Standard	Advanced
Rematch Addresses	V	V	V
Reverse Geocode	~	V	~
Data Preparation toolset	I	1	I
Assign Streets To Points	\checkmark	\checkmark	\checkmark
Assign Zones To Streets	V	V	V
Split Addresses Into Components	V	V	V
Portal toolset	I	I	I
Geocode File	Requires your account in ArcGIS Enterprise to have the Perform Analysis privilege		Requires your account in ArcGIS Enterprise to have the Perform Analysis privilege
Geocode Locations From Table	Requires your account in ArcGIS Enterprise to have the Perform Analysis privilege	✓	Requires your account in ArcGIS Enterprise to have the Perform Analysis privilege

19. Geostatistical Analyst toolbox

Toolset/Tool	Basic	Standard	Advanced
Interpolation toolset			
Diffusion Interpolation With Barriers	Requires Geostatistical	Requires Geostatistical	Requires Geostatistical

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
EBK Regression Prediction	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
Empirical Bayesian Kriging	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
Empirical Bayesian Kriging 3D	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
Global Polynomial Interpolation	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
<u>IDW</u>	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
IDW 3D	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
Kernel Interpolation With Barriers	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
Local Polynomial Interpolation	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
Moving Window Kriging	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
Nearest Neighbor 3D	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
Radial Basis Functions	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistica
	Analyst	Analyst	Analyst
Sampling Network Design tools	set	I	1
Create Spatially Balanced Points	Requires Geostatistical Analyst	Requires Geostatistical Analyst	
Densify Sampling Network	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistica
	Analyst	Analyst	Analyst
Simulation toolset	I	I	ı
Extract Values To Table	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistica
	Analyst	Analyst	Analyst
Gaussian Geostatistical Simulations	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistica
	Analyst	Analyst	Analyst
Utilities toolset			
Compare Geostatistical Layers	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistica
	Analyst	Analyst	Analyst
Cross Validation	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistica
	Analyst	Analyst	Analyst
Exploratory Interpolation	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistica
	Analyst	Analyst	Analyst
Generate Polygon Subsets	Requires	Requires	Requires

Toolset/Tool	Basic	Standard	Advanced
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
Neighborhood Selection	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
Semivariogram Sensitivity	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
Subset Features	V	\checkmark	V
Working with Geostatistical La	yers toolset		
Areal Interpolation Layer To Polygons	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
Calculate Z-Value	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
Create Geostatistical Layer	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
GA Layer 3D To Multidimensional Raster	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
GA Layer 3D To NetCDF	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
GA Layer To Contour	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
GA Layer To Grid	Requires	Requires	Requires
	Geostatistical	Geostatistical	Geostatistical

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
	Requires	Requires	Requires
GA Layer To Points	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
	Requires	Requires	Requires
GA Layer To Rasters	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
	Requires	Requires	Requires
Get Model Parameter	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst
	Requires	Requires	Requires
Set Model Parameter	Geostatistical	Geostatistical	Geostatistical
	Analyst	Analyst	Analyst

20. Image Analyst toolbox

Toolset/Tool	Basic	Standard	Advanced
Change Detection toolset			
Analyze Changes Using CCDC	1	Requires Image Analyst	Requires Image Analyst
Analyze Changes Using LandTrendr	1	Requires Image Analyst	Requires Image Analyst
Compute Change Raster	1	Requires Image Analyst	Requires Image Analyst
Detect Change Using Change Analysis Raster	1	Requires Image Analyst	Requires Image Analyst
Classification and Pattern Recognition toolset			

Toolset/Tool	Basic	Standard	Advanced
Classify Raster		Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Classify Raster Using Spectra		Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Compute Confusion Matrix		Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Compute Segment Attributes		Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Create Accuracy Assessment Points		Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Generate Training Samples From Seed Points		Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Inspect Training Samples		Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Linear Spectral Unmixing		Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Predict Using Regression Model		Requires Image Analyst	Requires Image Analyst
Remove Raster Segment Tiling Artifacts	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Segment Mean Shift	Requires Image	Requires Image	Requires Image

Toolset/Tool	Basic	Standard	Advanced
	Analyst or Spatial Analyst	Analyst or Spatial Analyst	Analyst or Spatial Analyst
Train Iso Cluster Classifier	Requires Image Analyst or Spatial Analyst	Analyst or	Requires Image Analyst or Spatial Analyst
<u> Irain K-Nearest Neighbor</u> Classifier	Requires Image Analyst or Spatial Analyst	Analyst or	Requires Image Analyst or Spatial Analyst
Irain Maximum Likelihood Classifier	Requires Image Analyst or Spatial Analyst	Analyst or	Requires Imag Analyst or Spatial Analys
Train Random Trees Classifier	Requires Image Analyst or Spatial Analyst	Analyst or	Requires Imag Analyst or Spatial Analys
	Requires Image Analyst	Requires Image Analyst	Requires Imag Analyst
Irain Support Vector Machine Classifier	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst	Requires Imag Analyst or Spatial Analys
Update Accuracy Assessment Points	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Imag Analyst or Spatial Analys
Deep Learning toolset			I
	Requires Image Analyst	Requires Image Analyst	Requires Imag Analyst
	Requires Image Analyst	Requires Image Analyst	Requires Imag Analyst
	_	Requires Image Analyst	Requires Imag Analyst

Toolset/Tool	Basic	Standard	Advanced
Detect Change Using Deep Learning		Requires Image Analyst	Requires Image Analyst
Detect Objects Using Deep Learning	Requires Image Analyst	Requires Image Analyst	Requires Image Analyst
Export Training Data For Deep Learning	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Extract Features Using AI Models			Requires Image Analyst
Non Maximum Suppression		Requires Image Analyst	Requires Image Analyst
Train Deep Learning Model	Requires Image Analyst	Requires Image Analyst	Requires Image Analyst
Train Using AutoDL			Requires Image Analyst
Extraction toolset			
Sample	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Interpolation toolset	I	I	
Interpolate From Spatiotemporal Points	Requires Image Analyst	Requires Image Analyst	Requires Image Analyst
Optimal Interpolation	Requires Image Analyst	Requires Image Analyst	Requires Image Analyst
Map Algebra toolset	I	I	
Raster Calculator	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst

Toolset/Tool	Basic	Standard	Advanced
Math toolset			
General toolset			
Abs	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Imag Analyst or Spatial Analys
<u>Divide</u>	Analyst or	Requires Image Analyst or Spatial Analyst or 3D Analyst	Requires Imag Analyst or Spatial Analys or 3D Analyst
<u>Exp</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Imag Analyst or Spatial Analys
Exp10	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Imag Analyst or Spatial Analys
Exp2	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Imag Analyst or Spatial Analys
<u>Float</u>	Analyst or	Requires Image Analyst or Spatial Analyst or 3D Analyst	Requires Imag Analyst or Spatial Analys or 3D Analyst
<u>Int</u>	Analyst or	Requires Image Analyst or Spatial Analyst or 3D Analyst	Requires Imag Analyst or Spatial Analys or 3D Analyst
<u>Ln</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Imag Analyst or Spatial Analys
<u>Log10</u>	Requires Image	Requires Image	Requires Imag

Toolset/Tool	Basic	Standard	Advanced
	Analyst or Spatial Analyst	Analyst or Spatial Analyst	Analyst or Spatial Analyst
Log2	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>Minus</u>	Analyst or	Requires Image Analyst or Spatial Analyst or 3D Analyst	Requires Image Analyst or Spatial Analyst or 3D Analyst
<u>Mod</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>Negate</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>Plus</u>	Analyst or	Requires Image Analyst or Spatial Analyst or 3D Analyst	Requires Image Analyst or Spatial Analyst or 3D Analyst
<u>Power</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Round Down	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Round Up	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst

Toolset/Tool	Basic	Standard	Advanced
	Requires Image	Requires Image	Requires Image
<u>Square</u>	Analyst or	Analyst or	Analyst or
	Spatial Analyst	Spatial Analyst	Spatial Analyst
	Requires Image	Requires Image	Requires Image
Square Root	Analyst or	Analyst or	Analyst or
	Spatial Analyst	Spatial Analyst	Spatial Analyst
	Requires Image	Requires Image	Requires Image
Times	Analyst or	Analyst or	Analyst or
<u>Hilles</u>	Spatial Analyst	Spatial Analyst	Spatial Analyst
	or 3D Analyst	or 3D Analyst	or 3D Analyst
Conditional toolset	ı	I	I
	Requires Image	Requires Image	Requires Image
Con	Analyst or	Analyst or	Analyst or
	Spatial Analyst	Spatial Analyst	Spatial Analyst
	Requires Image	Requires Image	Requires Image
<u>Pick</u>	Analyst or	Analyst or	Analyst or
	Spatial Analyst	Spatial Analyst	Spatial Analyst
	Requires Image	Requires Image	Requires Image
<u>Set Null</u>	Analyst or	Analyst or	Analyst or
	Spatial Analyst	Spatial Analyst	Spatial Analyst
Logical toolset	ı	l	
	Requires Image	Requires Image	Requires Image
Bitwise And	Analyst or	Analyst or	Analyst or
	Spatial Analyst	Spatial Analyst	Spatial Analyst
	Requires Image	Requires Image	Requires Image
Bitwise Left Shift	Analyst or	Analyst or	Analyst or
	Spatial Analyst	Spatial Analyst	Spatial Analyst
	Requires Image	Requires Image	Requires Image
Bitwise Not	Analyst or	Analyst or	Analyst or
	Spatial Analyst	Spatial Analyst	Spatial Analyst

Toolset/Tool	Basic	Standard	Advanced
Bitwise Or		Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Bitwise Right Shift	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Bitwise XOr	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Boolean And	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Boolean Not	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Boolean Or	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Boolean XOr	_	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Combinatorial And	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Combinatorial Or	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Combinatorial XOr	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst

Toolset/Tool	Basic	Standard	Advanced
<u>Diff</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Equal To	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Greater Than	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Greater Than Equal	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>InList</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>Is Null</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Less Than	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Less Than Equal	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Not Equal	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>Over</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst

Toolset/Tool	Basic	Standard	Advanced
<u>Test</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Trigonometic toolset	I	I	I
ACos	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>ACosH</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
ASin	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>ASinH</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>ATan</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
ATan2	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>ATanH</u>	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Cos	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
CosH	Requires Image Analyst or	Requires Image Analyst or	Requires Image Analyst or

Toolset/Tool	Basic	Standard	Advanced
	Spatial Analyst	Spatial Analyst	Spatial Analyst
<u>Sin</u>	_	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>SinH</u>		Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>Tan</u>	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
<u>TanH</u>	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Motion Imagery toolset			
Extract Video Frames To Images	_	Requires Image Analyst	Requires Image Analyst
<u>Video Metadata To Feature Class</u>	Requires Image Analyst	Requires Image Analyst	Requires Image Analyst
<u>Video Multiplexer</u>	Requires Image Analyst	Requires Image Analyst	Requires Image Analyst
Multidimensional Analysis tools	 set		
Aggregate Multidimensional Raster	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Dimensional Moving Statistics	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Find Argument Statistics	Requires Image	Requires Image	Requires Image

Generate Multidimensional Anomaly	Requires Image Analyst or Spatial Analyst	Requires Image	Analyst Requires Image Analyst or
Anomaly	Analyst or Spatial Analyst	Analyst or	1
	Requires Image		Spatial Analyst
Caenerate Trend Raster	_	1 0	Requires Image Analyst
	•	-	Requires Image Analyst
	•		Requires Image Analyst
Predict Using Trend Raster	-		Requires Image Analyst
Summarize Categorical Raster	1		Requires Image Analyst
Overlay toolset			
Weighted Sum	Analyst or	-	Requires Image Analyst or Spatial Analyst
Statistical toolset			
Cell Statistics A	Analyst or	Analyst or	Requires Image Analyst or Spatial Analyst
Focal Statistics A	Analyst or		Requires Image Analyst or Spatial Analyst
Zonal Statistics A	Analyst or		Requires Image Analyst or Spatial Analyst

Toolset/Tool	Basic	Standard	Advanced
Zonal Statistics as Table	Analyst or	Requires Image Analyst or Spatial Analyst	Requires Image Analyst or Spatial Analyst
Synthetic Aperture Radar tools	et	I	1
Apply Geometric Terrain Correction	Requires Image	Requires Image	Requires Image
	Analyst	Analyst	Analyst
Apply Orbit Correction		Requires Image Analyst	Requires Image Analyst
Apply Radiometric Calibration	Requires Image	Requires Image	Requires Image
	Analyst	Analyst	Analyst
Apply Radiometric Terrain Flattening	Requires Image	Requires Image	Requires Image
	Analyst	Analyst	Analyst
Compute SAR Indices		Requires Image Analyst	Requires Image Analyst
Convert SAR Units	Requires Image	Requires Image	Requires Image
	Analyst	Analyst	Analyst
Create Color Composite	v	\checkmark	v
<u>Deburst</u>	Requires Image	Requires Image	Requires Image
	Analyst	Analyst	Analyst
<u>Despeckle</u>	Requires Image	Requires Image	Requires Image
	Analyst	Analyst	Analyst
Detect Bright Ocean Objects	Requires Image	Requires Image	Requires Image
	Analyst	Analyst	Analyst
Detect Dark Ocean Areas	Requires Image	Requires Image	Requires Image
	Analyst	Analyst	Analyst
Download Orbit File	Requires Image	Requires Image	Requires Image
	Analyst	Analyst	Analyst
Extract Water	Requires Image	Requires Image	Requires Image

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
Multilook	Requires Image	Requires Image	Requires Image
<u>IVIUITIIOUK</u>	Analyst	Analyst	Analyst
Remove Thermal Noise	Requires Image	Requires Image	Requires Image
remove memai roise	Analyst	Analyst	Analyst
Utilities toolset	I	ı	ı
Create Binary Mask	Requires Image	Requires Image	Requires Image
Circuit Diliury Wask	Analyst	Analyst	Analyst

21. Indoors toolbox

Toolset/Tool	Basic	Standard	Advanced
Create Indoor Dataset			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps
Create Indoor 3D Dataset			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps
Create Indoors Database			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps
Generate Unit Openings			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps
Import BIM To Indoor Dataset			Requires ArcGIS Indoors Pro or ArcGIS

Toolset/Tool	Basic	Standard	Advanced
Import CAD To Indoor Dataset			Indoors Maps Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps
Import Floorplans To Indoors Geodatabase			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps
Import IFC To Indoor Dataset			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps
<u>Import Indoor Images</u>		Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps	Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps
<u>Update Occupant Features</u>			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps
<u>Upgrade Indoors Database</u>			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps
Indoors Network toolset	1	1	
Classify Indoor Pathways			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps
Create Indoor Network Dataset	Requires	Requires ArcGIS	Requires

Toolset/Tool	Basic	Standard	Advanced
	ArcGIS Indoors Pro or ArcGIS Indoors Maps	Indoors Pro or ArcGIS Indoors Maps	ArcGIS Indoors Pro or ArcGIS Indoors Maps
Generate Facility Entryways			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps and 3D Analyst
Generate Floor Transitions			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps
Generate Indoor Pathways			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps and 3D Analyst
Thin Indoor Pathways			Requires ArcGIS Indoors Pro or ArcGIS Indoors Maps, 3D Analyst, and Network Analyst

22. Indoor Positioning toolbox

Toolset/Tool	Basic	Standard	Advanced
Create IPS Data Model		Requires ArcGIS IPS	Requires ArcGIS IPS

Toolset/Tool	Basic	Standard	Advanced
Generate Indoor Positioning Dataset		Requires ArcGIS IPS	Requires ArcGIS IPS
Share Indoor Positioning Data Service		Requires ArcGIS IPS	Requires ArcGIS IPS
Classic toolset			
Enable Indoor Positioning		Requires ArcGIS IPS	Requires ArcGIS IPS
Generate Indoor Positioning File		Requires ArcGIS IPS	Requires ArcGIS IPS
Generate Indoor Positioning File Without Survey		Requires ArcGIS IPS	Requires ArcGIS IPS
Quality Assessment toolset			
Create IPS Quality Dataset		Requires ArcGIS IPS	Requires ArcGIS IPS
Compute Positioning Quality		Requires ArcGIS IPS	Requires ArcGIS IPS

23. Linear Referencing toolbox

Toolset/Tool	Basic	Standard	Advanced
Calibrate Routes	V	V	\checkmark
Create Routes	V	v	✓
Dissolve Route Events	V	V	V
Locate Features Along Routes	V	v	V
Make Route Event Layer	v	v	v
Overlay Route Events	V	V	\checkmark
Transform Route Events	V	\checkmark	v

24. Location Referencing toolbox

Toolset/Tool	Basic	Standard	Advanced
	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
	Location	Location	Location
	Referencing	Referencing	Referencing
Append Events	(ArcGIS Pipeline	(ArcGIS Pipeline	(ArcGIS Pipeline
	Referencing or	Referencing or	Referencing or
	ArcGIS Roads and	ArcGIS Roads and	ArcGIS Roads and
	Highways)	Highways)	Highways)
	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
	Location	Location	Location
	Referencing	Referencing	Referencing
Append Routes	(ArcGIS Pipeline	(ArcGIS Pipeline	(ArcGIS Pipeline
	Referencing or	Referencing or	Referencing or
	ArcGIS Roads and	ArcGIS Roads and	ArcGIS Roads and
	Highways)	Highways)	Highways)
Apply Event	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
<u>Behaviors</u>	Location	Location	Location
	Referencing	Referencing	Referencing
	(ArcGIS Pipeline	(ArcGIS Pipeline	(ArcGIS Pipeline
	Referencing or	Referencing or	Referencing or
	ArcGIS Roads and	ArcGIS Roads and	ArcGIS Roads and

Toolset/Tool	Basic	Standard	Advanced
	Highways)	Highways)	Highways)
Calculate Intersecting Route Measures	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Calculate Route Concurrencies	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Delete Routes	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Derive Event Measures	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Generate Calibration Points	Requires ArcGIS Location Referencing (ArcGIS Pipeline	Requires ArcGIS Location Referencing (ArcGIS Pipeline	Requires ArcGIS Location Referencing (ArcGIS Pipeline

Toolset/Tool	Basic	Standard	Advanced
	Referencing or ArcGIS Roads and Highways)	Referencing or ArcGIS Roads and Highways)	Referencing or ArcGIS Roads and Highways)
<u>Generate Events</u>	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Generate Intersections	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Generate Routes	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Overlay Events	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Remove Overlapping Centerlines	Requires ArcGIS Location	Requires ArcGIS Location	Requires ArcGIS Location

Toolset/Tool	Basic	Standard	Advanced		
	Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)		
Reverse Line Orders	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)		
Translate Event Measures	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)		
<u>Update Measures</u> <u>From LRS</u>	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)		
Configuration toolset					
Configure Address Feature Classes	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and		

Toolset/Tool	Basic	Standard	Advanced
	Highways)	Highways)	Highways)
Configure Utility Network Feature Class	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Remove LRS Entity	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
LRS toolset	I	I	
<u>Create LRS</u>	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Create LRS From Existing Dataset	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Modify LRS	Requires ArcGIS Location	Requires ArcGIS Location	Requires ArcGIS Location

Toolset/Tool	Basic	Standard	Advanced
	Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
LRS Event toolset	1	I	1
Configure External Event With LRS	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Create LRS Event	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Create LRS Event From Existing	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Disable Derived Measure Fields	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and

Toolset/Tool	Basic	Standard	Advanced
	Highways)	Highways)	Highways)
<u>Disable Referent</u> <u>Fields</u>	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipelin Referencing or ArcGIS Roads a Highways)
<u>Disable Stationing</u> <u>Fields</u>	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipelin Referencing or ArcGIS Roads a Highways)
Enable Derived Measure Fields	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipelin Referencing or ArcGIS Roads a Highways)
Enable Referent Fields	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipelin Referencing or ArcGIS Roads a Highways)
Enable Stationing Fields	Requires ArcGIS Location Referencing (ArcGIS Pipeline	Requires ArcGIS Location Referencing (ArcGIS Pipeline	Requires ArcGIS Location Referencing (ArcGIS Pipelin

Toolset/Tool	Basic	Standard	Advanced
	Referencing or ArcGIS Roads and Highways)	Referencing or ArcGIS Roads and Highways)	Referencing or ArcGIS Roads and Highways)
Modify Event Behavior Rules	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Modify LRS Event	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
LRS Intersection tool	set	1	'
Create LRS Intersection	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Create LRS Intersection From Existing Dataset	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)

Toolset/Tool	Basic	Standard	Advanced
Modify LRS Intersection	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
LRS Network toolset	I	I	I
Configure Lookup Table	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Configure Route Dominance Rules	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Create LRS Network	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Create LRS Network From Existing Dataset	_	Requires ArcGIS Location Referencing (ArcGIS Pipeline	Requires ArcGIS Location Referencing (ArcGIS Pipeline

Toolset/Tool	Basic	Standard	Advanced
	Referencing or ArcGIS Roads and Highways)	Referencing or ArcGIS Roads and Highways)	Referencing or ArcGIS Roads and Highways)
Modify Network Calibration Rules	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Modify LRS Network	Requires ArcGIS Location Referencing	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)
Modify Route ID Padding	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)	Requires ArcGIS Location Referencing (ArcGIS Pipeline Referencing or ArcGIS Roads and Highways)

25. Maritime toolbox

Toolset/Tool	Basic	Standard	Advanced
Data Management toolset			

Toolset/Tool	Basic	Standard	Advanced
Generate Depth Areas		Analyst and ArcGIS	Requires 3D Analyst and ArcGIS Maritime
Generate Land Areas		_	Requires ArcGIS Maritime
Expand Collapsed Contours		Requires ArcGIS Maritime	Requires ArcGIS Maritime
Reduce Point Density		_	Requires ArcGIS Bathymetry
Smooth Bathymetric TIN		_	Requires ArcGIS Bathymetry
S-100 toolset			
Convert S-57 to S-101 Cell		_	Requires ArcGIS Maritime
Export S-101 Cell		Requires ArcGIS Maritime	Requires ArcGIS Maritime
Import S-100 Cell		_	Requires ArcGIS Maritime
Import S-100 Feature Catalogue		_	Requires ArcGIS Maritime
S-57 toolset	I	I	
Management toolset			
Copy S-57 Features		Requires ArcGIS Maritime	Requires ArcGIS Maritime
Create S-57 Exchange Set		_	Requires ArcGIS Maritime

Toolset/Tool	Basic	Standard	Advanced
Export Geodatabase To S-57		_	Requires ArcGIS Maritime
Import S-57 To Geodatabase		_	Requires ArcGIS Maritime
Validation toolset	ı	ı	
Parse S-58 Log File		_	Requires ArcGIS Maritime
Repair Nautical Data		Requires ArcGIS Maritime	Requires ArcGIS Maritime
Validate S-57 File		1	Requires ArcGIS Maritime
VPF toolset	1	1	
Export Geodatabase To VPF		_	Requires ArcGIS Maritime
Import VPF To Geodatabase		_	Requires ArcGIS Maritime
Cartography toolset	I	ı	
Apply Maritime Symbology			Requires ArcGIS Maritime
Generate Cartographic Limits			Requires ArcGIS Maritime
Generate Light Sector		_	Requires ArcGIS Maritime
Transfer Quality of Position	Requires ArcGIS Maritime	Requires ArcGIS Maritime	Requires ArcGIS Maritime

26. Multidimension toolbox

Toolset/Tool	Basic	Standard	Advanced
Build Multidimensional Info		\checkmark	\checkmark
Build Multidimensional Transpose			
Make Multidimensional Raster Layer	\checkmark	\checkmark	\checkmark
Make Multidimensional Voxel Layer	\checkmark	\checkmark	
Make OPeNDAP Raster Layer	\checkmark	\checkmark	\checkmark
Manage Multidimensional Raster	\checkmark	\checkmark	\checkmark
Merge Multidimensional Rasters	\checkmark	\checkmark	\checkmark
Select by Dimension	\checkmark	\checkmark	\checkmark
Subset Multidimensional Raster	\checkmark	\checkmark	\checkmark
NetCDF toolset			
Describe NetCDF File	\checkmark	\checkmark	\checkmark
Feature to NetCDF	\checkmark	\checkmark	\checkmark
Make NetCDF Feature Layer	\checkmark	\checkmark	\checkmark
Make NetCDF Raster Layer	\checkmark	\checkmark	\checkmark
Make NetCDF Table View	\checkmark	\checkmark	\checkmark
NetCDF Points To Feature Class (Discrete Sampling Geometry)			
NetCDF Profiles To Feature Class (Discrete Sampling Geometry)	✓	✓	✓
NetCDF Time Series To Feature Class (Discrete Sampling Geometry)		\checkmark	

Toolset/Tool	Basic	Standard	Advanced
NetCDF Trajectories To Feature Class (Discrete Sampling Geometry)	✓	✓	✓
Raster to NetCDF	\checkmark	V	V
Table to NetCDF	V	V	v

27. Network Analyst toolbox

Toolset/Tool	Basic	Standard	Advanced			
Analysis toolset						
Add Field To Analysis Layer	V	V	V			
Add Locations	V	V	V			
Add Vehicle Routing Problem Breaks	\checkmark	V	V			
Add Vehicle Routing Problem Routes	\checkmark	V	\checkmark			
Calculate Locations	V	V	v			
Copy Network Analysis Layer	V	V	V			
Copy Traversed Source Features	Network	Requires Network Analyst	Requires Network Analyst			
Delete Network Analysis Layer	V	V	V			
Directions	_	Requires Network Analyst	Requires Network Analyst			
Make Closest Facility Analysis Layer	V	V	✓			

Toolset/Tool	Basic	Standard	Advanced
Make Last Mile Delivery Analysis Layer	\checkmark	\checkmark	\checkmark
Make Location-Allocation Analysis Layer	\checkmark	V	V
Make OD Cost Matrix Analysis Layer	\checkmark	v	V
Make Route Analysis Layer	\checkmark		✓
Make Service Area Analysis Layer	\checkmark	\checkmark	\checkmark
Make Vehicle Routing Problem Analysis Layer	\checkmark	V	V
Solve			
This tool requires the Network Analyst license if the network data source of the layer being solved is a network dataset but not if the network data source is a service.		✓	
Share As Route Layers	\checkmark	\checkmark	V
Network Dataset toolset			
Build Network	Requires Network Analyst	Requires Network Analyst	Requires Network Analyst
Create Network Dataset	Requires Network Analyst	Requires Network Analyst	Requires Network Analyst
Create Network Dataset From Template	Requires Network Analyst	Requires Network Analyst	Requires Network Analyst

Toolset/Tool	Basic	Standard	Advanced
Create Template From Network Dataset	V	V	V
Dissolve Network	Network	Requires Network Analyst	Requires Network Analyst
Make Network Dataset Layer	V	V	\checkmark
Turn Feature Class toolset	I	I	
Create Turn Feature Class	\checkmark	\checkmark	V
Increase Maximum Edges	V	V	v
Populate Alternate ID Fields	V	V	V
Turn Table To Turn Feature Class	V	\checkmark	v
Update by Alternate ID Fields	V	V	v
Update by Geometry	V	V	

28. Network Diagram toolbox

Toolset/Tool	Basic	Standard	Advanced
Alter Diagram Properties		\checkmark	\checkmark
Append to Diagram		\checkmark	\checkmark
Change Diagrams Owner		\checkmark	\checkmark
Create Diagram		\checkmark	\checkmark
Delete Diagram		\checkmark	\checkmark
Export Diagram Content		\checkmark	\checkmark
Extend Diagram		\checkmark	\checkmark
Make Diagram Layer		\checkmark	\checkmark

Toolset/Tool	Basic	Standard	Advanced
Overwrite Diagram		\checkmark	v
Purge Temporary Diagrams		\checkmark	v
Store Diagram		\checkmark	\checkmark
<u>Update Diagram</u>		\checkmark	\checkmark
Configuration toolset	1		
Add Angle Directed Layout		\checkmark	\checkmark
Add Collapse Container By Attribute Rule		\checkmark	\checkmark
Add Collapse Container By Category Rule		\checkmark	v
Add Collapse Container Rule		\checkmark	v
Add Compression Layout		\checkmark	\checkmark
Add Connectivity Associations Rule		\checkmark	v
Add Diagram Feature Capability By Attribute Rule		\checkmark	v
Add Diagram Feature Capability By Category Rule		\checkmark	v
Add Diagram Template		\checkmark	\checkmark
Add Expand Container By Attribute Rule		\checkmark	\checkmark
Add Expand Container By Category Rule		\checkmark	\checkmark
Add Expand Container Rule		\checkmark	\checkmark
Add Force Directed Layout		\checkmark	\checkmark
Add Grid Layout		\checkmark	\checkmark
Add Linear Dispatch Layout		\checkmark	\checkmark
Add Main Ring Layout		\checkmark	\checkmark
Add Mainline Tree Layout			

Toolset/Tool	Basic	Standard	Advanced
Add Partial Overlapping Edges Layout		\checkmark	\checkmark
Add Radial Tree Layout		\checkmark	\checkmark
Add Reduce Edge By Attribute Rule		\checkmark	V
Add Reduce Junction By Attribute Rule		\checkmark	\checkmark
Add Reduce Junction By Category Rule		\checkmark	\checkmark
Add Reduce Junction Rule		\checkmark	\checkmark
Add Relative Mainline Layout		\checkmark	\checkmark
Add Remove Feature By Attribute Rule		\checkmark	V
Add Remove Feature By Category Rule		\checkmark	\checkmark
Add Remove Feature Rule		\checkmark	\checkmark
Add Reshape Diagram Edges Layout		\checkmark	\checkmark
Add Set Root Junction By Attribute Rule		\checkmark	\checkmark
Add Set Starting Point By Attribute Rule		\checkmark	\checkmark
Add Smart Tree Layout		\checkmark	\checkmark
Add Spatial Dispatch Layout		\checkmark	\checkmark
Add Spatial Query Rule		\checkmark	\checkmark
Add Start Iteration Rule		\checkmark	\checkmark
Add Stop Iteration Rule		\checkmark	\checkmark
Add Structural Attachments Rule		\checkmark	\checkmark
Add Trace Rule		\checkmark	V
Alter Diagram Template		\checkmark	V
Create Diagram Layer Definition		V	V
Delete Diagram Template		\checkmark	\checkmark

Toolset/Tool	Basic	Standard	Advanced
Export Diagram Layer Definition		\checkmark	\checkmark
Export Diagram Template Definitions		\checkmark	\checkmark
Get Diagram Templates Names		\checkmark	\checkmark
Import Diagram Template Definitions		\checkmark	\checkmark
Layout toolset			
Apply Angle Directed Layout		\checkmark	\checkmark
Apply Compression Layout		\checkmark	V
Apply Force Directed Layout		\checkmark	V
Apply Geo Positions Layout		\checkmark	\checkmark
Apply Grid Layout		\checkmark	\checkmark
Apply Linear Dispatch Layout		\checkmark	\checkmark
Apply Main Ring Layout		\checkmark	V
Apply Mainline Tree Layout		\checkmark	V
Apply Partial Overlapping Edges Layout		\checkmark	V
Apply Radial Tree Layout		\checkmark	V
Apply Relative Mainline Layout		\checkmark	V
Apply Rotate Tree Layout		\checkmark	V
Apply Smart Tree Layout		\checkmark	V
Apply Spatial Dispatch Layout		\checkmark	V
Apply Template Layouts		\checkmark	✓
Reshape Diagram Edges Layout		\checkmark	V

29. Oriented Imagery toolbox

Toolset/Tool	Basic	Standard	Advanced
Authoring toolset			
Add Images From Custom Input Type		V	\checkmark
Add Images To Oriented Imagery Dataset		v	✓
Build Oriented Imagery Footprint		V	\checkmark
Create Oriented Imagery Dataset		V	\checkmark
Manage toolset			
Generate Service From Oriented Imagery Dataset		\checkmark	\checkmark
Update Oriented Imagery Dataset Properties		✓	✓

30. Parcel toolbox

Toolset/Tool	Basic	Standard	Advanced
Analyze Parcels By Least		V	v
Squares Adjustment		_	_
Append Parcels			
Apply Parcel Least Squares		V	V
Adjustment			
Build Parcel Fabrics		7	
Copy Parcels		\checkmark	V
Create Parcel Seeds		V	\checkmark
Delete Parcels		V	\checkmark
<u>Duplicate Parcels</u>		v	v
Export Parcel Record Features		~	✓

Toolset/Tool	Basic	Standard	Advanced
Export Sequenced Parcel Features			V
Generate Parcel Fabric Links		V	V
Import Parcel Fabric Points		V	\checkmark
Merge Collinear Parcel Boundaries		\checkmark	v
Select Parcel Features		V	\checkmark
Administration toolset		l	
Add Parcel Type		\checkmark	\checkmark
Create Parcel Fabric		V	\checkmark
Create Parcel Records		v	\checkmark
Disable Parcel Topology		V	\checkmark
Enable Parcel Topology		V	\checkmark
Set Parcel Line Label Position		V	\checkmark
Remove Parcel Type		V	\checkmark
Upgrade ArcMap Parcel Fabric	\checkmark	\checkmark	\checkmark

31. Public Transit toolbox

Toolset/Tool	Basic	Standard	Advanced
Analysis toolset			

Toolset/Tool	Basic	Standard	Advanced
Calculate Transit Service Frequency When calculating public transit frequency statistics for points of interest or areas, this tool requires a Network Analyst license if the network data source is a network dataset but not if the network data source is a service. When calculating public transit frequency statistics for transit stops or lines, no additional license is required.	√	✓	√
Conversion toolset			
Connect Public Transit Data Model To Streets			\checkmark
Features To GTFS Shapes	\checkmark	$ \mathbf{V} $	\checkmark
Features To GTFS Stops	\checkmark	\checkmark	\checkmark
Generate Shapes Features From GTFS When generating shapes using a road network, this tool requires a Network Analyst license if the network data source is a network dataset but not if the network data source is a service. When generating shapes without using a road network, no additional license is required.		✓	☑
GTFS Shapes To Features	\checkmark	\checkmark	\checkmark
GTFS Stops To Features	\checkmark	~	\checkmark
GTFS To Public Transit Data Model	V	7	V

32. Raster Analysis toolbox

Toolset/Tool	Basic	Standard	Advanced
Analyze Patterns toolset			
Calculate Density	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
	Image Server	Image Server	Image Server
<u>Interpolate Points</u>	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
	Image Server	Image Server	Image Server
Analyze Terrain toolset			
<u>Create Viewshed</u>	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
	Image Server	Image Server	Image Server
Surface Parameters	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
	Image Server	Image Server	Image Server
Deep Learning toolset			
Classify Objects Using Deep Learning	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
	Image Server	Image Server	Image Server
Classify Pixels Using Deep	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
Learning	Image Server	Image Server	Image Server
Detect Objects Using Deep Learning	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
	Image Server	Image Server	Image Server
Generalize toolset			
<u>Nibble</u>	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
	Image Server	Image Server	Image Server
Hydrology toolset			
<u>Fill</u>	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
	Image Server	Image Server	Image Server
Flow Accumulation	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
	Image Server	Image Server	Image Server
Flow Direction	Requires ArcGIS	Requires ArcGIS	Requires ArcGIS
	Image Server	Image Server	Image Server

Toolset/Tool	Basic	Standard	Advanced
Flow Distance	_	Requires ArcGIS Image Server	Requires ArcGIS Image Server
Stream Link	_	Requires ArcGIS Image Server	Requires ArcGIS Image Server
<u>Watershed</u>	_	Requires ArcGIS Image Server	Requires ArcGIS Image Server
Manage Data toolset			
Convert Feature To Raster	1 -	Requires ArcGIS Image Server	Requires ArcGIS Image Server
Convert Raster To Feature		Requires ArcGIS Image Server	Requires ArcGIS Image Server
Summarize Data toolset			
Summarize Raster Within	•	Requires ArcGIS Image Server	Requires ArcGIS Image Server
Zonal Statistics As Table	_	Requires ArcGIS Image Server	Requires ArcGIS Image Server
Use Proximity toolset			
Distance Accumulation	_	Requires ArcGIS Image Server	_
Distance Allocation	•	Requires ArcGIS Image Server	Requires ArcGIS Image Server
Optimal Path As Line	1 -	Requires ArcGIS Image Server	Requires ArcGIS Image Server
Optimal Path As Raster	_	Requires ArcGIS Image Server	Requires ArcGIS Image Server
Optimal Region Connections	1 -	Requires ArcGIS Image Server	Requires ArcGIS Image Server

Toolset/Tool	Basic	Standard	Advanced
Use Proximity (Legacy) tools	et		
Calculate Distance	_	Requires ArcGIS Image Server	Requires ArcGIS Image Server
Calculate Travel Cost	_	Requires ArcGIS Image Server	Requires ArcGIS Image Server
Cost Path As Polyline		Requires ArcGIS Image Server	Requires ArcGIS Image Server
Determine Optimum Travel Cost Network		Requires ArcGIS Image Server	Requires ArcGIS Image Server
Determine Travel Cost Path As Polyline	•	Requires ArcGIS Image Server	Requires ArcGIS Image Server
Determine Travel Cost Paths To Destinations		Requires ArcGIS Image Server	Requires ArcGIS Image Server

33. Reality Mapping toolbox

Toolset/Tool	Basic	Standard	Advanced
Analyze Control Points		V	\checkmark
Append Control Points		V	\checkmark
Apply Block Adjustments		V	\checkmark
Compute Block Adjustments		V	V
Compute Camera Model		Requires ArcGIS Reality for ArcGIS Pro	
Compute Control Points		7	V
Compute Depth Map		7	V
Compute Tie Points		~	✓

Toolset/Tool	Basic	Standard	Advanced
Export Frame And Camera Parameters	$ \overline{\checkmark} $	V	V
Generate Block Adjustment Report		V	✓
Match Control Points		~	V
Reconstruct Surface		Requires ArcGIS Reality for ArcGIS Pro	
Remove Depth Map		V	~

34. Server toolbox

Toolset/Tool	Basic	Standard	Advanced
Caching toolset			
Convert Map Server Cache Storage Format			✓
Create Map Server Cache	v	V	$\overline{\checkmark}$
Delete Map Server Cache	v	v	\checkmark
Export Map Server Cache	V	V	\checkmark
Generate Map Server Cache Tiling Scheme	\checkmark	\checkmark	v
Import Map Server Cache	v	V	\checkmark
Manage Map Server Cache Scales	\checkmark	✓	✓
Manage Map Server Cache Status	\checkmark		
Manage Map Server Cache Tiles	$ \overline{\checkmark} $	\checkmark	

Toolset/Tool	Basic	Standard	Advanced
Data Extraction toolset			
Extract Data	V	V	\checkmark
Extract Data and Email Task	V	V	✓
Extract Data Task	V	V	v
Send Email With Zip File Attachment	V	V	
Printing toolset		I	
Export Web Map	\checkmark	V	✓
Get Layout Templates Info	V	V	✓
Get Report Templates Info	V	V	v
Publishing toolset			
Replace Web Layer	V	V	✓
Stage Service	V	V	v
<u>Upload Service Definition</u>	V	V	

35. Space Time Pattern Mining toolbox

Toolset/Tool	Basic	Standard	Advanced		
Space Time Cube Creation toolset					
Create Space Time Cube By Aggregating Points	\checkmark	\checkmark	~		
Create Space Time Cube From Defined Locations	V	✓	✓		
Create Space Time Cube From Multidimensional Raster Layer	V	$ \overline{\checkmark} $			
Space Time Cube Visualization	toolset	I			

Toolset/Tool	Basic	Standard	Advanced	
Visualize Space Time Cube in 2D	V	V	✓	
Visualize Space Time Cube in 3D	\checkmark	V	\checkmark	
Space Time Pattern Analysis too	olset			
Change Point Detection	V	V		
Emerging Hot Analysis	V	V		
Local Outlier Analysis	v	v	\checkmark	
Time Series Clustering	v	v	\checkmark	
Time Series Cross Correlation	V	V	\checkmark	
Time Series Forecasting toolset	I	I	I	
Curve Fit Forecast	V	V	\checkmark	
Evaluate Forecasts by Location	V	V	\checkmark	
Exponential Smoothing Forecast	V	V	\checkmark	
Forest-based Forecast	V	V	\checkmark	
Utilities toolset				
Describe Space Time Cube	V	V		
Fill Missing Values	V	V		
Subset Space Time Cube	V	\checkmark	✓	

36. Spatial Analyst toolbox

Toolset/Tool	Basic	Standard	Advanced
Conditional toolset			
<u>Con</u>	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst or Image	Analyst or Image	Analyst or Image

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
<u>Pick</u>		Requires Spatial Analyst or Image Analyst	Requires Spatial Analyst or Image Analyst
Set Null		Requires Spatial Analyst or Image Analyst	Requires Spatial Analyst or Image Analyst
Density toolset	I	ı	
Calculate Kernel Density Ratio		Requires Spatial Analyst	Requires Spatial Analyst
Kernel Density		Requires Spatial Analyst	Requires Spatial Analyst
Line Density		Requires Spatial Analyst	Requires Spatial Analyst
<u>Point Density</u>		Requires Spatial Analyst	Requires Spatial Analyst
Space Time Kernel Density		Requires Spatial Analyst	Requires Spatial Analyst
Distance toolset		I	
Distance Accumulation		Requires Spatial Analyst	Requires Spatial Analyst
Distance Allocation		Requires Spatial Analyst	Requires Spatial Analyst
Least Cost Corridor	Requires Spatial Analyst	Requires Spatial Analyst	Requires Spatial Analyst
Optimal Corridor Connections		Requires Spatial Analyst	Requires Spatial Analyst
Optimal Path As Line	Requires Spatial	Requires Spatial	Requires Spatial

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
Optimal Path As Raster	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
Optimal Region Connections	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
Distance (Legacy) toolset			
<u>Corridor</u>	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
Cost Allocation	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
<u>Cost Back Link</u>	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
Cost Connectivity	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
<u>Cost Distance</u>	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
<u>Cost Path</u>	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
Cost Path as Polyline	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
Euclidean Allocation	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
Euclidean Back Direction	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
Euclidean Direction	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
Euclidean Distance	Requires Spatial	Requires Spatial	Requires Spatia

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
Path Distance	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Path Distance Allocation	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Path Distance Back Link	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Extraction toolset			
Extract By Attributes	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Extract Multi Values to Points	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
extract Values to Points	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Extract by Circle	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Extract by Mask	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Extract by Points	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Extract by Polygon	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Extract by Rectangle	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
<u>Sample</u>		Requires Spatial Analyst or Image Analyst	

Toolset/Tool	Basic	Standard	Advanced
<u>Aggregate</u>	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Boundary Clean	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
<u>Expand</u>	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Majority Filter	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
<u>Nibble</u>	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Region Group	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
<u>Shrink</u>	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Thin	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Groundwater toolset	I	I	I
Darcy Flow	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Darcy Velocity	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Particle Track	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Porous Puff	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Hydrology toolset	ı	ı	ı

Toolset/Tool	Basic	Standard	Advanced
Basin	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Derive Continuous Flow	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Derive Stream As Line	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Derive Stream As Raster	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
<u>Fill</u>	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Flow Accumulation	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Flow Direction	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Flow Distance	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Flow Length	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
<u>Sink</u>	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Snap Pour Point	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Storage Capacity	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Stream Link	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Stream Order	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst

Basic	Standard	Advanced
Requires Spatial	Requires Spatial	Requires Spatial
Analyst	Analyst	Analyst
Requires Spatial	Requires Spatial	Requires Spatial
Analyst	Analyst	Analyst
Requires Spatial	Requires Spatial	Requires Spatial
Analyst or 3D	Analyst or 3D	Analyst or 3D
Analyst	Analyst	Analyst
Requires Spatial	Requires Spatial	Requires Spatial
Analyst or 3D	Analyst or 3D	Analyst or 3D
Analyst	Analyst	Analyst
Requires Spatial	Requires Spatial	Requires Spatial
Analyst or 3D	Analyst or 3D	Analyst or 3D
Analyst	Analyst	Analyst
Requires Spatial	Requires Spatial	Requires Spatial
Analyst or 3D	Analyst or 3D	Analyst or 3D
Analyst	Analyst	Analyst
Requires Spatial	Requires Spatial	Requires Spatial
Analyst or 3D	Analyst or 3D	Analyst or 3D
Analyst	Analyst	Analyst
Requires Spatial	Requires Spatial	Requires Spatial
Analyst or 3D	Analyst or 3D	Analyst or 3D
Analyst	Analyst	Analyst
Requires Spatial	Requires Spatial	Requires Spatial
Analyst or 3D	Analyst or 3D	Analyst or 3D
Analyst	Analyst	Analyst
Requires Spatial	Requires Spatial	Requires Spatial
Analyst or 3D	Analyst or 3D	Analyst or 3D
	Requires Spatial Analyst Requires Spatial Analyst Requires Spatial Analyst or 3D Analyst	Requires Spatial Analyst or 3D Analyst

Toolset/Tool	Basic	Standard	Advanced
	'		
Cell Statistics		_	Requires Spatial Analyst or Image Analyst
Combine		Requires Spatial Analyst	Requires Spatial Analyst
Equal To Frequency		Requires Spatial Analyst	Requires Spatial Analyst
Greater Than Frequency		Requires Spatial Analyst	Requires Spatial Analyst
Highest Position		Requires Spatial Analyst	Requires Spatial Analyst
Less Than Frequency		Requires Spatial Analyst	Requires Spatial Analyst
Lowest Position		Requires Spatial Analyst	Requires Spatial Analyst
<u>Popularity</u>		Requires Spatial Analyst	Requires Spatial Analyst
Rank	Requires Spatial Analyst	Requires Spatial Analyst	Requires Spatial Analyst
Map Algebra toolset	I	I	I
Raster Calculator		_	Requires Spatial Analyst or Image Analyst
Math toolset	I	I	
General toolset			
Abs		Requires Spatial Analyst or Image	Requires Spatial Analyst or Image

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
<u>Divide</u>	Analyst or Image	3	
Exp		Requires Spatial Analyst or Image Analyst	
Exp10		Requires Spatial Analyst or Image Analyst	
Exp2	1	Requires Spatial Analyst or Image Analyst	
<u>Float</u>	Analyst or Image		
<u>Int</u>	Analyst or Image		
<u>Ln</u>		Requires Spatial Analyst or Image Analyst	
<u>Log10</u>		Requires Spatial Analyst or Image Analyst	

Toolset/Tool	Basic	Standard	Advanced
<u>Log2</u>	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
Minus	Analyst or Image Analyst or 3D	Analyst or 3D	Requires Spatial Analyst or Image Analyst or 3D Analyst
Mod		_	Requires Spatial Analyst or Image Analyst
<u>Negate</u>	Requires Spatial Analyst or Image Analyst	Analyst or Image	Requires Spatial Analyst or Image Analyst
<u>Plus</u>	Analyst or 3D	Analyst or Image Analyst or 3D	Requires Spatial Analyst or Image Analyst or 3D Analyst
<u>Power</u>	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
Round Down		_	Requires Spatial Analyst or Image Analyst
Round Up		_	Requires Spatial Analyst or Image Analyst
<u>Square</u>	Analyst or Image		Requires Spatial Analyst or Image Analyst
Square Root		Requires Spatial Analyst or Image	Requires Spatial Analyst or Image

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
<u>Times</u>	Analyst or Image Analyst or 3D	Analyst or 3D	Requires Spatial Analyst or Image Analyst or 3D Analyst
Bitwise toolset	I	I	
Bitwise And			Requires Spatial Analyst or Image Analyst
Bitwise Left Shift	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
Bitwise Not	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
Bitwise Or		_	Requires Spatial Analyst or Image Analyst
Bitwise Right Shift	Analyst or Image	•	Requires Spatial Analyst or Image Analyst
Bitwise XOr	Analyst or Image		Requires Spatial Analyst or Image Analyst
Logical toolset	I	I	
Boolean And		_	Requires Spatial Analyst or Image Analyst
Boolean Not		Requires Spatial Analyst or Image	Requires Spatial Analyst or Image

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
Boolean Or	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
Boolean XOr	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
Combinatorial And	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
Combinatorial Or	_	Analyst or Image	Requires Spatial Analyst or Image Analyst
Combinatorial XOr	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
Diff	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
Equal To	Analyst or Image		Requires Spatial Analyst or Image Analyst
Greater Than	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
Greater Than Equal		_	Requires Spatial Analyst or Image Analyst
InList		Requires Spatial Analyst or Image	Requires Spatial Analyst or Image

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
<u>Is Null</u>	Analyst or Image	Requires Spatial Analyst or Image Analyst	
Less Than	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
Less Than Equal	Analyst or Image	Requires Spatial Analyst or Image Analyst	
Not Equal	Analyst or Image		Requires Spatial Analyst or Image Analyst
<u>Over</u>	Analyst or Image		Requires Spatial Analyst or Image Analyst
<u>Test</u>	Analyst or Image	Requires Spatial Analyst or Image Analyst	
Trigonometic toolset	1	ı	
ACos	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
<u>ACosH</u>		_	Requires Spatial Analyst or Image Analyst
ASin		_	Requires Spatial Analyst or Image Analyst
<u>ASinH</u>	Requires Spatial	Requires Spatial	Requires Spatial

Toolset/Tool	Basic	Standard	Advanced
	Analyst or Image Analyst	_	Analyst or Image Analyst
<u>ATan</u>	Requires Spatial Analyst or Image Analyst		
ATan2	Requires Spatial Analyst or Image Analyst	Analyst or Image	
<u>ATanH</u>	Requires Spatial Analyst or Image Analyst	Analyst or Image	
Cos	Analyst or Image	_	
<u>CosH</u>	Analyst or Image	_	Requires Spatial Analyst or Image Analyst
Sin	Requires Spatial Analyst or Image Analyst	Analyst or Image	Requires Spatial Analyst or Image Analyst
<u>SinH</u>		_	Requires Spatial Analyst or Image Analyst
<u>Tan</u>	Requires Spatial Analyst or Image Analyst	Analyst or Image	Requires Spatial Analyst or Image Analyst
<u>TanH</u>		_	Requires Spatial Analyst or Image Analyst
Multidimensional Analysis to	olset	ı	1

Toolset/Tool	Basic	Standard	Advanced
Aggregate Multidimensional Raster	Analyst or Image	Requires Spatial Analyst or Image Analyst	
Dimensional Moving Statistics	Analyst or Image		
Anomaly	Analyst or Image	Requires Spatial Analyst or Image Analyst	
Multivariate toolset			
Band Collection Statistics	•	Requires Spatial Analyst	Requires Spatial Analyst
Liass Probability		Requires Spatial Analyst	Requires Spatial Analyst
Create Signatures	•	Requires Spatial Analyst	Requires Spatial Analyst
Dengrogram		Requires Spatial Analyst	Requires Spatial Analyst
Edit Signatures		Requires Spatial Analyst	Requires Spatial Analyst
ISO Callister		Requires Spatial Analyst	Requires Spatial Analyst
•		Requires Spatial Analyst	Requires Spatial Analyst
		Requires Spatial Analyst	Requires Spatial Analyst
Principal Components		Requires Spatial Analyst	Requires Spatial Analyst

Toolset/Tool	Basic	Standard	Advanced
Neighborhood toolset			
Block Statistics	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
<u>Filter</u>	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Focal Flow	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Focal Statistics		Requires Spatial Analyst or Image Analyst	Requires Spatial Analyst or Image Analyst
<u>Line Statistics</u>	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Point Statistics	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Overlay toolset	I		
<u>Fuzzy Membership</u>	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Fuzzy Overlay	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Locate Regions	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Weighted Overlay	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Weighted Sum		Requires Spatial Analyst or Image Analyst	Requires Spatial Analyst or Image Analyst
Raster Creation toolset	ı	1	1
Create Constant Raster	Requires Spatial	Requires Spatial	Requires Spatial

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
Create Normal Raster	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Create Random Raster	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Reclass toolset	I	I	I
Lookup	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Reclass by ASCII File	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Reclass by Table	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Reclassify	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Rescale by Function	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Slice		-	Requires Spatial Analyst or 3D Analyst
Segmentation and Classificat	ion toolset	1	1
Classify Raster		Requires Spatial Analyst or Image Analyst	Requires Spatial Analyst or Image Analyst
Compute Confusion Matrix		Requires Spatial Analyst or Image	Requires Spatial Analyst or Image

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
Compute Segment Attributes	Requires Spatial Analyst or Image Analyst	Analyst or Image	
Create Accuracy Assessment Points	Requires Spatial Analyst or Image Analyst	Analyst or Image	
Export Training Data	Requires Spatial Analyst or Image Analyst	Analyst or Image	
From Seed Points	Requires Spatial Analyst or Image Analyst	Analyst or Image	
Inspect Training Samples	Requires Spatial Analyst or Image Analyst	Analyst or Image	
Linear Spectral Unmixing	Requires Spatial Analyst or Image Analyst	Analyst or Image	
Remove Raster Segment Tiling Artifacts	Requires Spatial Analyst or Image Analyst	Analyst or Image	
Segment Mean Shift	Requires Spatial Analyst or Image Analyst	Analyst or Image	
Train Iso Cluster Classifier	Requires Spatial Analyst or Image Analyst	Analyst or Image	
_	Requires Spatial Analyst or Image		

Toolset/Tool	Basic	Standard	Advanced
	Analyst	Analyst	Analyst
Train Maximum Likelihood Classifier	Analyst or Image	Requires Spatial Analyst or Image Analyst	Requires Spatial Analyst or Image Analyst
Train Random Trees Classifier		_	
Train Support Vector Machine Classifier		_	Requires Spatial Analyst or Image Analyst
Update Accuracy Assessment Points		Requires Spatial Analyst or Image Analyst	Requires Spatial Analyst or Image Analyst
Solar Radiation toolset	I	I	
Area Solar Radiation	Requires Spatial Analyst	Requires Spatial Analyst	Requires Spatial Analyst
Feature Solar Radiation	Requires Spatial Analyst	Requires Spatial Analyst	Requires Spatial Analyst
Points Solar Radiation	Requires Spatial Analyst	Requires Spatial Analyst	Requires Spatial Analyst
Raster Solar Radiation	Requires Spatial Analyst	Requires Spatial Analyst	Requires Spatial Analyst
Solar Radiation Graphics	Requires Spatial Analyst	Requires Spatial Analyst	Requires Spatial Analyst
Surface toolset	I	I	
Add Surface Information	Requires Spatial Analyst or 3D Analyst	Requires Spatial Analyst or 3D Analyst	Requires Spatial Analyst or 3D Analyst

Toolset/Tool	Basic	Standard	Advanced
<u>Aspect</u>	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
<u>Contour</u>	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Contour List	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Contour with Barriers	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
<u>Curvature</u>	Requires Spatial	Requires Spatial	Requires Spati
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Cut Fill	Requires Spatial	Requires Spatial	Requires Spati
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Geodesic Viewshed	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Geomorphon Landforms	Requires Spatial	Requires Spatial	Requires Spatia
	Analyst	Analyst	Analyst
<u>Hillshade</u>	Requires Spatial	Requires Spatial	Requires Spati
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
<u>Interpolate Shape</u>	Requires Spatial	Requires Spatial	Requires Spati
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Observer Points	Requires Spatial	Requires Spatial	Requires Spati

Toolset/Tool	Basic	Standard	Advanced
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Slope	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Surface Parameters	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Viewshed	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Visibility	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst or 3D	Analyst or 3D	Analyst or 3D
	Analyst	Analyst	Analyst
Zonal toolset	I		
<u>Tabulate Area</u>	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Zonal Fill	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Zonal Geometry		Requires Spatial Analyst	Requires Spatial Analyst
Zonal Geometry as Table	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Zonal Histogram	Requires Spatial	Requires Spatial	Requires Spatial
	Analyst	Analyst	Analyst
Zonal Statistics		Requires Spatial Analyst or Image Analyst	Requires Spatial Analyst or Image Analyst
Zonal Statistics as Table	Requires Spatial	Requires Spatial	Requires Spatial

Toolset/Tool	Basic	Standard	Advanced
			Analyst or Image Analyst

37. Spatial Statistics toolbox

Toolset/Tool	Basic	Standard	Advanced			
Analyzing Patterns toolset						
Average Nearest Neighbor	\checkmark	\checkmark	\checkmark			
High/Low Clustering	V	\checkmark	\checkmark			
Incremental Spatial Autocorrelation	V		✓			
Multi-Distance Spatial Cluster Analysis						
Spatial Autocorrelation	V	V	\checkmark			
Mapping Clusters toolset	l	l				
Build Balanced Zones	V	\checkmark	\checkmark			
Calculate Composite Index	V	\checkmark	\checkmark			
Cluster and Outlier Analysis: Anselin Local Moran's I	V	\checkmark	✓			
Density-based Clustering	✓	V	\checkmark			
Hot Spot Analysis	✓	V	\checkmark			
Hot Spot Analysis Comparison	V	V	\checkmark			
Multivariate Clustering	v	v	v			
Optimized Hot Spot Analysis	v	V	\checkmark			
Optimized Outlier Analysis	v	V	\checkmark			
Similarity Search		\checkmark				

Toolset/Tool	Basic	Standard	Advanced			
Advanced license is required to use Collapse Output To Points parameter.						
Spatial Outlier Detection						
Spatial Analyst is required to use the Output Prediction Raster parameter.						
Spatially Constrained Multivariate Clustering	\checkmark		\checkmark			
Measuring Geographic Distributions toolset						
Central Feature	\checkmark	\checkmark	V			
<u>Directional Distribution</u> (Standard Deviational Ellipse)	\checkmark	\checkmark	\checkmark			
Linear Directional Mean	\checkmark	v	V			
Mean Center	\checkmark	v	V			
Median Center	\checkmark	v	V			
Neighborhood Summary Statistics						
Advanced license is required to use Delaunay triangulation neighborhood type.			$\overline{\mathbf{v}}$			
Standard Distance	\checkmark	V	V			
Modeling Spatial Relationships	toolset					
Causal Inference Analysis	\checkmark	V	\checkmark			
Colocation Analysis	\checkmark	V	V			
Exploratory Regression	\checkmark	V	V			

Toolset/Tool	Basic	Standard	Advanced
Forest-based and Boosted Classification and Regression Spatial Analyst is required to use		✓	
rasters.			
Generalized Linear Regression	\checkmark	✓	\checkmark
Generate Network Spatial Weights	Requires Network Analyst	Requires Network Analyst	Requires Network Analyst
Generate Spatial Weights Matrix	\checkmark	\checkmark	\checkmark
Geographically Weighted Regression (GWR)			v
Advanced license is required to generate coefficient rasters.			
Hot Spot Comparison	\checkmark	V	\checkmark
Multiscale Geographically Weighted Regression (MGWR)	■	✓	
Advanced license is required to generate coefficient rasters.	_	•	v
Local Bivariate Relationships	\checkmark	v	\checkmark
Ordinary Least Squares	\checkmark	v	\checkmark
Predict Using Spatial Statistics Model File		I	
Spatial Analyst is required to use rasters.	<u> </u>		<u> </u>
Presence-Only Prediction			
Spatial Analyst is required to use rasters.		✓	

Toolset/Tool	Basic	Standard	Advanced
Spatial Association Between Zones Spatial Analyst is required to use rasters as input or output.		✓	
Utilities toolset			
Calculate Distance Band from Neighbor Count		\checkmark	✓
<u>Calculate Rates</u>	V	\checkmark	\checkmark
Collect Events	v	\checkmark	\checkmark
Convert Spatial Statistics Popup Charts for Web Display	✓	\checkmark	✓
Convert Spatial Weights Matrix to Table	✓		✓
Describe Spatial Statistics Model File	\checkmark		
Dimension Reduction	V	\checkmark	\checkmark
Export Feature Attribute to ASCII	✓	\checkmark	✓
Set Spatial Statistics Model File Properties	V	\checkmark	
Time Series Smoothing	~	~	\checkmark

38. Standard Feature Analysis toolbox

Analyze Patterns toolset Find Hot Spots Requires your Requires your	Requires your
Find Hot Spots Requires your Requires your	Poquires vour
account in ArcGIS account in ArcGI Enterprise to have Enterprise to hav	IS account in ArcGIS

Toolset/Tool	Basic	Standard	Advanced
	Analysis privilege	privilege	privilege
	Requires your	Requires your	Requires your
	account in ArcGIS	account in ArcGIS	account in ArcGIS
Calculate Density	Enterprise to have	Enterprise to have	Enterprise to have
	the Perform	the Perform Analysis	the Perform Analysis
	Analysis privilege	privilege	privilege
	Requires your	Requires your	Requires your
	account in ArcGIS	account in ArcGIS	account in ArcGIS
<u>Interpolate Points</u>	Enterprise to have	Enterprise to have	Enterprise to have
	the Perform	the Perform Analysis	_
	Analysis privilege	privilege	privilege
Manage Data tools	et	I	I
	Requires your	Requires your	Requires your
Dissolve	account in ArcGIS	account in ArcGIS	account in ArcGIS
Boundaries	Enterprise to have	Enterprise to have	Enterprise to have
	the Perform	-	the Perform Analysis
	Analysis privilege	privilege	privilege
	Requires your	Requires your	Requires your
	account in ArcGIS	account in ArcGIS	account in ArcGIS
Merge Layers	Enterprise to have	Enterprise to have	Enterprise to have
	the Perform	-	the Perform Analysis
	Analysis privilege	privilege	privilege
	Requires your	Requires your	Requires your
Ola I	account in ArcGIS	account in ArcGIS	account in ArcGIS
Overlay Layers	Enterprise to have	Enterprise to have	Enterprise to have
	the Perform Analysis privilege	the Perform Analysis privilege	privilege
Cummaviza Data te		privilege	privilege
Summarize Data to	I .	D	D
	Requires your account in ArcGIS	Requires your account in ArcGIS	Requires your account in ArcGIS
Aggregate Points	Enterprise to have	Enterprise to have	Enterprise to have
Aggregate Forms	the Perform	_	the Perform Analysis
	Analysis privilege	privilege	privilege
	Requires your	Requires your	Requires your
	account in ArcGIS	account in ArcGIS	account in ArcGIS
Summarize Nearby	Enterprise to have	Enterprise to have	Enterprise to have
<u> </u>	the Perform	_	the Perform Analysis
	Analysis privilege	privilege	privilege
Summarize Within	Requires your	Requires your	Requires your
TT THE TY THE TY	account in ArcGIS	account in ArcGIS	account in ArcGIS
	Enterprise to have	Enterprise to have	Enterprise to have
I	1	1	1

Toolset/Tool	Basic	Standard	Advanced	
	the Perform	the Perform Analysis	the Perform Analysis	
	Analysis privilege	privilege	privilege	
Use Proximity toolset				
	Requires your	Requires your	Requires your	
	account in ArcGIS	account in ArcGIS	account in ArcGIS	
Create Buffers	Enterprise to have	Enterprise to have	Enterprise to have	
	the Perform	the Perform Analysis	the Perform Analysis	
	Analysis privilege	privilege	privilege	

39. Territory Design toolbox

Toolset/Tool	Basic	Standard	Advanced
Analysis toolset			
Add Level Variables	_		Requires Business Analyst
Add Territory Seed Points	Requires Business Analyst		Requires Business Analyst
Add Territory Barriers	Requires Business Analyst	_	Requires Business Analyst
Set Balance Variables	Requires Business Analyst	Requires Business Analyst	Requires Business Analyst
Set Territory Attribute Constraints	Requires Business Analyst	_	Requires Business Analyst
Set Territory Distance Parameters Requires locally installed network routing data.	Requires Business Analyst	1	Requires Business Analyst
Set Territory Level Options	_	_ -	Requires Business Analyst
Solve Territories	Requires Business Analyst	_	Requires Business Analyst
Validate Territories	Requires	Requires	Requires

Toolset/Tool	Basic	Standard	Advanced				
	Business Analyst	Business Analyst	Business Analyst				
Territory Solution toolset							
Add Territory Level	_		Requires Business Analyst				
Copy Territory Solution	_	Requires Business Analyst	Requires Business Analyst				
Create Territory Level Feature Classes	_		Requires Business Analyst				
Create Territory Solution	_	_	Requires Business Analyst				
Export Territory Solution			Requires Business Analyst				
Generate Territory Report	_	_	Requires Business Analyst				
Import Territory Solution	_	_	Requires Business Analyst				
Load Territory Records	_		Requires Business Analyst				
Make Territory Solution Layer			Requires Business Analyst				
Rebuild Territory Solution	_		Requires Business Analyst				

40. Topographic Production toolbox

Toolset/Tool	Basic	Standard	Advanced
Cartography toolset			
Banding toolset			

Toolset/Tool	Basic	Standard	Advanced
Generate Elevation Bands			Requires Production Mapping and Spatial Analyst
Generate Elevation Bands From Features			Requires Production Mapping
Cartographic Refinement	toolset	I	
Apply Building Offsets			Requires Production Mapping
Apply Masks From Rules		Requires Production Mapping	Requires Production Mapping
Apply Visual Specification To Map		Requires Production Mapping	Requires Production Mapping
Calculate Bridge Offsets		Requires Production Mapping	Requires Production Mapping
Make Masks From Rules		Requires Production Mapping	Requires Production Mapping
Thin Spot Heights			Requires Production Mapping
Features toolset		I	
Calculate Magnetic Components		Requires Production Mapping	Requires Production Mapping
Calculate Max Elevation Figures		Requires Production Mapping	Requires Production Mapping
Generate Adjoining Sheets Features		Requires Production Mapping	Requires Production Mapping
Generate Elevation Guide Features			Requires Production Mapping and Spatial Analyst

Toolset/Tool	Basic	Standard	Advanced	
Generate Location Diagram Features			Requires Production Mapping	
Generate Spot Heights			Requires Production Mapping and Spatial Analyst	
Generate Topographic Contours			Requires Production Mapping and Spatial Analyst	
Identify Contours		Requires Production Mapping	Requires Production Mapping	
Validate Spot Heights		Requires Production Mapping	Requires Production Mapping	
Layout toolset		l		
Generate Product Layout		Requires Production Mapping and Spatial Analyst	Requires Production Mapping and Spatial Analyst	
Make Grids And Graticules Layer		Requires Production Mapping	Requires Production Mapping	
Populate Map Sheet Info		Requires Production Mapping	Requires Production Mapping	
Data Management toolset				
Features toolset				
Apply Feature Level Metadata		Requires Production Mapping	Requires Production Mapping	
Calculate Default Values		Requires Production Mapping	Requires Production Mapping	
Calculate Metrics		Requires Production Mapping	Requires Production Mapping	

Toolset/Tool	Basic	Standard	Advanced
Some parameters require the Spatial Analyst extension—see the tool reference page for more detail.			
Merge Lines By Pseudo Node		Requires Production Mapping	Requires Production Mapping
Remove Cutback Vertices		Requires Production Mapping	Requires Production Mapping
Repair Self Intersection		Requires Production Mapping	Requires Production Mapping
<u>Split Features</u>		Requires Production Mapping	Requires Production Mapping
<u>Update GeoNames</u>		Requires Production Mapping	Requires Production Mapping
Generalization toolset		I	I
Eliminate Polygon		Requires Production Mapping	Requires Production Mapping
Export Generalized Data		Requires Production Mapping	Requires Production Mapping
Fill Gaps			Requires Production Mapping
Identify Narrow Polygons		Requires Production Mapping	Requires Production Mapping
Import Generalization Data		Requires Production Mapping	Requires Production Mapping
Polygon To Centerline		Requires Production Mapping	Requires Production Mapping

Toolset/Tool	Basic	Standard	Advanced
Remove Small Lines		Requires Production Mapping	Requires Production Mapping
Set Line Direction		Requires Production Mapping	Requires Production Mapping
Thin Hydrology Lines		Requires Production Mapping	Requires Production Mapping
Geodatabase toolset			
Create Cross-Reference Geodatabase		Requires Production Mapping	Requires Production Mapping
Export MGCP Metadata		Requires Defense Mapping	Requires Defense Mapping
Extract Data By Feature		Requires Production Mapping	Requires Production Mapping
Generate Excel From Geodatabase		Requires Production Mapping	Requires Production Mapping
Generate Geodatabase From Excel		Requires Production Mapping	Requires Production Mapping
Geodatabase To Shape		Requires Production Mapping	Requires Production Mapping
GeoNames To Geodatabase		Requires Production Mapping	Requires Production Mapping
Import MGCP Metadata		Requires Defense Mapping	Requires Defense Mapping
Load Data		Requires Production Mapping	Requires Production Mapping
Unzip MGCP Cell And Import		Requires Defense Mapping	Requires Defense Mapping
Topology toolset			

Toolset/Tool	Basic	Standard	Advanced
Export Topology		Requires Production Mapping	Requires Production Mapping
Import Topology		Requires Production Mapping	Requires Production Mapping
Validation toolset		1	
GAIT		Requires Defense Mapping	Requires Defense Mapping
Workflow toolset		1	
Data Management toolset			
Copy Job Files		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager
Create Task Group Jobs		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager
Get Features By Job AOI		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager
Set Task Group Dependencies		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager
Update Task Group Metrics		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager
Properties toolset		1	ı
Copy Extended Properties		Requires Production Mapping and	Requires Production Mapping and

Toolset/Tool	Basic	Standard	Advanced
		Workflow Manager	Workflow Manager
Set Data Workspace		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager
Set Production Properties		Requires Production Mapping and Data Reviewer and Workflow Manager	Requires Production Mapping and Data Reviewer and Workflow Manager
<u>Update Extended Property</u>		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager
Tasks toolset			
Cancel Remaining Tasks		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager
Create Job For Task		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager
Insert Task Group		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager
Set Next Task		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager
Set Task List		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager
Set Task Status		Requires Production Mapping and Workflow Manager	Requires Production Mapping and Workflow Manager

41. Trace Network toolbox

Toolset/Tool	Basic	Standard	Advanced
Add Network Attribute		V	V
Convert Geometric Network To Trace Network			✓
Create Trace Network		V	V
Disable Network Topology		\checkmark	V
Enable Network Topology		\checkmark	\checkmark
Set Flow Direction		\checkmark	V
Set Network Attribute		V	V
Trace		V	V
Validate Network Topology		V	V
Trace Configuration toolset		I	I
Add Trace Configuration		V	V
Delete Trace Configuration		V	V
Export Trace Configuration		V	V
Import Trace Configuration		V	\checkmark

42. Utility Network toolbox

Ctiffy Network toolbox			
Toolset/Tool	Basic	Standard	Advanced
Add Trace Locations		V	\checkmark
Export Subnetwork		V	
Rebuild Network Topology		V	\checkmark
Repair Network Topology		V	\checkmark

Toolset/Tool	Basic	Standard	Advanced
<u>Trace</u>		V	V
Update Is Connected		V	V
Update Subnetwork		V	\checkmark
Validate Network Topology		V	\checkmark
Verify Network Topology		V	V
Administration toolset			
Add Domain Network		\checkmark	\checkmark
Add Network Attribute		\checkmark	\checkmark
Add Network Category		V	\checkmark
Add Rule		V	V
Add Terminal Configuration		V	\checkmark
Add Tier		V	V
Add Tier Group		V	✓
Create Utility Network		V	✓
Delete Network Category		V	v
Delete Rule		V	✓
Delete Terminal Configuration		V	v
Disable Network Topology		V	v
Enable Network Topology		V	V
Export Associations		V	V
Export Rules		V	V
Export Subnetwork Controllers		V	V
Import Associations		$\overline{\checkmark}$	V

Toolset/Tool	Basic	Standard	Advanced
Import Rules		V	\checkmark
Import Subnetwork Controllers		V	\checkmark
Repair Network Topology		v	\checkmark
Set Association Role		v	\checkmark
Set Edge Connectivity		V	\checkmark
Set Network Attribute		V	\checkmark
Set Network Category		V	\checkmark
Set Subnetwork Definition		V	\checkmark
Set Terminal Configuration		V	\checkmark
Trace Configuration toolset			
Add Trace Configuration		V	\checkmark
Delete Trace Configuration		V	V
Export Trace Configurations		V	V
Import Trace Configuration		V	

43. Workflow Manager toolbox

Toolset/Tool	Basic	Standard	Advanced
Configuration toolset			
Clear Job Replication Information		Requires Workflow Manager	Requires Workflow Manager
Create Workflow Database		Requires Workflow Manager	Requires Workflow Manager
Export Job Data		Requires Workflow Manager	Requires Workflow Manager

Toolset/Tool	Basic	Standard	Advanced
Import Job Data		Requires Workflow Manager	Requires Workflow Manager
Publish Workflow Service		Requires Workflow Manager	Requires Workflow Manager
Replicate Job Data		Requires Workflow Manager	Requires Workflow Manager
Synchronize Job Data		Requires Workflow Manager	Requires Workflow Manager
Upgrade Workflow Database		Requires Workflow Manager	Requires Workflow Manager
Jobs toolset			
Create New Jobs		Requires Workflow Manager	Requires Workflow Manager
Get Job AOI		Requires Workflow Manager	Requires Workflow Manager
Get Job Data Workspace		Requires Workflow Manager	Requires Workflow Manager
Get Job Parent Version		Requires Workflow Manager	Requires Workflow Manager
Get Job Version		Requires Workflow Manager	Requires Workflow Manager
Post Job Version		Requires Workflow Manager	Requires Workflow Manager

II. ARCGIS PRO (Advanced) EXTENSIONS

Các tiện ích mở rộng là những sản phẩm tích hợp liền mạch với ArcGIS Pro để tăng cường năng suất và phân tích. Các tiện ích mở rộng này được mua và cấp phép riêng biệt so với sản phẩm cốt lõi. Thông tin thêm về các tiện ích mở rộng có thể được tìm thấy từ trang tổng quan ArcGIS Pro.

1. Advanced analysis (Phân tích nâng cao):

ArcGIS Pro extensions for advanced analysis

Name	Description
3D Analyst	Tiện ích mở rộng ArcGIS 3D Analyst cung cấp các công cụ để tạo và phân tích các bề mặt và dữ liệu 3D. Bạn có thể quản lý dữ liệu lidar, thực hiện phân tích khả năng nhìn thấy, đánh giá các đặc tính hình học của các đối tượng 3D, và sử dụng TINs làm nguồn độ cao.
Business Analyst	Tiện ích mở rộng ArcGIS Business Analyst cung cấp các công cụ thực hiện các thao tác GIS cơ bản cho phân tích thị trường. Bạn có thể thực hiện báo cáo dân số, xem xét phân phối khách hàng và đối thủ cạnh tranh, xác định các khu vực thương mại quan trọng, và trực quan hóa các biến dữ liệu.
Geostatistical Analyst	Tiện ích mở rộng ArcGIS Geostatistical Analyst cung cấp các công cụ cho mô hình hóa bề mặt nâng cao và khám phá dữ liệu. Bạn có thể tạo mô hình nội suy với nhiều kỹ thuật thống kê để xác định xu hướng, biến động không gian, sự tập trung, và nhiều hơn nữa. Các mô hình có thể được đánh giá thông qua kiểm tra chéo và các chỉ số khác.
Image Analyst	Tiện ích mở rộng ArcGIS Image Analyst cung cấp các công cụ để trực quan hóa, đo đạc, và phân tích dữ liệu hình ảnh. Bạn có thể biên soạn dữ liệu đặc trưng 3D với khả năng xem và vẽ bản đồ stereo, làm việc với hình ảnh nghiêng trong không gian hình ảnh, thực hiện phân loại hình ảnh, và phân tích dữ liệu hình ảnh sử dụng nhiều công cụ và chức năng xử lý hình ảnh.
Network Analyst	Tiện ích mở rộng ArcGIS Network Analyst cung cấp các công cụ phân tích dựa trên mạng lưới giao thông để giải quyết các vấn đề định tuyến phức tạp. Nó sử dụng một mô hình dữ liệu mạng tiện ích hoặc giao thông có thể cấu hình, cho phép bạn đại diện cho các yêu cầu mạng lưới tiện ích hoặc đường phố độc đáo của tổ chức. Bạn có thể lên kế hoạch cho các tuyến đường cho cả một đội xe, tính toán các đa giác thời gian lái xe, xác định các cơ sở, và giải quyết các vấn đề liên quan đến mạng lưới giao thông.
Spatial Analyst	Tiện ích mở rộng ArcGIS Spatial Analyst cung cấp các công cụ để tạo và phân tích dữ liệu raster và thực hiện phân tích tích hợp giữa dữ liệu raster và vector. Bạn có thể tạo ra các bề mặt như độ dốc và khía cạnh từ các mô hình độ cao số; tạo các mô hình tính toán sự phù hợp của địa điểm sử dụng phân tích lớp chồng; và thực hiện phân tích cảnh quan phức tạp, như tìm kiếm các lối đi ít chi phí nhất hoặc mô hình hóa dòng chảy, nồng độ và sự phân tán của vật liệu trên một bề mặt.

2. Data and workflows (xử lý dữ liệu và tự động hóa quy trình làm việc):

ArcGIS Pro extensions for data and workflows

Name	Description
ArcGIS Reality for ArcGIS Pro	Tiện ích mở rộng ArcGIS Reality for ArcGIS Pro mở rộng khả năng lập bản đồ ortho với việc tạo ra các sản phẩm 3D và 2D có độ chính xác cao. Sử dụng hình ảnh drone và hình ảnh số từ trên không, bạn có thể tạo ra DSM độ phân giải đầy đủ, True Orthos, lưới DSM 2D, mây điểm 3D dày đặc, và mô hình 3D chân thực. Bạn cũng có thể tạo sản phẩm Ortho Mapping từ hình ảnh vệ tinh và hình ảnh từ máy quét trên không. Các wizard hướng dẫn bạn qua các quy trình quang học để tạo không gian làm việc cho loại hình ảnh của bạn, thực hiện điều chỉnh khối và tạo sản phẩm.
Data Interoperability	Tiện ích mở rộng ArcGIS Data Interoperability là một bộ công cụ extract, transform, load (ETL) cho dữ liệu không gian và không phải không gian. Nó hoạt động trong khung xử lý không gian của ArcGIS bằng các công cụ ETL không gian được viết với ứng dụng Safe Software's Feature Manipulation Engine (FME) Workbench, hoặc có thể tương tác trong ứng dụng Workbench được khởi chạy từ tab Phân tích. Tiện ích mở rộng này cho phép ArcGIS Pro nhập, sử dụng, và xuất hàng trăm định dạng dữ liệu tệp, cơ sở dữ liệu và web. *Note: Tiện ích mở rộng này được cài đặt riêng biệt với ArcGIS Pro.
Data Reviewer	Tiện ích mở rộng ArcGIS Data Reviewer cung cấp các công cụ tự động hóa và đơn giản hóa quá trình kiểm soát chất lượng dữ liệu của bạn. Bạn có thể kiểm tra dữ liệu về lỗi thông qua phương tiện tự động hoặc trực quan, và quản lý tập trung quy trình sửa lỗi và xác minh. ArcGIS IPS là một tiện ích mở rộng hệ thống định vị trong nhà
Indoor Positioning System (IPS)	(IPS) cung cấp khả năng xác định vị trí chính xác cho nhiều trường hợp sử dụng vị trí trong nhà. ArcGIS IPS cho phép bạn định vị trong nhà bằng cách hiển thị một điểm xanh trên bản đồ trong nhà kỹ thuật số, chia sẻ vị trí thời gian thực của bạn với người khác (tùy chọn), theo dõi vị trí thời gian thực của người khác (tùy chọn), thu thập dữ liệu vị trí và khám phá các thông tin phân tích. *Note: Tiện ích mở rộng này được cài đặt riêng biệt với ArcGIS Pro.
Indoors LocateXT	Cần có giấy phép ArcGIS Indoors Pro hoặc ArcGIS Indoors Maps để sử dụng các công cụ xử lý Indoors để tải dữ liệu bản đồ nền và tạo một mạng lưới có thể định tuyến, cấu hình các thể loại Indoors và khởi chạy các hành động, và tạo và chia sẻ bản đồ nhận thức theo tầng trong ArcGIS Pro. *Note: Tiện ích mở rộng này được cài đặt riêng biệt với ArcGIS Pro. Tiện ích mở rộng ArcGIS LocateXT cung cấp các công cụ để trích

	xuất tọa độ địa lý, tên địa phương và các dữ liệu vị trí khác từ văn bản không cấu trúc và chuyển đổi thông tin này thành một lớp đối tượng điểm.
Publisher	Tiện ích mở rộng ArcGIS Publisher cho phép bạn chia sẻ các gói bản đồ di động (mobile map packages) trực tiếp với người dùng ứng dụng ArcGIS Field Maps. Người dùng có thể mở gói bản đồ và sử dụng bản đồ mà không cần đăng nhập vào ArcGIS Online.
StreetMap Premium	Mỗi tiện ích mở rộng ArcGIS StreetMap Premium khu vực cung cấp dữ liệu đường phố phong phú cho bản đồ hóa theo nhiều tỷ lệ, mã hóa địa chỉ chính xác, và phân tích mạng tối ưu, bao gồm định tuyến và hướng dẫn lái xe.
Territory Design	*Note: Tiện ích mở rộng này được cài đặt riêng biệt với ArcGIS Pro. Tiện ích mở rộng ArcGIS Territory Design cung cấp các công cụ để xây dựng, chỉnh sửa, cân bằng, và duy trì các vùng lãnh thổ cho các bộ dữ liệu điểm và đa giác. Sử dụng các ranh giới tùy chỉnh hoặc các lớp địa lý trong Business Analyst, bạn có thể tạo tự động, cân bằng và chỉnh sửa các khu vực bán hàng, khu vực dịch vụ hoặc vùng nhượng quyền. *Note: Tiện ích mở rộng này được đi kèm với ArcGIS Business Analyst.
Workflow Manager	Tiện ích mở rộng ArcGIS Workflow Manager là thành phần máy tính để bàn của kiến trúc dịch vụ của ArcGIS Workflow Manager Server cho phép bạn tạo ra các quy trình làm việc liền mạch trên các nền tảng máy tính để bàn, web và di động. Workflow Manager là một hệ thống quản lý quy trình làm việc có thể mở rộng giúp tự động hóa và đơn giản hóa nhiều khía cạnh của công việc GIS và phi GIS lặp đi lặp lại để tăng năng suất trong một tổ chức.
Workflow Manager (Classic)	ArcGIS Workflow Manager (Classic) là phiên bản truyền thống của Workflow Manager giúp bạn chuẩn hóa, quản lý và theo dõi công việc GIS (cũng như công việc phi GIS hoặc công việc kết hợp) trong một môi trường cơ sở dữ liệu đa người dùng.

3. Industry focused (Tiện ích mở rộng ArcGIS Pro theo ngành):

Name	Description
Aviation Airports	Tiện ích mở rộng ArcGIS Aviation Airports cung cấp các công cụ
Tiviation Timports	giúp đảm bảo dữ liệu vận hành đáp ứng các yêu cầu quy định của sân

Name	Description
	bay. Nó bao gồm một cơ sở dữ liệu sân bay đã sẵn sàng để sử dụng, các công cụ kiểm tra dữ liệu đã được cấu hình, công cụ quản lý bề mặt cản trở, các mẫu chỉnh sửa dữ liệu và nhập khẩu, xuất khẩu tự động giữa các lớp đối tượng cơ sở dữ liệu và shapefile.
Aviation Charting	Tiện ích mở rộng ArcGIS Aviation Charting cung cấp các công cụ để tạo sản phẩm định hướng cho hàng không, quản lý dữ liệu hàng không hiệu quả và tuân thủ các tiêu chuẩn quy định trong môi trường doanh nghiệp.
Bathymetry	Tiện ích mở rộng ArcGIS Bathymetry cung cấp các công cụ để tạo ra một Hệ thống Thông tin Đo sâu (BIS), chỉnh sửa và xuất dữ liệu BIS, và tạo sản phẩm cũng như dữ liệu bị suy giảm và tổng hợp thích hợp để sử dụng trong sản xuất bản đồ hải lý.
Defense Mapping	Tiện ích mở rộng ArcGIS Defense Mapping cung cấp các công cụ để thu thập và ghi nhãn dữ liệu chuyên biệt, duy trì cơ sở dữ liệu, và kiểm tra dữ liệu, theo yêu cầu của các sản phẩm Topographic Data Store (TDS) và Multinational Geospatial Co-Production Program (MGCP).
Maritime	Tiện ích mở rộng ArcGIS Maritime cung cấp các công cụ để quản lý thông tin thủy văn. Bạn có thể tạo, nhập khẩu, ký hiệu, quản lý, và lưu trữ các sản phẩm vector S-57 và S-100, các sản phẩm giấy S-4, và dữ liệu định dạng Vector Product Format (VPF) trong định dạng Digital Nautical Chart (DNC).
Pipeline Referencing	Tiện ích mở rộng ArcGIS Pipeline Referencing cung cấp các chức năng và công cụ để xây dựng và duy trì một hệ thống tham chiếu tuyến tính (LRS) cho các đường ống. Tiện ích mở rộng này bao gồm một mô hình dữ liệu đã được xác định sẵn và cũng cho phép bạn định nghĩa mô hình dữ liệu riêng của mình.
	*Note: Tiện ích mở rộng này yêu cầu triển khai ArcGIS Enterprise.
Production Mapping	Tiện ích mở rộng ArcGIS Production Mapping cung cấp các công cụ để chuẩn hóa và tinh giản quy trình GIS trong toàn bộ tổ chức của bạn trong các lĩnh vực sản xuất bản đồ địa hình, thu thập đặc trưng địa lý, và quản lý dữ liệu cùng với kiểm soát chất lượng.
Roads and Highways	

Name	Description
	tính (LRS) cung cấp các công cụ để trực quan hóa và duy trì Mạng LRS đường bộ và dữ liệu sự kiện liên quan. Tiện ích mở rộng này bao gồm một mô hình dữ liệu đã được xác định sẵn và cũng cho phép bạn định nghĩa mô hình dữ liệu của riêng mình. *Note: Tiện ích mở rộng này yêu cầu triển khai ArcGIS Enterprise.