

# CEDRA-AVcogo™

Coordinate Geometry  
Using ESRI's ArcGIS® or ArcView® GIS Software



## A Productivity Tool For:

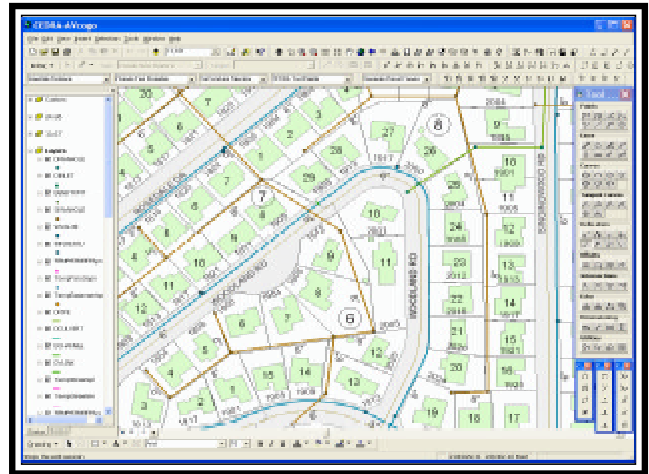
### Building geometric databases and basemaps

- Geometric layout of
  - stormwater and wastewater systems,
  - water distribution networks,
  - streets and roadways,
  - land parcels, and
  - other geometric applications.
- Optional three dimensional geometry for a variety of applications.
- Import of
  - Arc/Info coverages & libraries,
  - dxf, dwg and dgn drawings,
  - CEDRA design & drawing files,
  - ASCII based point files in a variety of formats.
- Assignment of
  - survey point codes,
  - work to user specified layers.

### Geometric functionality

- Includes and expands AVcad.
- Over 120 geometric commands tailored for cadastral mapping, surveying, engineering, mapping and other applications.
- Button selection for specifying:
  - Azimuth, Bearing or Cartesian directions,
  - Radial or traverse form of points and lines,
  - Point snapping across visible themes.
- Variety of commands for establishing:
  - Points, lines, circular curves and spirals,
  - Quadratic and cubic curves.
- Creation of offset strings of elements using auto-search functionality, or individual user selection.
- Determination of parcel and polygon areas.

- Variety of commands for computing:
  - Intersections of lines and curves,
  - projection points and lines, and
  - point, line and/or curve tangencies.
- Relocation, translation, rotation and scaling of individual and groups of points, lines, curves and/or text.



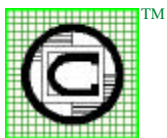
- Division and/or segmentation of lines and curves.
- Polygon splitting and manipulation of vertices.
- Undo an operation across visible themes.

### Graphic display manipulation

- Preparation of drawings to customized templates.
- Individual and mass annotation of lines, curves, parcels, areas, centroids.
- Orthogonal, inclined and leader dimensioning.
- Annotation of point numbers and/or coordinates.
- Individual and global text editing and scaling.
- Advance or return to previous views.
- Generation of customized symbols.
- View of ASCII based files.

Contact **The CEDRA Corporation** on how to order:

**CEDRA-AVcad™** for general feature editing, annotation and CAD tools, **CEDRA-AVcogo™** for comprehensive COGO tools, **CEDRA-AVland™** for roadway and site engineering, **CEDRA-AVparcel™** for parcel mapping and maintenance, **CEDRA-AVsand™** for sanitary, storm and combined sewer modeling, **CEDRA-AVwater™** for water distribution and quality modeling, **CEDRA-DataEditor™** for data entry and maintenance, **CEDRA-DxfExport™** for DXF file exporting.



## The CEDRA Corporation

Total CADD for Engineers™  
Bridging Engineering and GIS™

1600 Moseley Road - Suite 500  
Victor, New York 14564

Phone: 585-414-6541  
Fax: 585-924-8614

E-mail: [cedra@cedra.com](mailto:cedra@cedra.com)  
URL: <http://www.cedra.com>



AUTHORIZED ESRI  
DEVELOPER  
and  
RESELLER



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# SOME OF THE FUNCTIONALITY FOUND IN CEDRA-AVcogo™ for ArcGIS® and ArcView® GIS

## Curve and Non-Tangent Curve Creation

- Circle with center and radius which can be explicitly defined or specified by a pick.
- Circle or Arc through 3 points.
- Arc given center, start point, and (a) arc length, (b) endpoint, or (c) central angle.
- Arc tangent to two lines and with a radius.
- Arc tangent to two lines passing through a point.
- Arc tangent to a line or curve given its PC, radius and (a) arc length, (b) central angle, (c) chord length, or (d) chord direction and length.

## Buffers, Offset Elements and Polygon Creation

- Lines or curves offset to a line or curve element.
- Line/curve elements offset to a string of features.
- Buffer polygon about a string of features.
- Create polygons within a quadrilateral by specifying the number of rows and columns.
- Create polygons that represent sectors of concentric circles by specifying (a) the number of sectors that a circle is to be decomposed into, (b) the number of concentric circles and (c) the radius for each of the circles.
- Create polygons by transcribing deed data with the ability to perform a Compass, Crandall, Least Squares or Transit rule adjustment to force closure.

## Transformations

- Translate, rotate and/or scale selected features with ability to specify individual x and y scale factors.
- Stretch or "rubber-sheet" selected features using six control points.

## Intersections

- Intersect lines with lines, lines with curves, lines with polylines and/or lines with polygons.
- Intersect curves with curves.
- Intersect polylines with polygons.
- Intersect polygons with polygons.

## Dimensioning

- Leader dimensions with or without annotation.
- Vertical, Horizontal and Inclined dimensions with computed or user specified annotation.

## Editing/Relocation

- Move a line/curve endpoint to a new location.
- Move a line/curve vertex to a new location .

- Extend a line to its intersection with another line.
- Extend a line by specifying a distance.
- Extend a line by specifying its total line length.
- Break a line or curve at a specific point.
- Cutout a line or curve keeping the inside or outside portion of the cutout.
- Flip or reverse the direction of a line or polyline or a group of lines and/or polylines.
- Ability to change the shape of a feature to be identical to that of another feature.

## Generic Functionality

- Ability to customize the default Property values such as the units of measure (US/SI), direction mode, point snapping mode and so forth.
- Ability to specify distances in varas, chains or rods.
- Button selection for specifying (a) Azimuths, (b) Bearings, or (c) Cartesian directions.
- Display distance, angle and/or area of (a) a feature or (b) from snapped point picks.
- Undo or Oops an operation even though the features may reside in multiple themes.
- Copy features, with or without including their attributes, into other themes.
- Auto-search or trace to (a) select features, (b) create polygons, or (c) create offset elements.
- Delete in mass a group of selected features even though the features may reside in multiple themes.
- Mass annotation of a group of features' length, direction, or length and direction in azimuth or bearing form.
- Ability to zoom in or out of a view using a user-specified scale factor.
- Ability to view or display ASCII files without having to leave ArcView.
- Ability to delete files without having to leave ArcView.

Used by Local, State and Federal Agencies, as well as Private companies worldwide, **CEDRA-AVcogo** is a comprehensive software package designed to expand the use and applicability of **Arc View GIS** and **ArcGIS** in addition to increasing the productivity of its Users.