Arc Map

, Arc GIS

ArcGIS 9
Using ArcMap

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ESRI ® Arc GIS

Arc GIS   Arc Map   ,

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"Using Arc MAP
        Arc GIS 9.1   Tutorial.pdf"
                                                    .   ESRI

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dawod_gomaa@yahoo.com
dawod_gomaa@hotmail.com

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                        /   –   –   –   .

Tutorial Data CD

.Arc GIS 9

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<div style="border:2px solid green">

Arc Map

</div>

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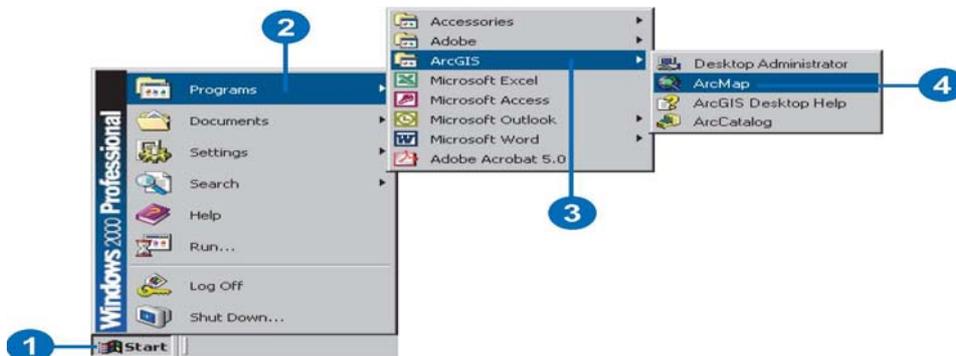Tutorial Data CD

:   ArcGIS
C:\ArcGIS\ArcTutor\Map

: Arc Map

:

.   Start
.   Programs
.   Arc GIS
.   Arc Map

:   –
Open an existing map
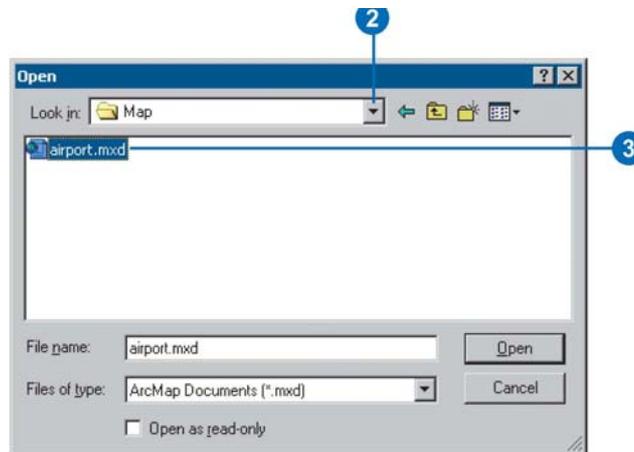Browse for maps
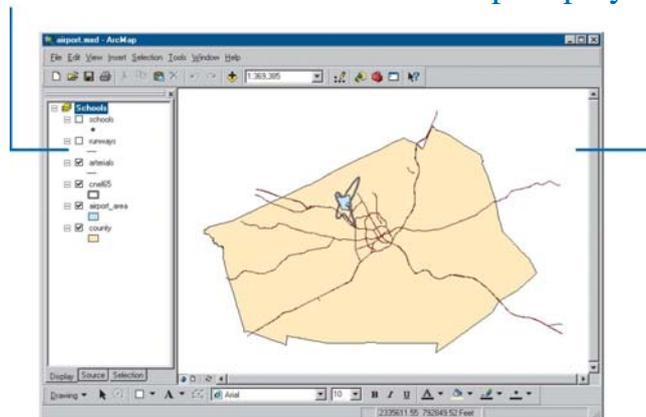
-

C:\ArcGIS\ArcTutor\Map
airport.mxd -
.

Table of :

Layers contents
Map display area

Table of contents   Map display area

:

Schools
runways
arterials
Cnel65
airport_area
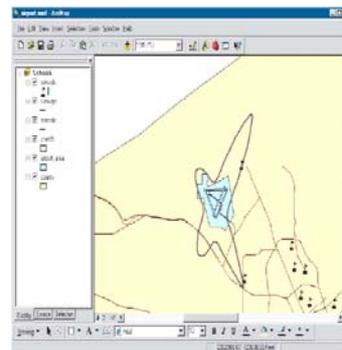county

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"Tools   "

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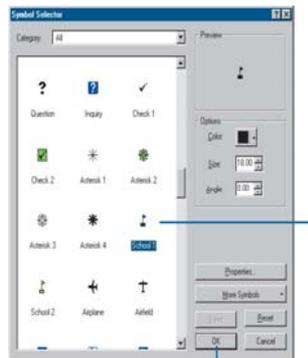

- Zoom In

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- Pan ( )

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Arc Map

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-   Schools

-   School

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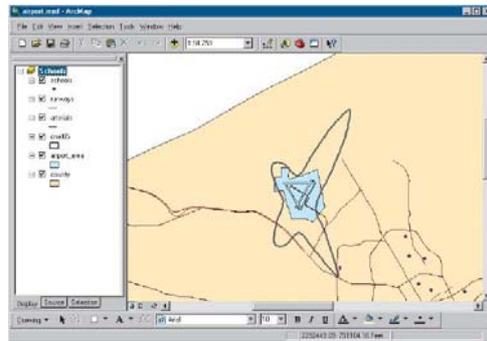
Zoom In
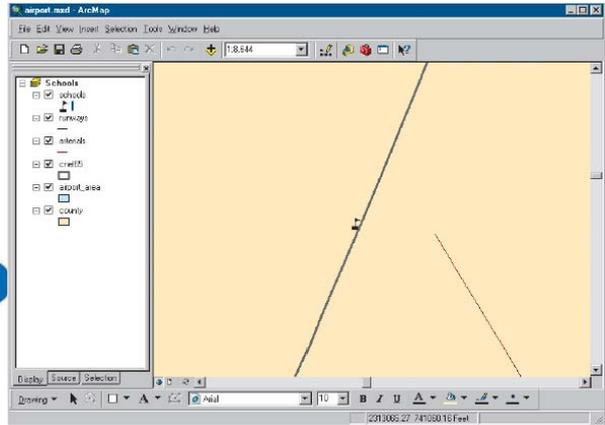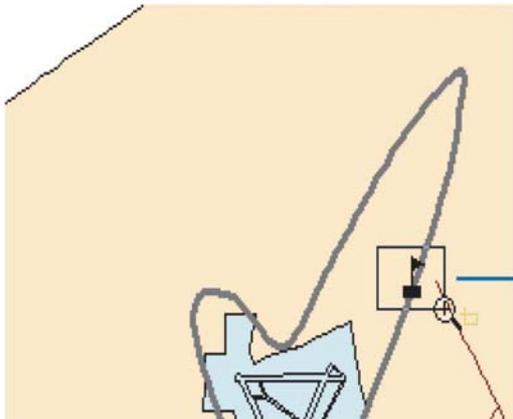
Identify (i)

Northwestern Prep
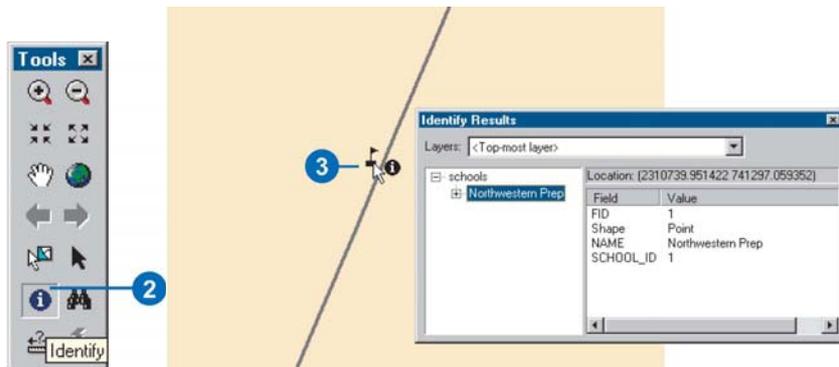
Back)
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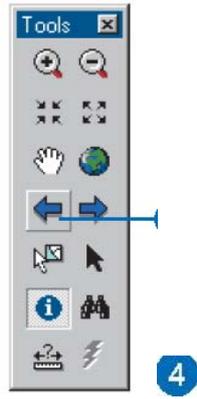
Draw Text
:

- New Text (
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Enter -

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Data View   :   Arc Map
Layout View
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×   **:**

-            Fixed Zoom Out
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-          View   Layout
.View   (   )
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Layout toolbar

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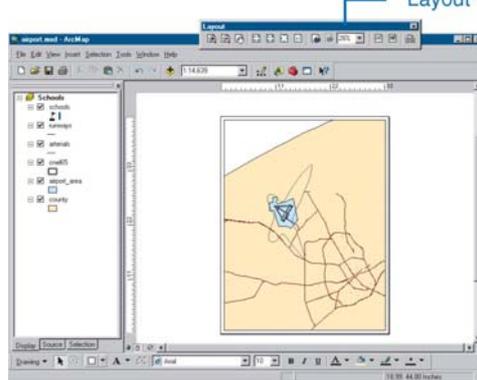
-         ) Page and Print Setup
File   .(

-       Use Printer Paper Settings
)
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-       Scale Map Elements
proportionally to changes in Page Size
.

-               Landscape
-      width   height   )
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- OK.

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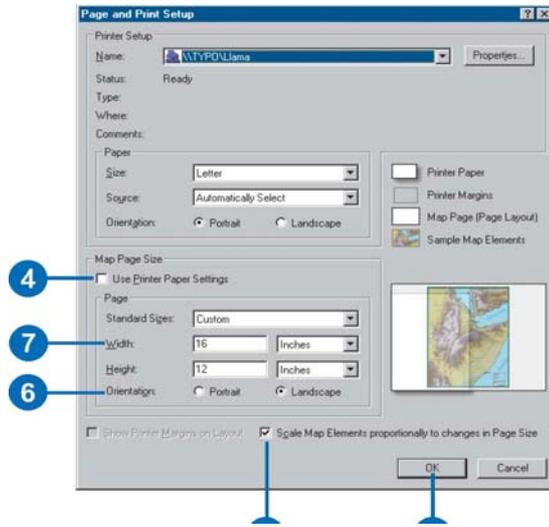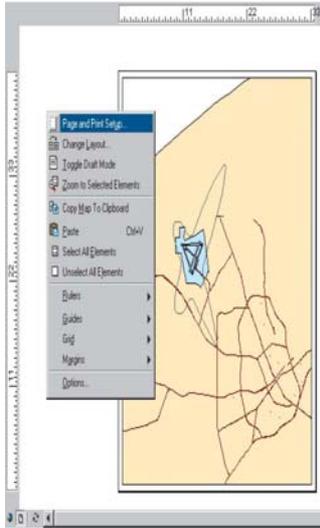
Layout View

- .

- % Zoom to 100% .
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- Pan
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Arc Map

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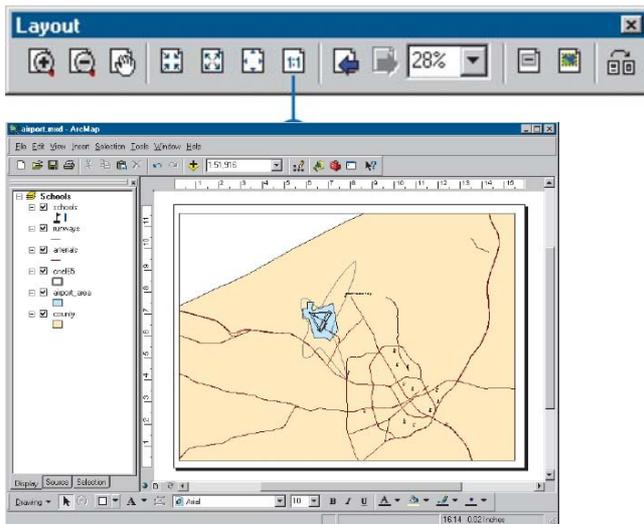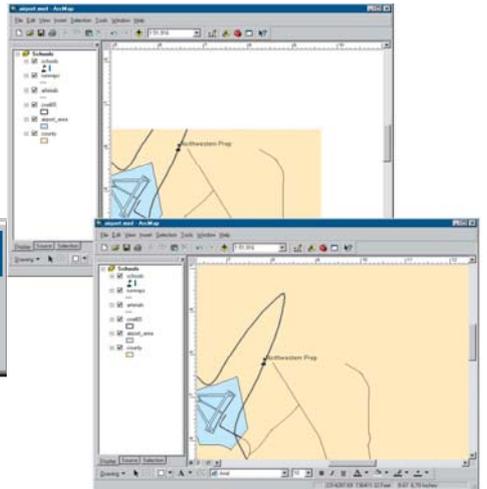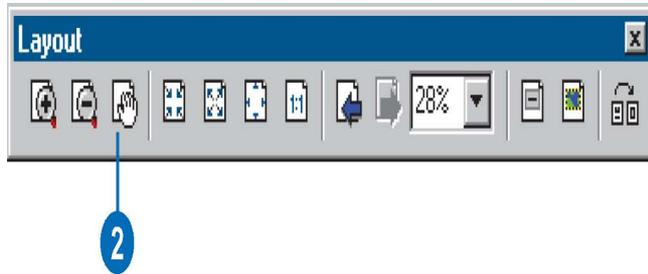
Title — Insert

Schools and Noise :

Contour Enter.

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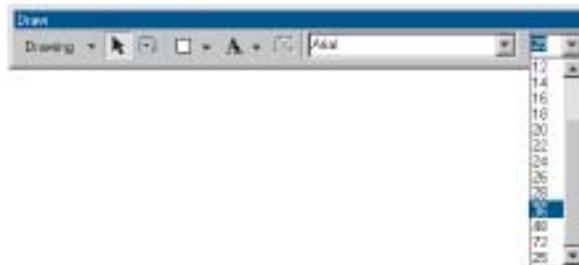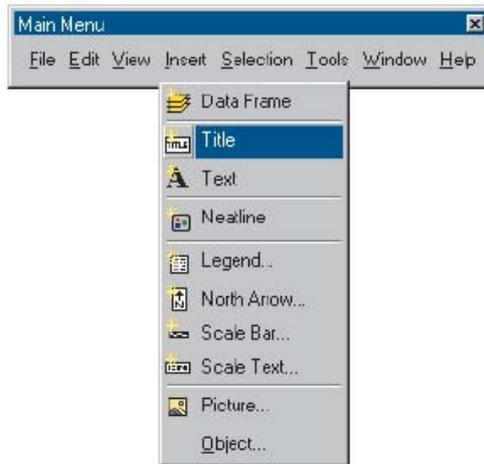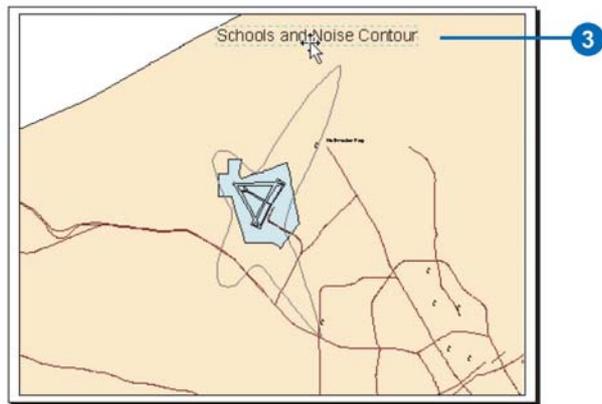
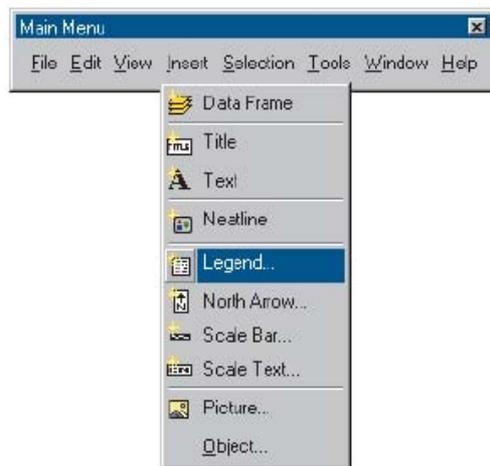. Font

Legend   Insert   -
:

(   )   Next   -
.   Finish
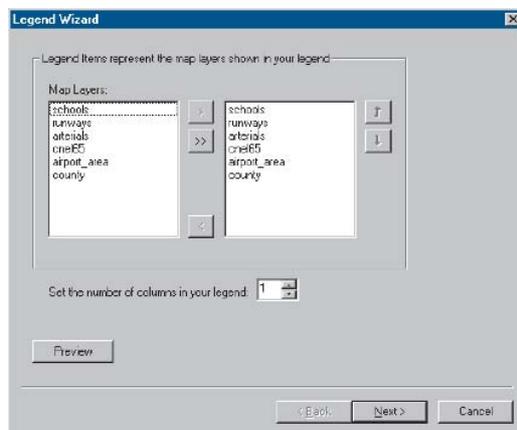
.   (   )   -

- Insert قائمة من North Arrow
: التالي

- ESRI North 1 اختر OK

- : Insert قائمة من Scale Bar
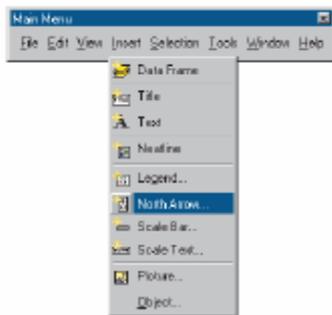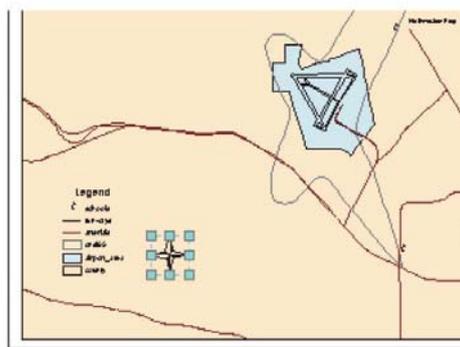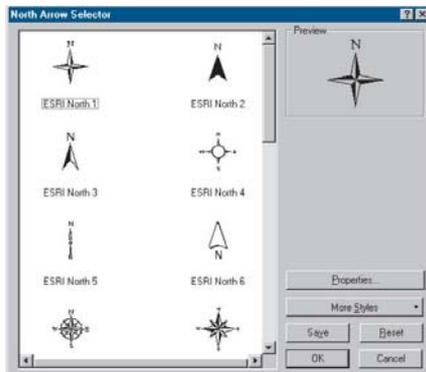
Scale Line 1 OK.
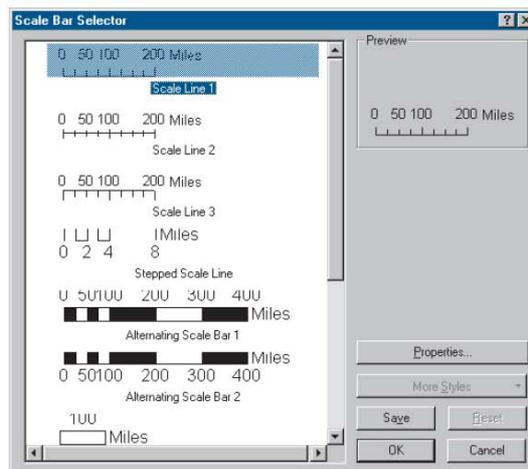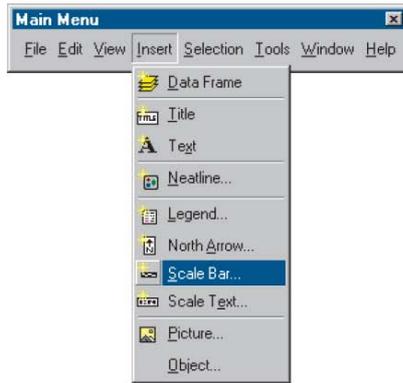
.Shift ( ) -
Align Draw Drawing -
Align Left

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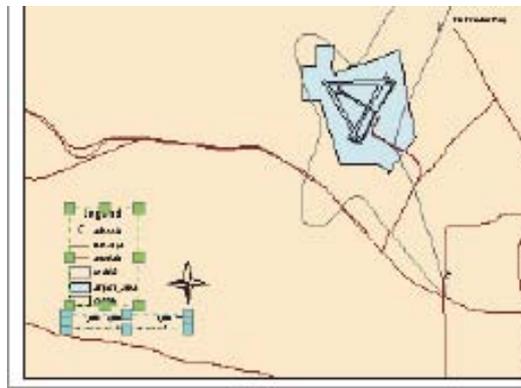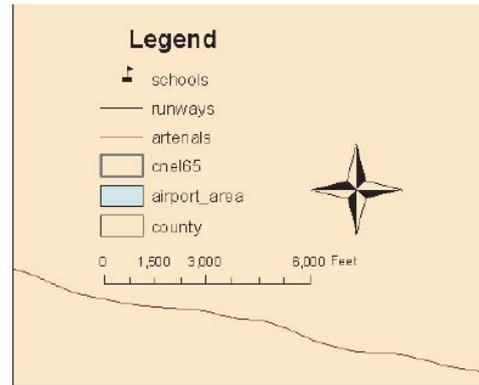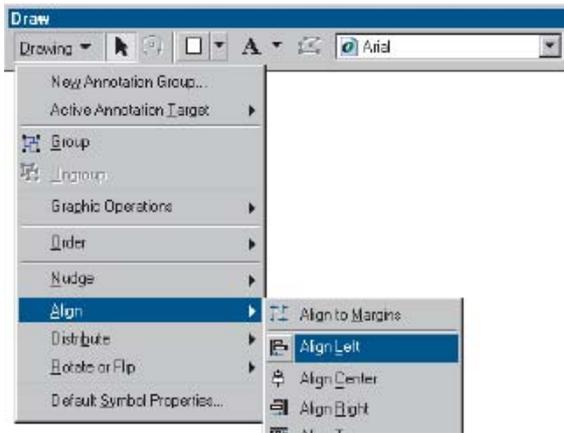
- المسار File ثم Print.
- (×)
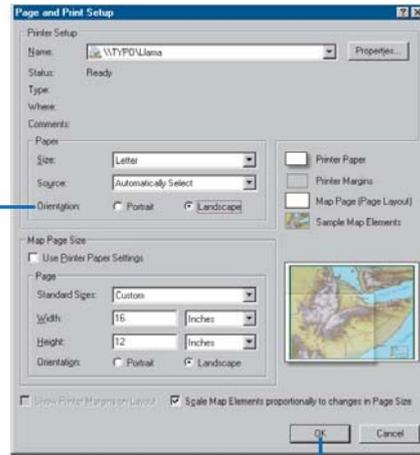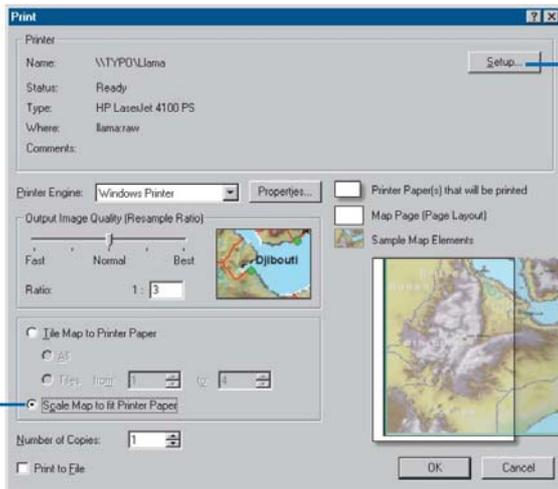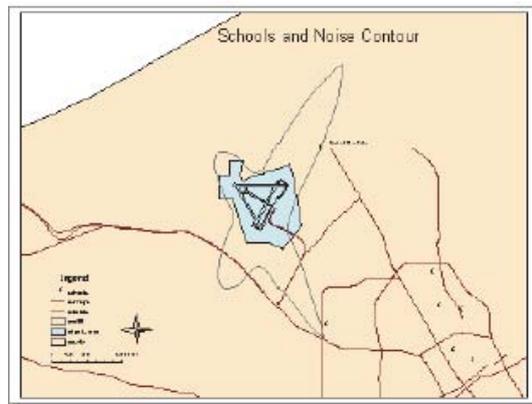.Scale Map to fit Printer Paper
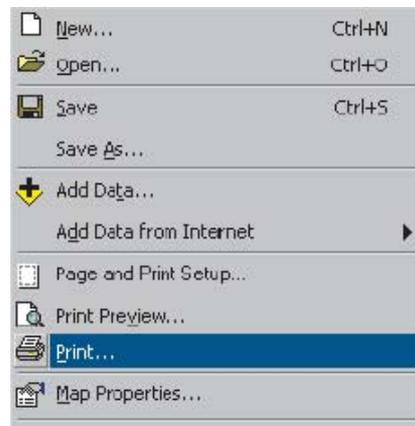
- Setup.
- Landscape .
- OK.

<div align="center">5</div>

-           OK   .

<div align="right">:</div>

ArcGIS.
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Arc MAP   ):(

-           File   Map Properties
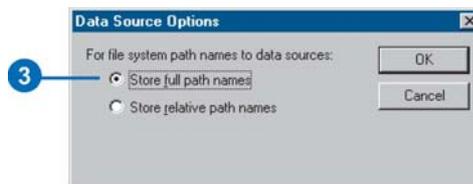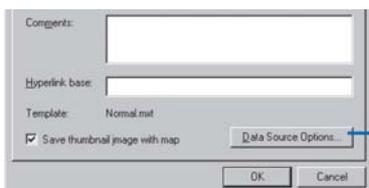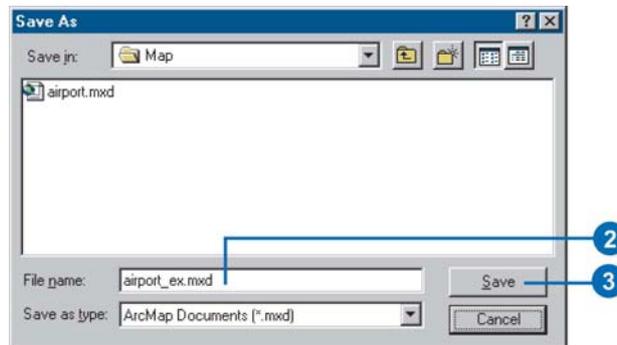-   Data Source Options   .
-           Store full path names   OK.
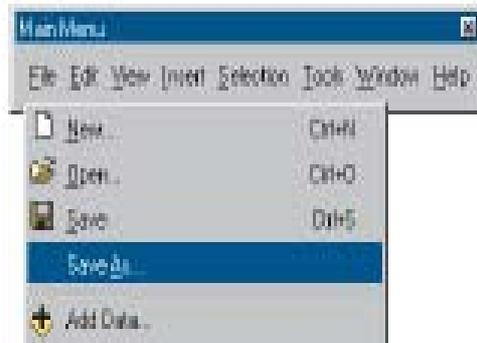
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- ‏من‏ قائمة‏ File ‏نختار‏ Save As.
- ‏نكتب‏ اسم‏ airport_ex
- ‏نضغط‏ على‏ Save .

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Arc Map

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- Layout View (View) .

- File Page and Print Setup
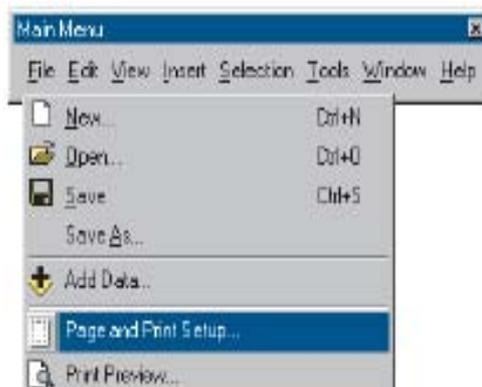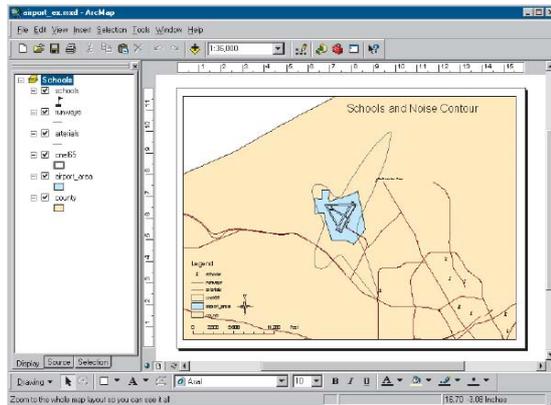
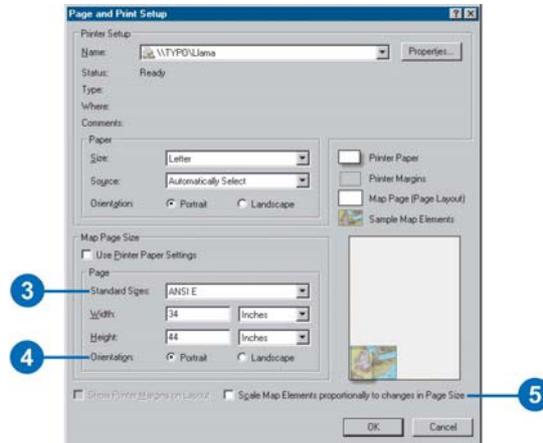- Standard Sizes ANSI E

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- Portrait

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Scale Map Elements　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　–
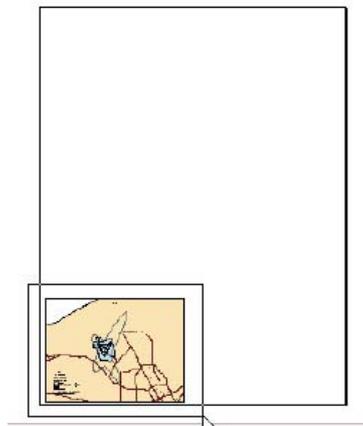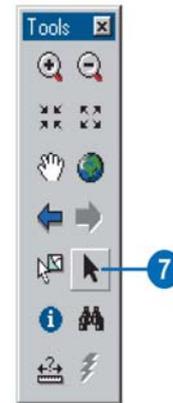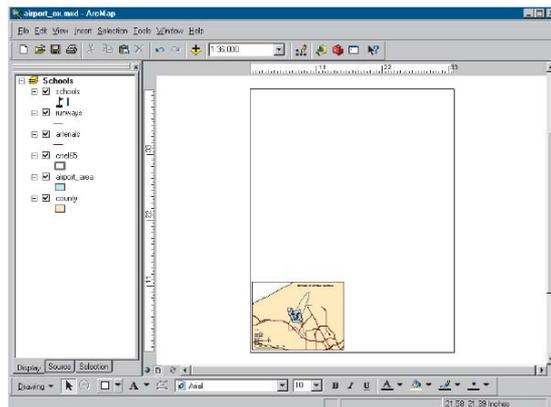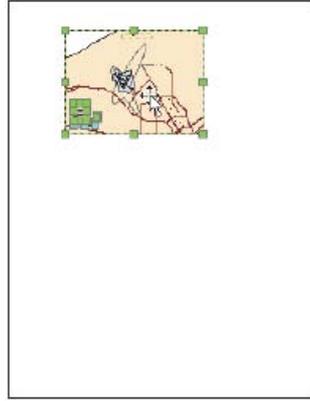
proportionally to changes in Page Size

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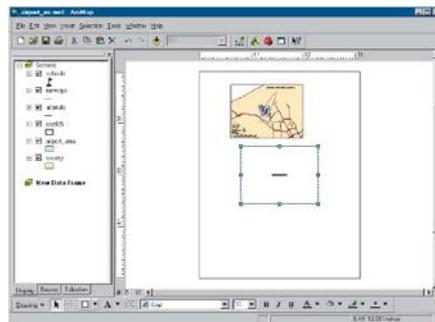

.OK　　　　　　　　　　　　　　　　　　　　　　　　　　.　　　　　　　　　–

.Tools　　　　　　　　　　　Select Elements　　　　　　　　　　　　　　　　–
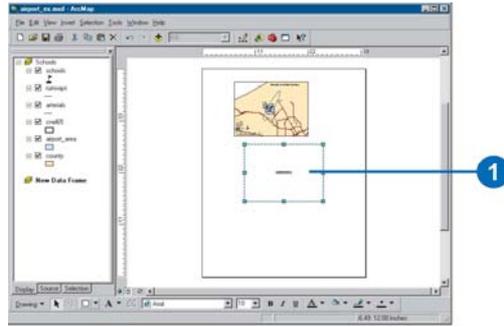

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Data Frame :

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- Insert Data Frame .

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Data Layer:

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-     Add Data   .

Add Data

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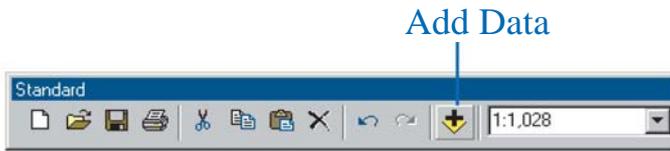
-          airport.mdb

-          Parcels   Add.

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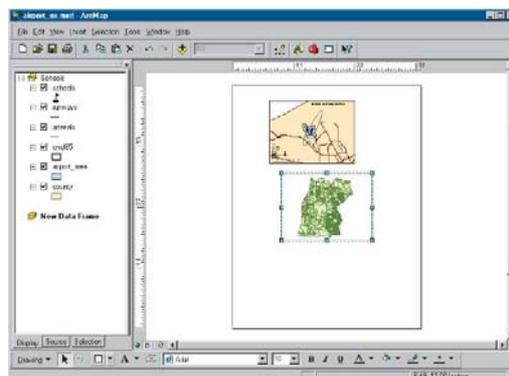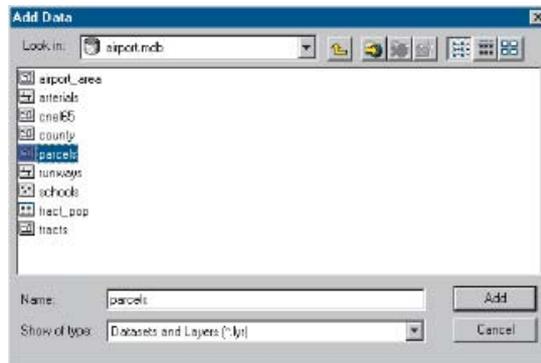
- ‫   New Data Frame‬
Properties.

- General   Land Use
(   )
- Display   Display Units   Feet)
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- Apply
- Size and Position

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- X   Y   .
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- OK.

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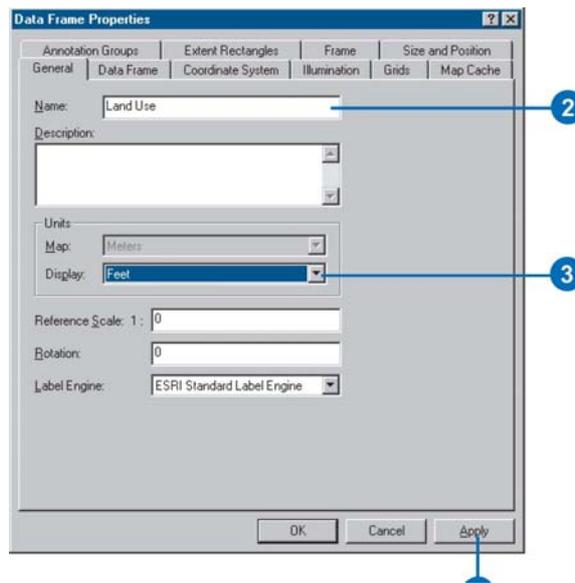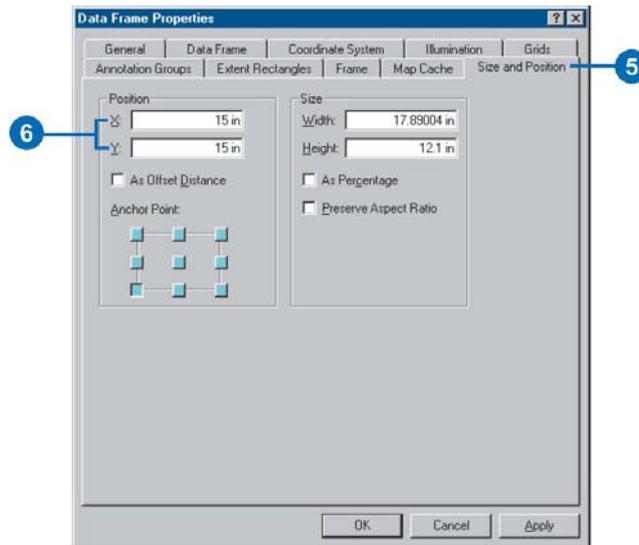
Bold -

. Shift
Distribute Drawing -
.Same Size
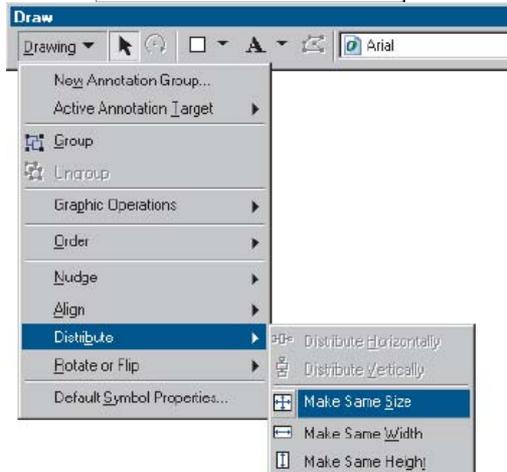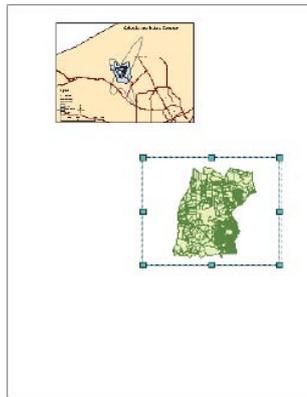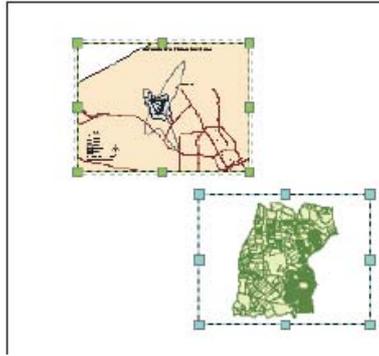
Land .

. Use

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. Data View View –
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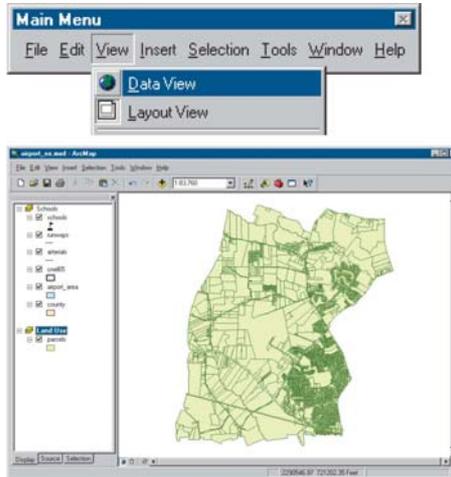airport_area –
.Copy

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.Paste Layer(s)

. cnel65 –

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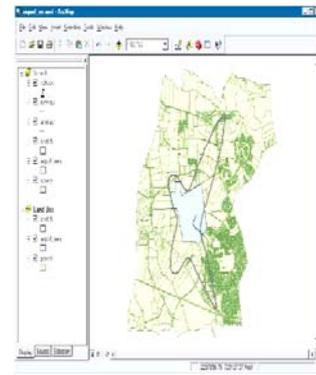
2   3   4

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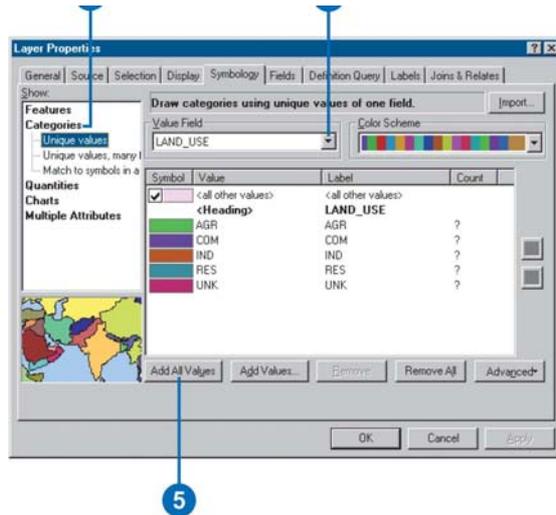
Attribute

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. Properties
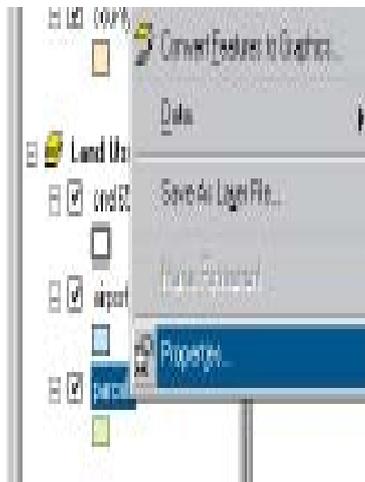
- Symbology (   )

- Categories

. Unique Values

- Value   LAND_USE

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- . Add All Values

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⑤

‫-‬   OK ‫.‬   ‫.‬
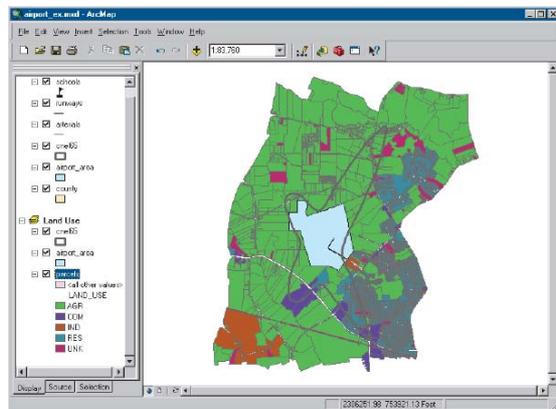
Arc Map   ‫.‬
‫.‬

Arc Map   ‫.‬
‫.‬
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‫-‬
. Properties
‫-‬   . Symbology
‫-‬   Categories   Match to Symbols in a
.Style
‫-‬
. land_use style

‫-‬   . Match Symbols

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All other values –

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OK. –

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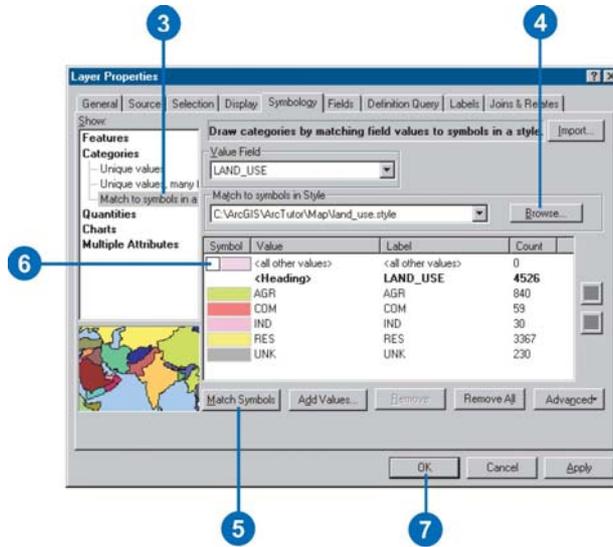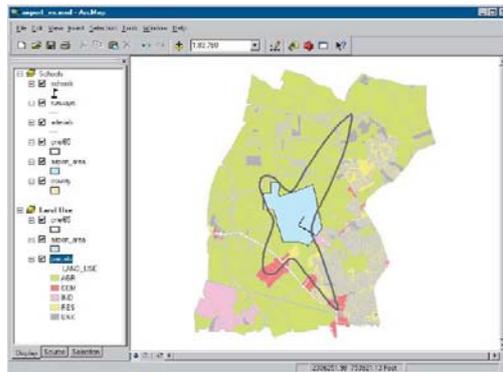
– Selection Select by Location .

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Select features from.

_____

–   **parcels**

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–   **intersect**

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.cnel65

–   . **Apply**   .‫‬

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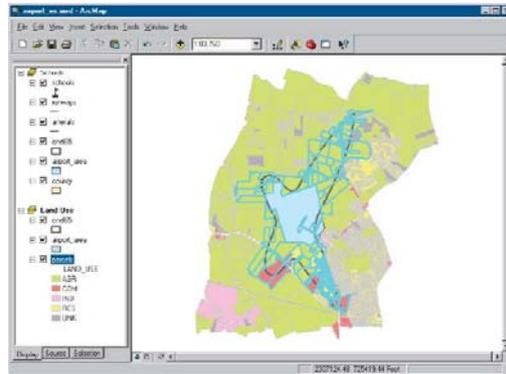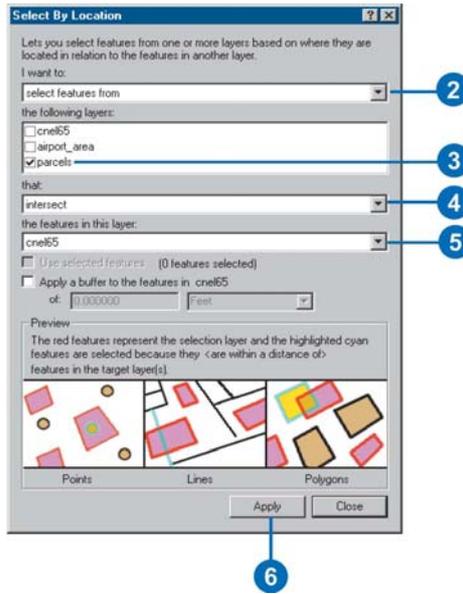
–   **parcels**

.**Export Data**   **Data**

–   **Selected**

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features (   )   .(

-   paracel_sel   (

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-                     .OK   Arc Map

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-   Yes

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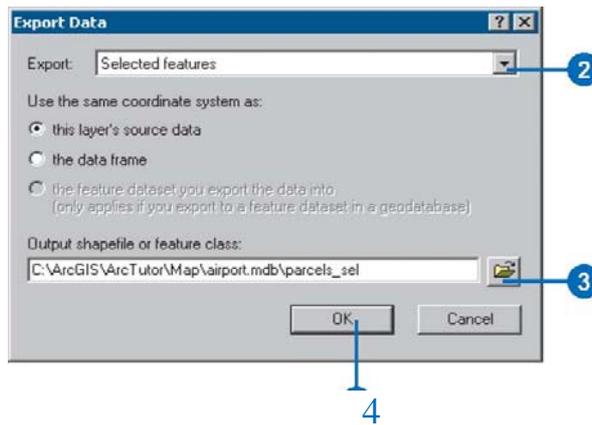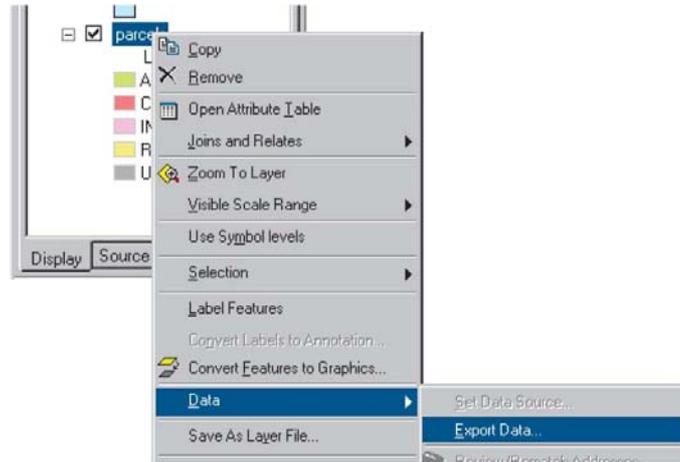
-   parcels

Selection   Clear selected features.

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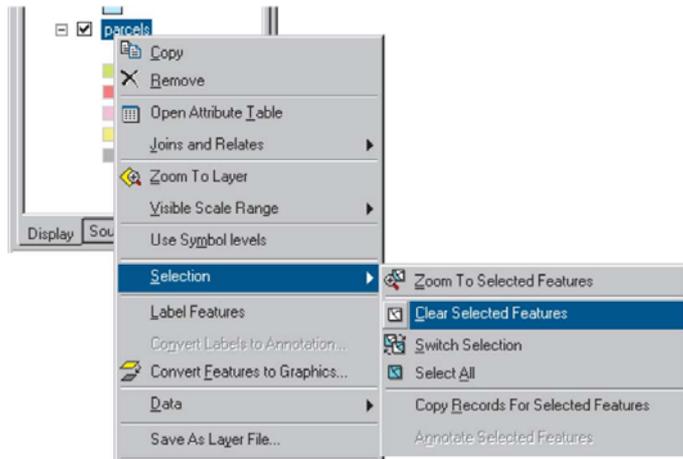
) paracel_sel

. parcels (

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. Arc Map

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paracel_sel ـ

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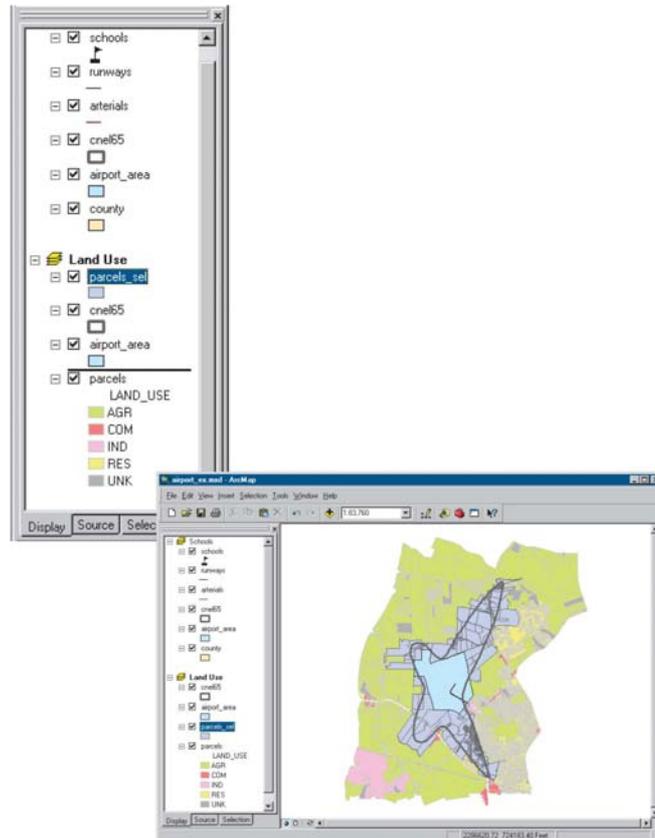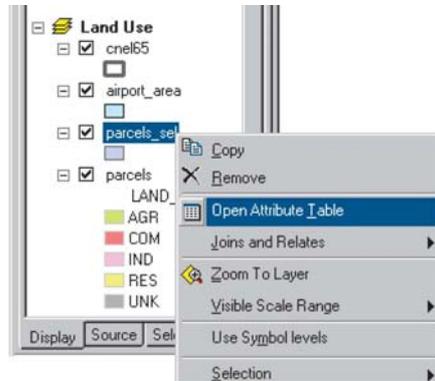/ ـ ـ ـ .

Open Attribute Table.

-                             LAND_USE

Summarize.

-   LAND_USE .

-      +   Shape_Area   .   Sum

-                                  lu_frequency

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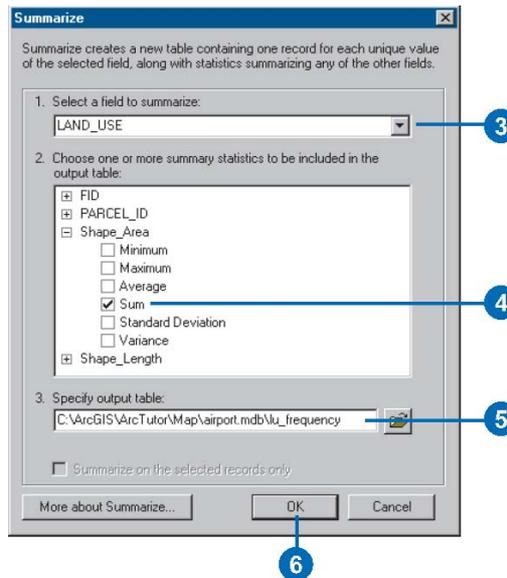
‫‬ (Source ‫‬ Display ‫‬)
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(‫‬)
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- ‫‬ lu_frequency ‫‬
.Open ‫‬
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- ‫‬ . ‫‬
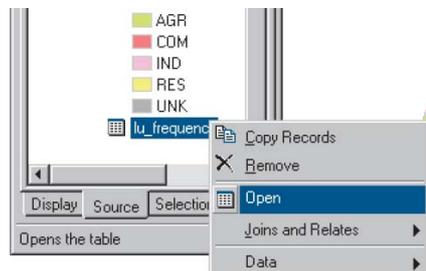
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:
-           Tools   Graphs   Create
.
-                   Column Graph   Next .
-           lu_frequency   .
-                   Use selected features or records   .
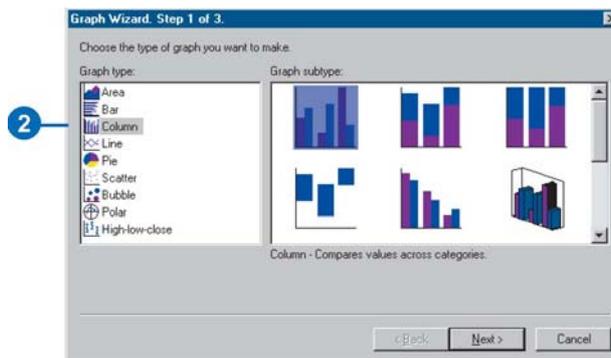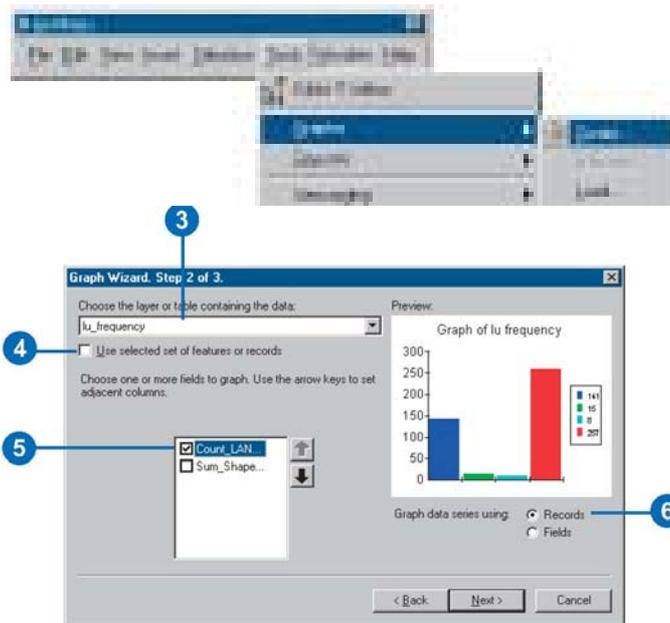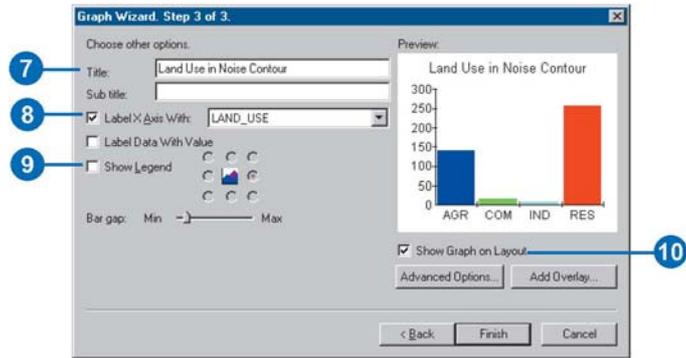

- Graph data series using records
. Next
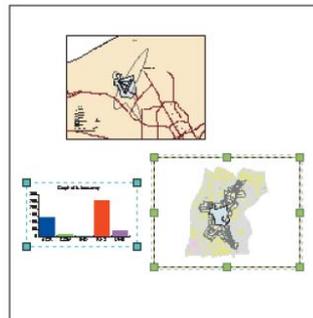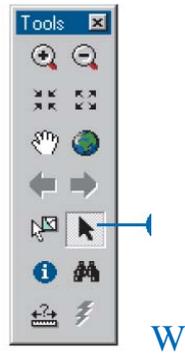- : Land use in noise contour .
- Label X Axis with   LAND_USE.
- Show Legend   .
- Show graph on layout
.Finish

.

. Select Elements –

W

. –
Shift –
. ( )
Align –
. Align Bottom

File

.Save

<div style="border: 3px solid green; padding: 20px;">

إنشاء خريطة في برنامج Arc Map

</div>

الهدف من الدرس.

المفاهيم الأساسية.

العناصر المطلوبة :

خطوات العمل :

- من قائمة العرض (View) اختر Layout View.
- من قائمة (إدراج) Insert اختر Data Frame
- انقر بالزر الأيمن على الإطار الجديد واختر Properties

- من علامة التبويب General اكتب في خانة الاسم Population Density
- انقر على علامة التبويب Size and Position

Data Frame Properties

| Annotation Groups | Extent Rectangles | Frame | Size and Position |
| General | Data Frame | Coordinate System | Illumination | Grids | Map Cache |

⑤

Name: Population Density

④

Description:

Units
Map: Unknown Units
Display: Unknown Units

Reference Scale: 1 : 0

Rotation: 0

Label Engine: ESRI Standard Label Engine

OK   Cancel   Apply

_____

- X .... Y ....
- OK ....
- Shift ....

- Drawing .... Draw .... Distribute
Make Same Size

-

_____
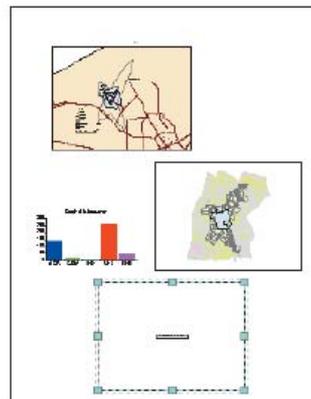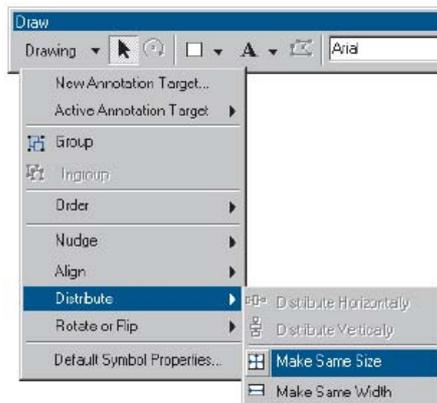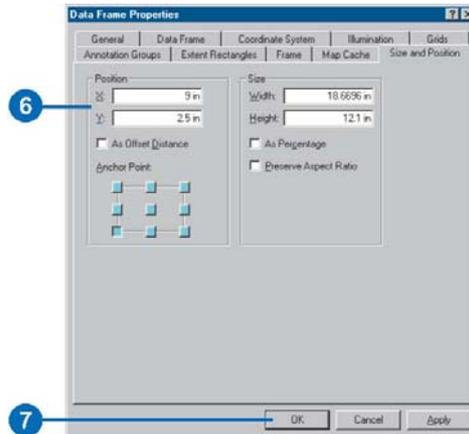
Arc Catalog

: Arc Catalog

-      Arc Catalog

ArcCatalog

-      Arc Catalog
-      +
-
-     arterials
- tracts ,   Control

arirport_area
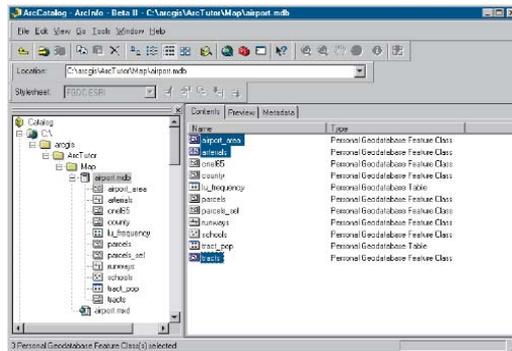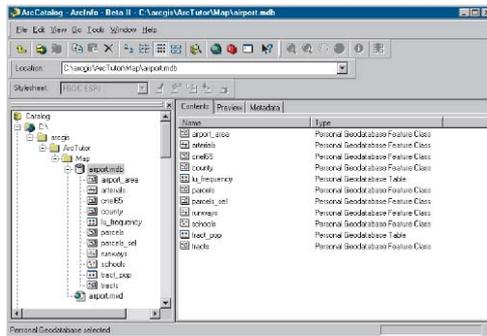
-      Arc Catalog   Arc Map (arterials
  arc Map

-
-      Arc Catalog

_____

tracts -

Zoom to Layer

-
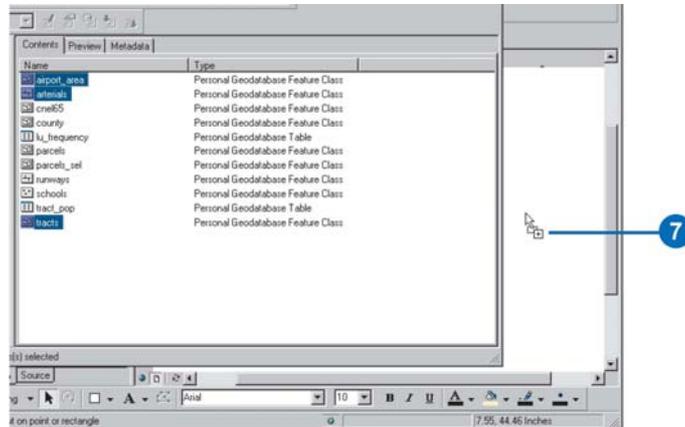
Properties

Display General -

) Display Units

(

OK

_____

:

:
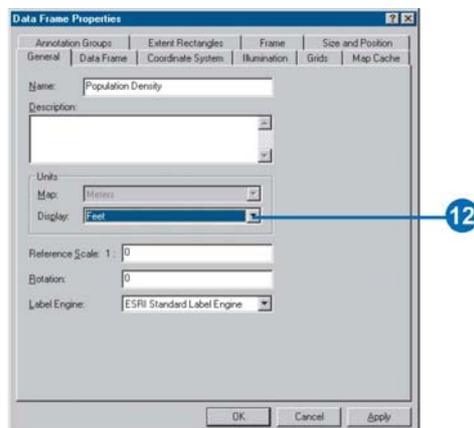
Add Data   Arc Map   -

           -
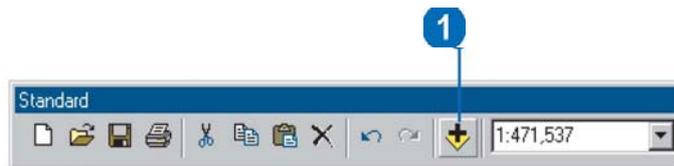
(   ) tract_pop   -

.   Add   -

.   Source

:   (   )

.
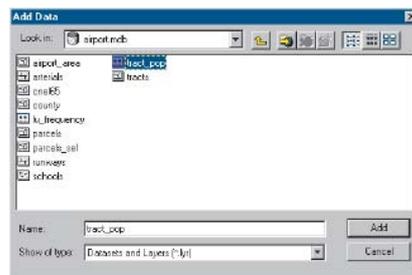
:   ID

Open Attribute   -

       Attributes   Table

_____

tract_pop

.Open   .TRACT_ID

.

-                          tracts

Join and Relates   join

-   join

attribute from a table

-   TRACT_ID

-                             tract_pop

-                                     TRACT_ID

-       OK   .   create an

index   YES
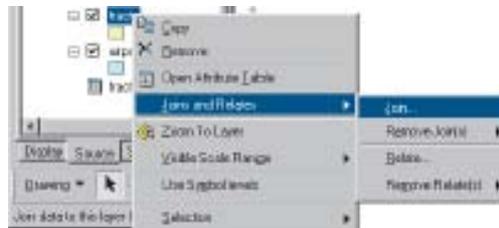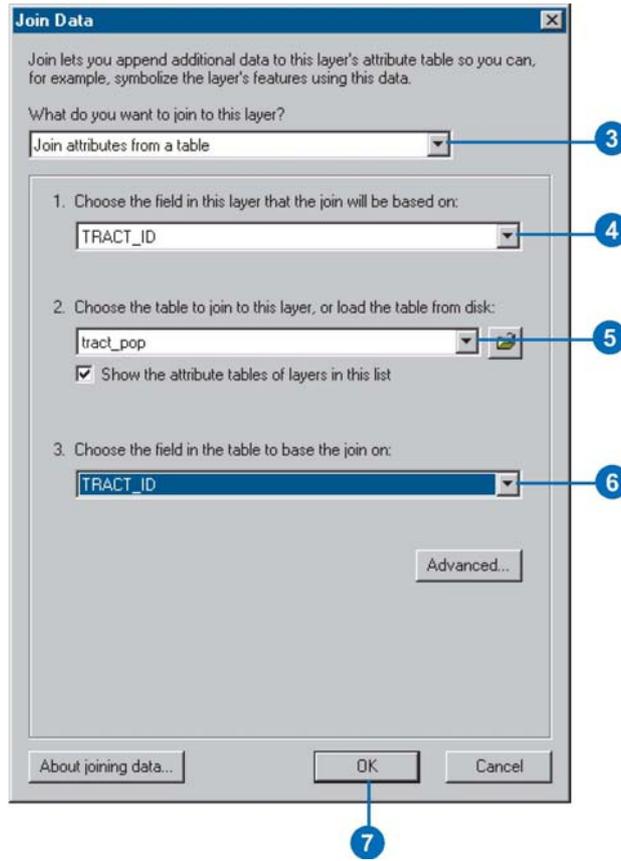
Open tracts

attribute table

_____

:_____

tracts

:

options ( ) -
. add field
Arc Catalog

POP_DEN : field name -
Long Integer -
OK -

:( )_____

( )

:

Arc Map Editors -

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/ – – – .
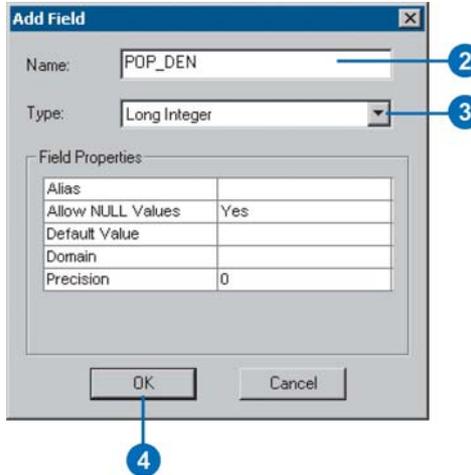
Editor - Start Editing
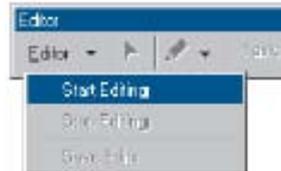
POP_DEN -

Calculate Values

:
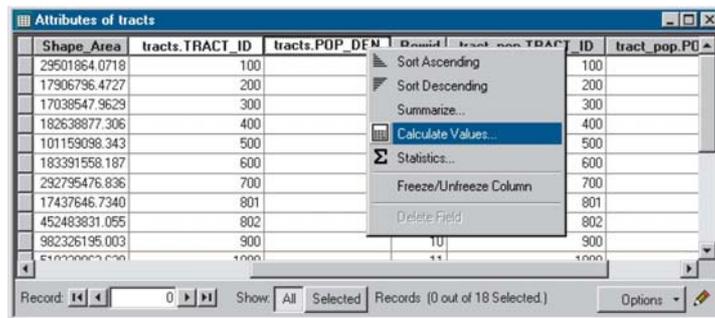
(/) / =
(/ AREA) / POPULATION = POP_DEN
.

:

- POPULATION
- /
-
- tract.Shape_Area
- /
-
-
- OK

Stop Editing Editor –

YES –
.( ) –

: _____

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tracts –

properties –

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/ – – – .

( ) Symbology -
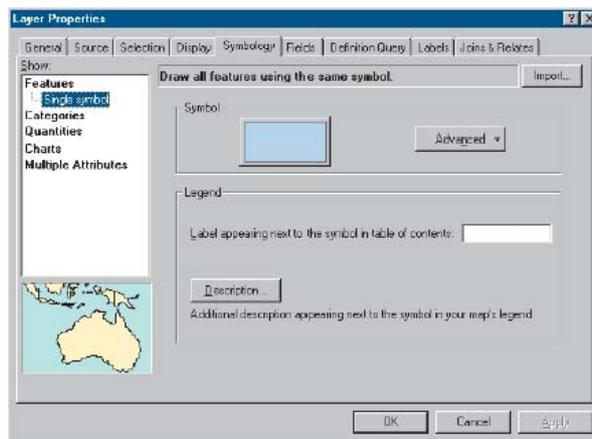
Show Quantities -

Graduated Colors

Values -

POP_DEN

Color Ramp -
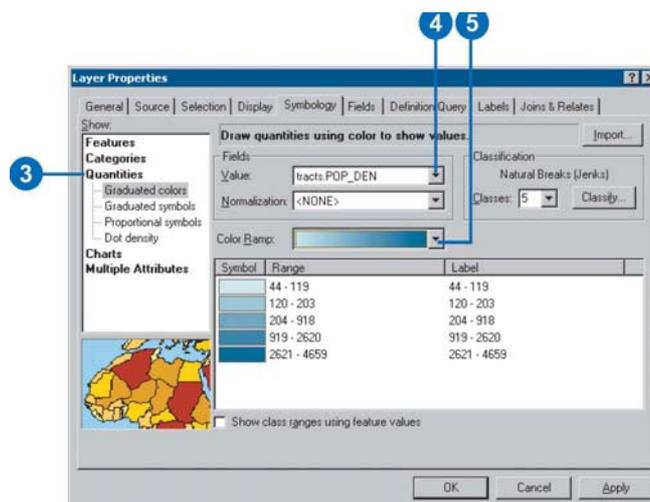
Arc Map
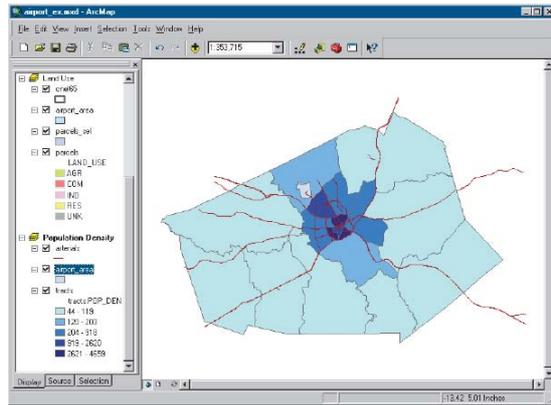
_____

- انقر **OK**
- انقر علي **Display**
- اختر **arterials**

- افتح **Data View** (
View ثم **Data View**)

(انقر علي **File**

Save)

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<div style="border: 2px solid green; padding: 20px;">

Arc Map ﺗﺼﺪﻳﺮ ﺍﻟﺒﻴﺎﻧﺎﺕ ﻓﻲ

</div>

ﻳﻤﻜﻨﻨﺎ ﺗﺼﺪﻳﺮ ﻃﺒﻘﺔ ﻣﻌﻴﻨﺔ (ﺃﻭ ﺟﺰﺀ ﻣﻨﻬﺎ).

ﻣﺜﺎﻝ:

ﻧﺮﻳﺪ ﺗﺼﺪﻳﺮ ﺍﻟﻄﺒﻘﺔ:

ﺍﻟﻄﺒﻘﺔ ﺍﻟﻤﺮﺍﺩ ﺗﺼﺪﻳﺮﻫﺎ: arterials

- ﻧﻨﺘﻘﻞ ﺇﻟﻰ ﻧﻤﻂ ﺍﻟﻌﺮﺽ Data View ﻣﻦ ﻗﺎﺋﻤﺔ View
ﻟﻠﺘﺄﻛﺪ ﺃﻧﻨﺎ ﻓﻲ ﻧﻤﻂ Data View
- ﻧﻨﻘﺮ ﺑﺎﻟﺰﺭ ﺍﻟﻴﻤﻴﻨﻲ ﻋﻠﻰ ﺍﻟﻔﺮﻳﻢ ﺍﻟﻔﻌﺎﻝ ﻭﻧﺨﺘﺎﺭ
Activate
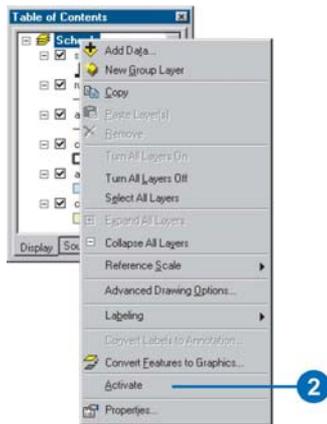
- ﺑﺎﻟﺰﺭ ﺍﻟﻴﻤﻴﻨﻲ ﻧﻨﻘﺮ ﻋﻠﻰ ﺍﻟﻄﺒﻘﺔ arterials
- ﻧﺨﺘﺎﺭ Export Data
- ﻣﻦ ﺍﻟﻨﺎﻓﺬﺓ ﻧﺨﺘﺎﺭ ﺍﻟﺘﺼﺪﻳﺮ Export ﺛﻢ All features
- ﺛﻢ ﺍﻟﻨﻈﺎﻡ ﺍﻹﺣﺪﺍﺛﻲ Use the same coordinate system
- ﺛﻢ ﻧﺴﻤﻲ ﺍﻟﻄﺒﻘﺔ arterials_new

_____

OK   -

Yes   -

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Copy
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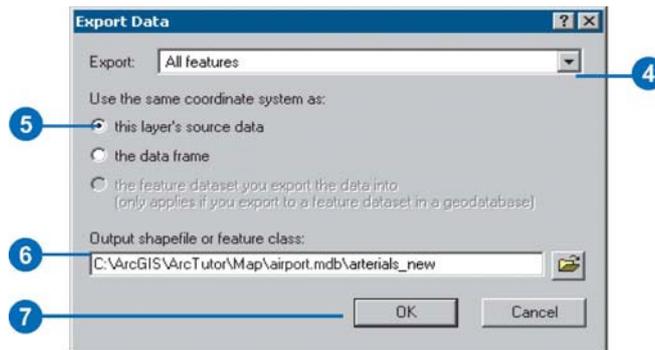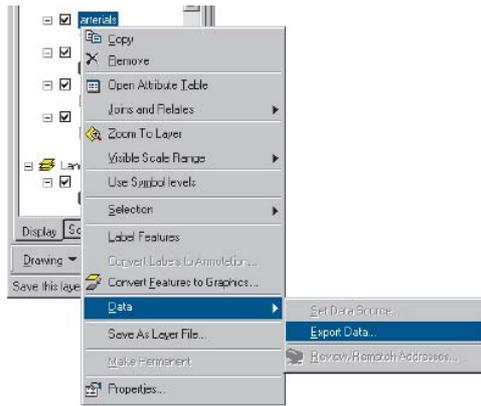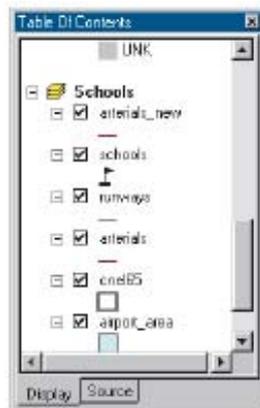
- Tools Zoom In
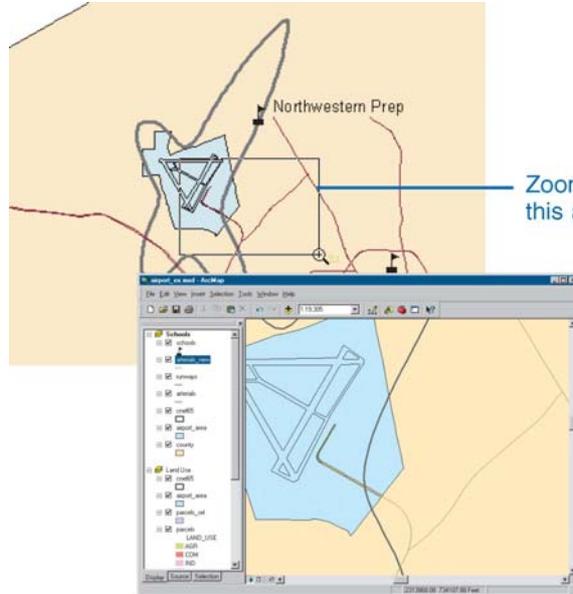
Zoom in to this area.

- airport_area cnel65 ×

- Editor)

(

- Start Editing

_____
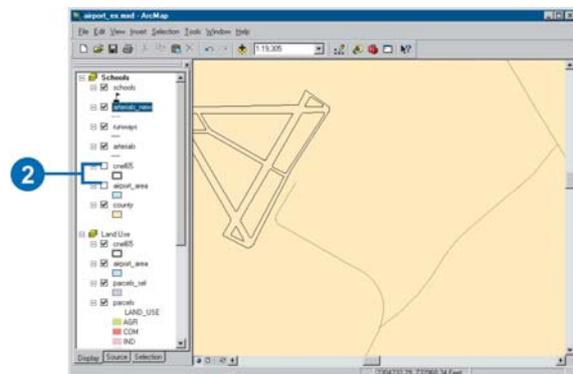
:snapping

Snapping   Editors   -

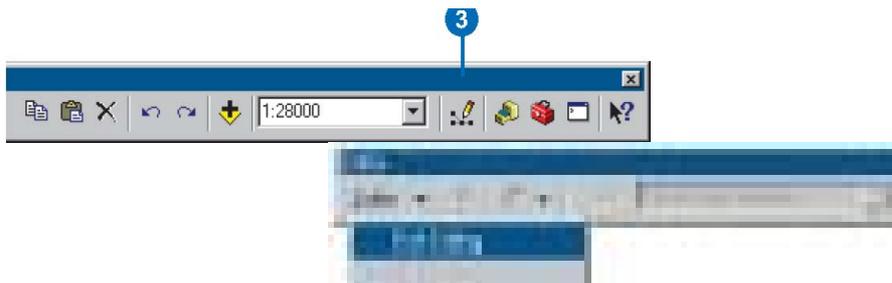. arterials_new   End   Edge   -
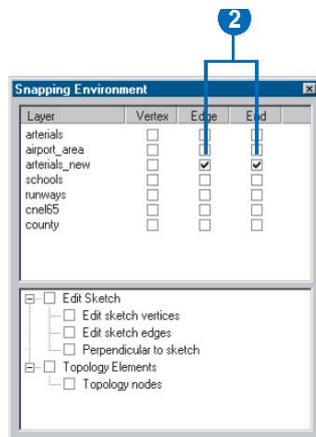
.   (   )

-

:   (   )

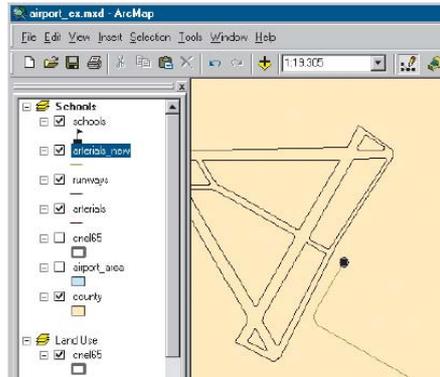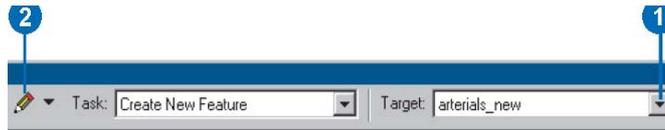)   arterials_new   Target   -
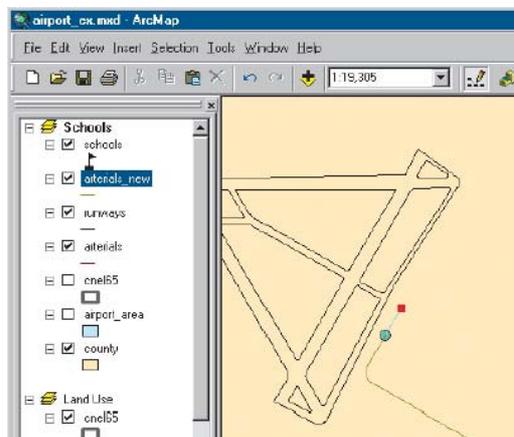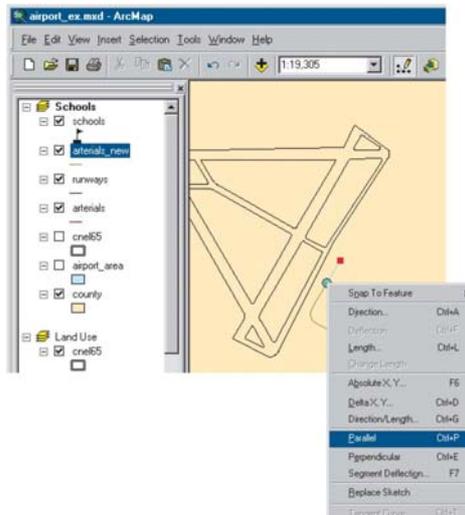(
Sketch   -
(   )   .   +   -
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context
Parallel –

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( ) -

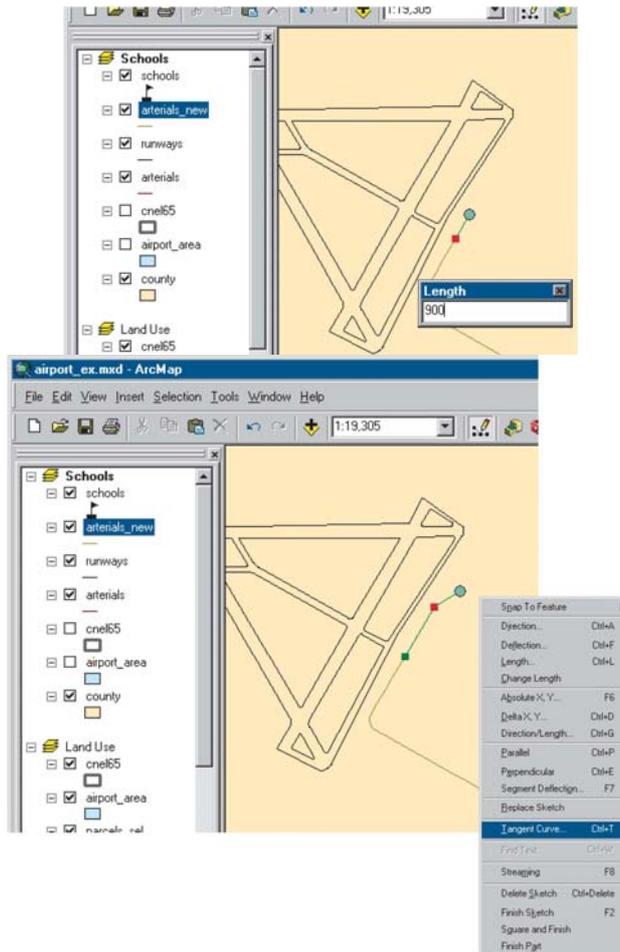Length
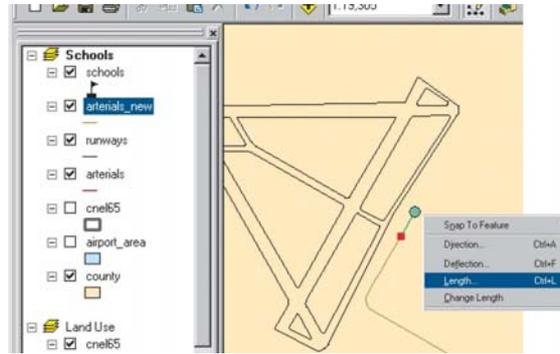
Enter -
( )
Tangent Curve -

Arc Length -
.( )
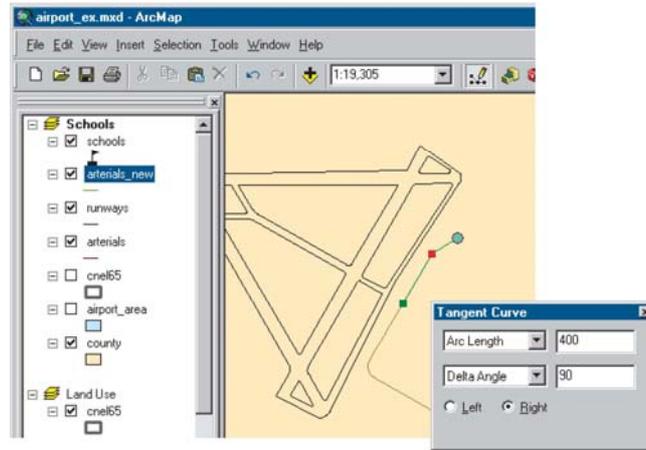) Delta Angle

Enter   Right   (

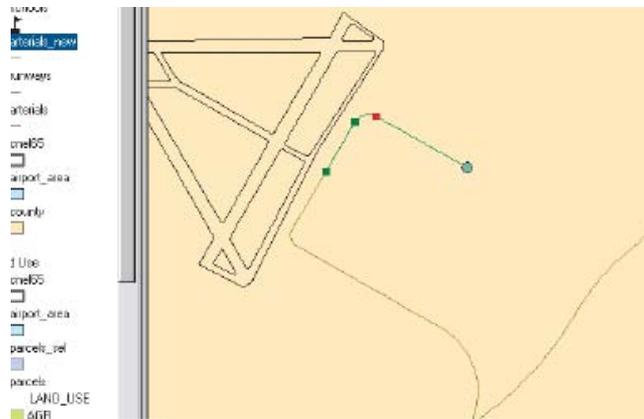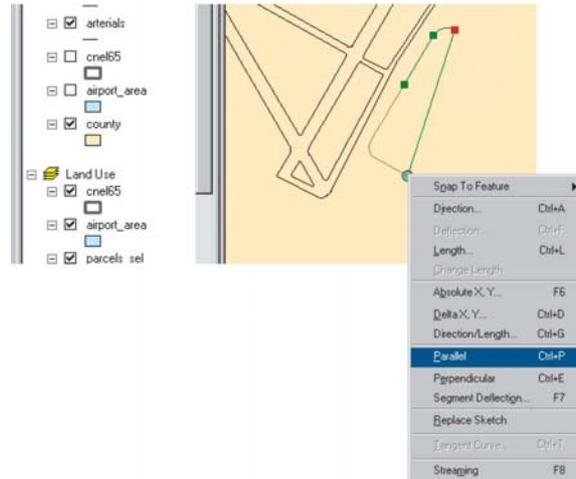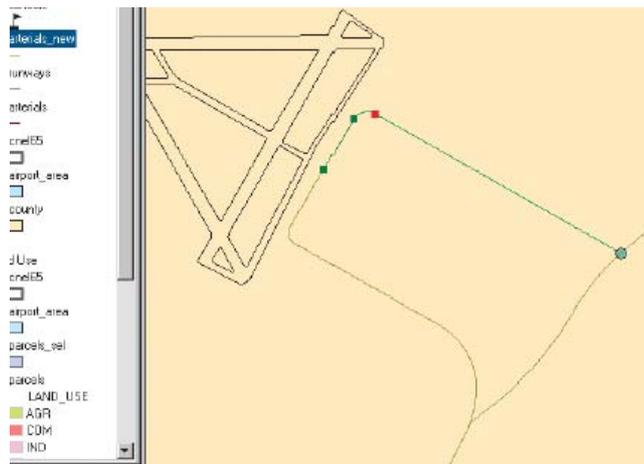-   (   ).
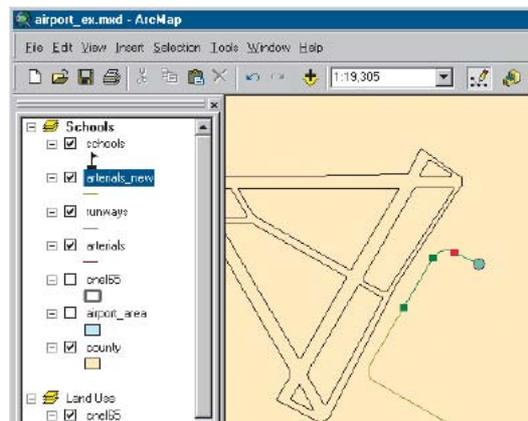
-                            Parallel

( ) –
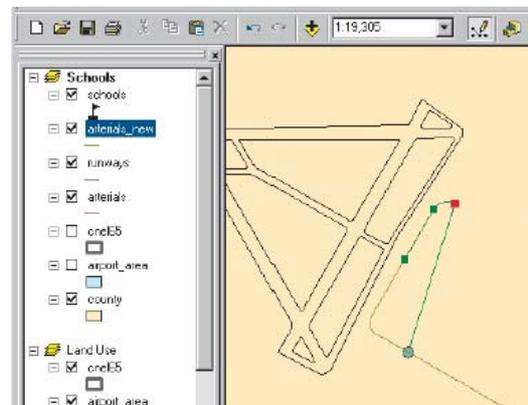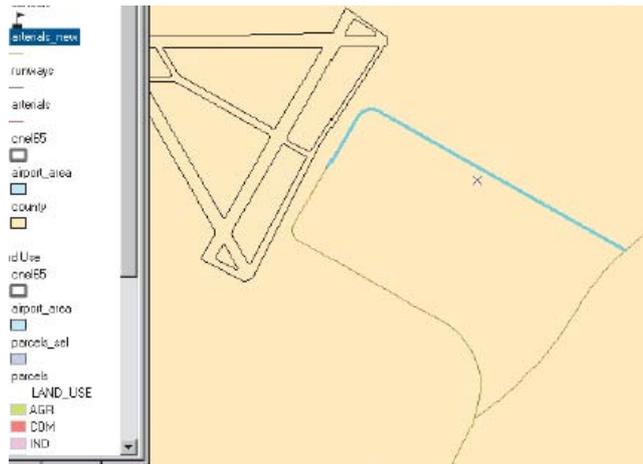
snapping)

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( )

<u>:   **(Attribute   )**</u>

:(   )

-                          Editor   Attribute

-                          Name   Airport Dr :   Enter
-
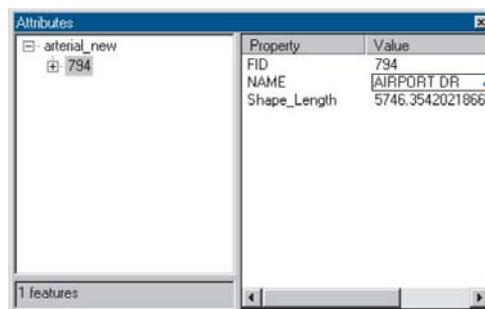-   Editor   Stop Editing
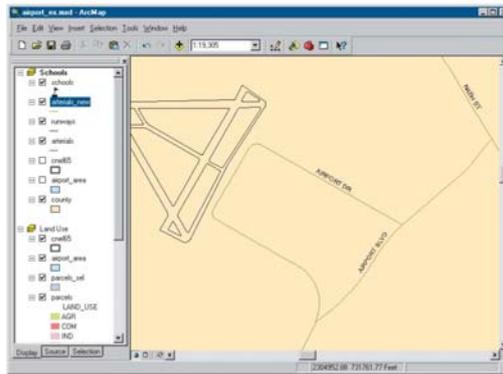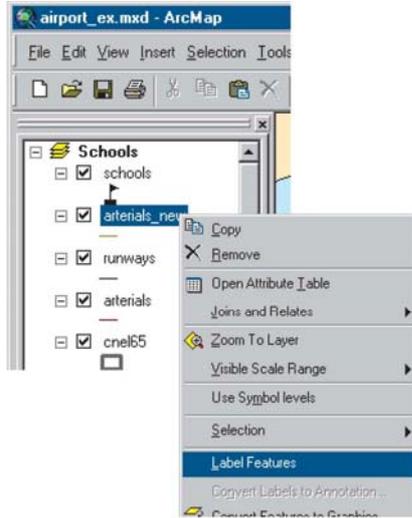   Yes
-

arterials_new -

Label Features

× arterials_new cnel65 -

View Layout View -

-

Map :
Enter ( ) Scale
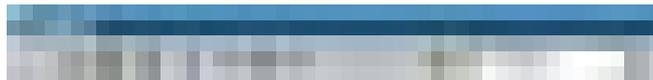
┌───┐
│   │
│   **Arc Map**   │
│   │
└───┘
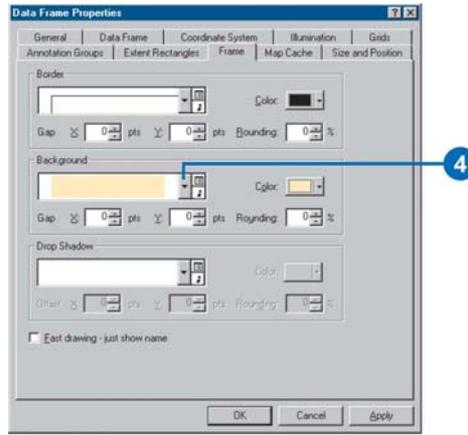
)   :(

:_____

- View   Layout View   (
- Land Use   .
paracel_sel

- Properties
- Frame   Background   Sand
OK

_____
/   –   –   –   .
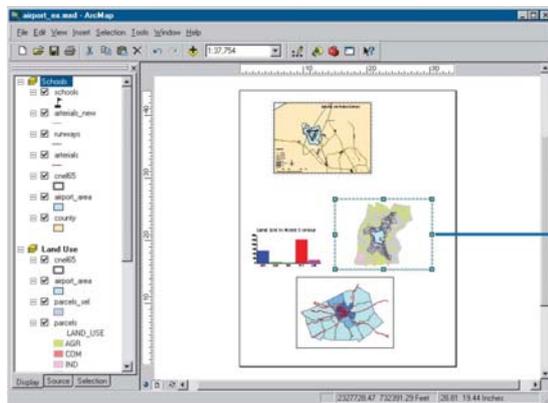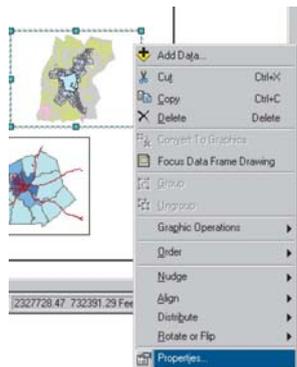
- Insert   Title
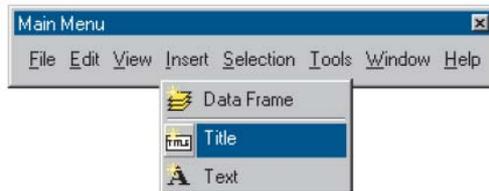
- : Land use within noise contour (
(Enter

- Size Text   Draw

-
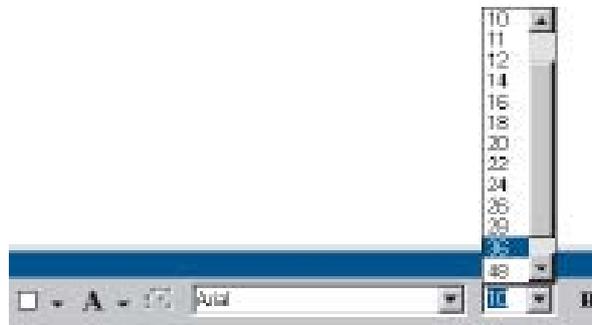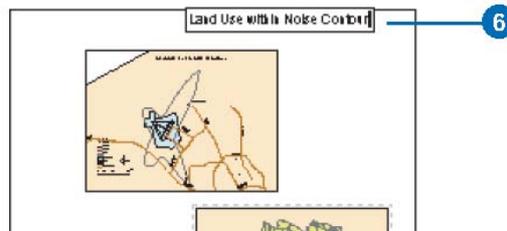
- Insert   Legend
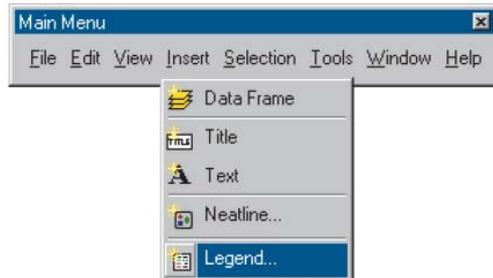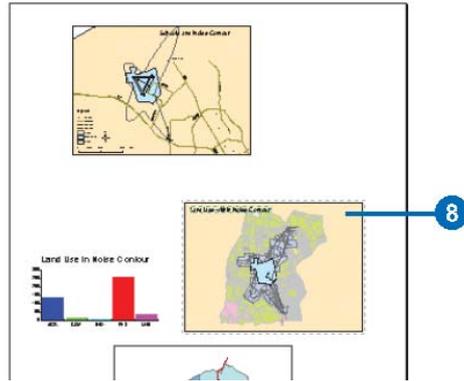
Finish	Next -
.	-
Scale Bar	Insert -
OK	Scale Line 1 -
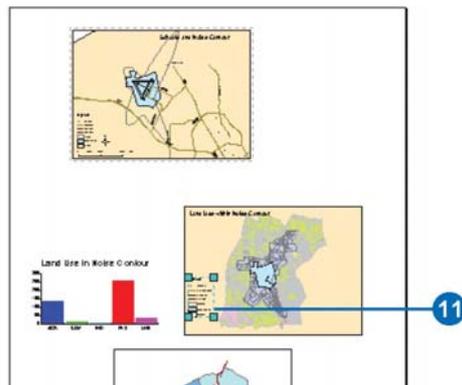
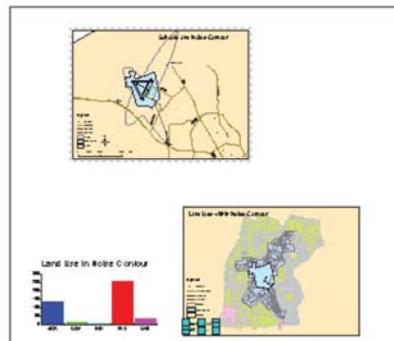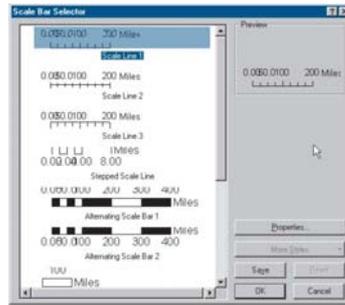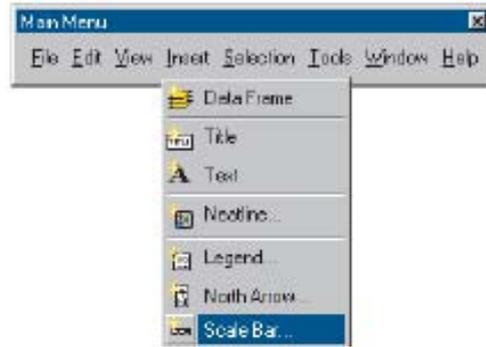:   –
) Population Density
.   (

Olive   –
.   –
.
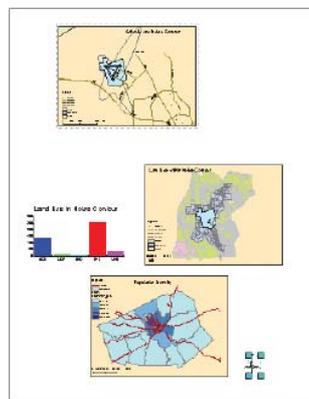
The   New Text   Draw   -
Proposed Airport Extension :   Tope pf the Page
Bold   .

: _____

:   Shadow
Population Density   -
Properties   -

Frame   -
Gray 30%   %   Shadow   -
Y Offset   X Offset   -
OK   -

.   –
:
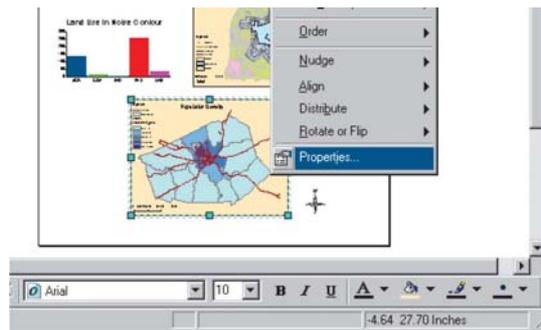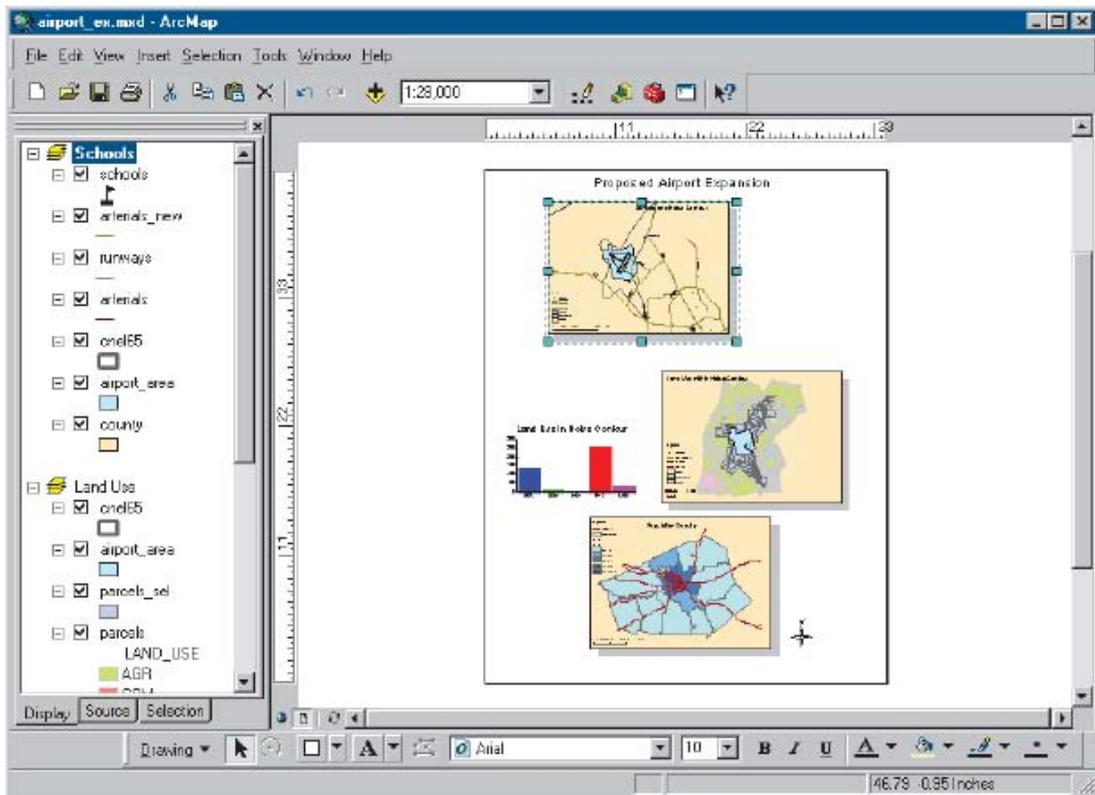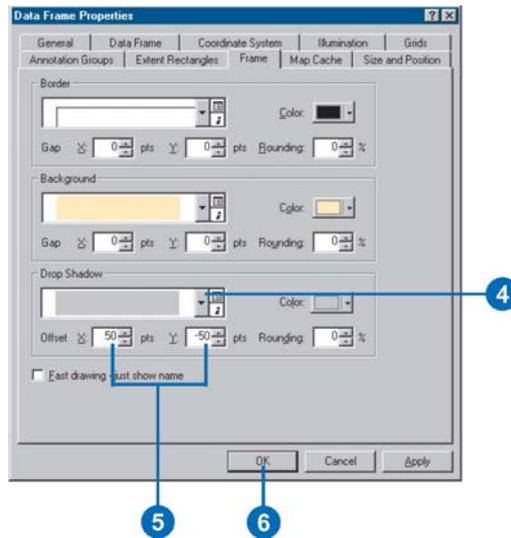
: Neatline _____

- Insert   Neatline
- Place inside margins
- gape .
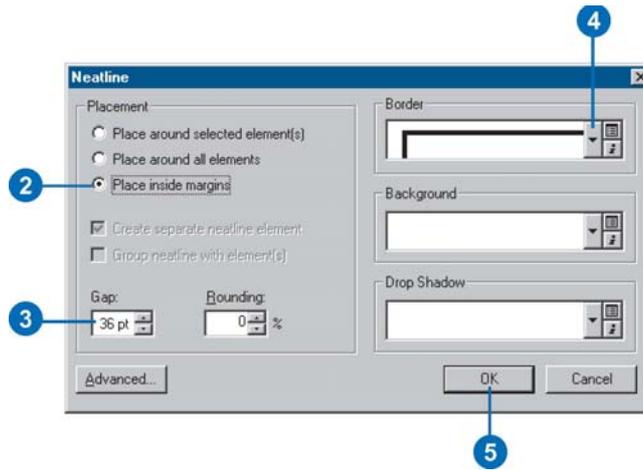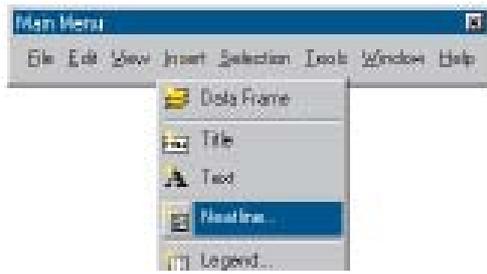
Border Size Borders -
: OK -

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×

:
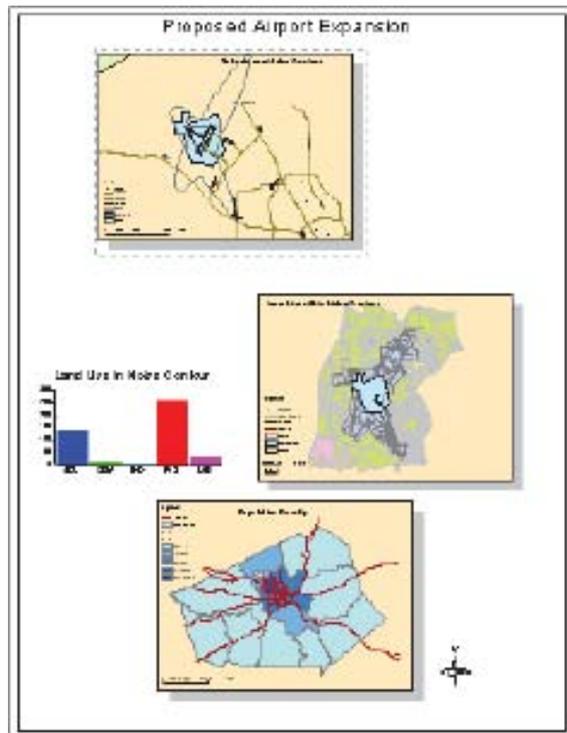
- File   Print
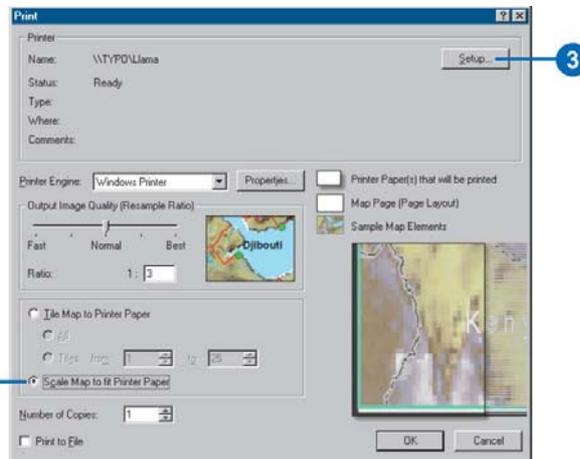- Scale map to fit the printer paper
- setup

- Portrait
- OK   OK
.