

GIS/CAMA Linkage

Using ArcExplorer

(ESRI's Free and Simple-To-Use GIS Software)

Idaho State Tax Commission
September 2004

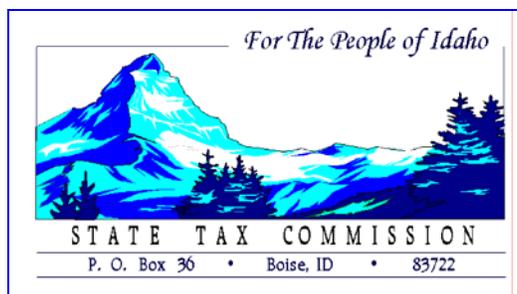


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Section 1: Course Introduction

Let's begin by explaining the GIS/CAMA Linkage program. The GIS/CAMA Linkage program was designed by a programmer at the Idaho State Tax Commission through collaboration with Idaho Counties and other Tax Commission employees. Its purpose is to make AS400 and Proval data collected by the Assessor's office available in a useable format that can be used in a GIS. The output is several .dbf tables that can be joined in the GIS with parcel data to allow for querying, labeling maps with owner and acreage information, hyperlinking photos, data visualization, etc. There is a lot of additional analysis that can be done in the GIS with this data that will make the Assessor's job much easier.

This course will focus on viewing and querying the parcel layer using ArcExplorer. You can think of it as a simplified version of ArcView with a limited amount of functionality. It is not designed to create maps, hyperlink photos or do analysis like ArcView. It's main objective is to view maps without the bells and whistles and that is why it is free. There is still some basic functionality that county personnel can take advantage of and that is what we'll learn in this class. The best thing about ArcExplorer is that it was designed for non-GIS users so it's easy to learn.

The mapper, using ArcView, can join information from Proval and the AS400 (CAMA Systems) to the parcel layer in GIS and save it to the server. County personnel can view and query the GIS parcel layer that contains several attributes from the CAMA system using ArcExplorer. You decide which information you want the mapper to make available from your CAMA system(s).

The next few pages include a document that shows the table structure. This is basically a pick-list of fields that you could add to the GIS parcel layer in GIS. It includes a list of the fields and their descriptions found in each table. It also includes the table names description. For example, pcparc00.dbf is the parcel master table. **Just let your mapper know what information you want added to the parcel layer and it can be made available to you on the server for viewing and querying in ArcExplorer.**

***** Files associated with Parcel Master *****

RELATED PARCELS

PCXPAR00 P RECORD FORMAT: XPARP00 RECORD LENGTH: 88

FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION
XP_PAR_14	1	14	14 A	PARCEL TYPE/NUM
XP_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS
XP_PAR_TYP	30	31	2 A	PARCEL TYPE
XP_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER
XP_PAR_STS	44	44	1 A	PARCEL STATUS
XP_REL_14	45	58	14 A	RELATED TYPE/NUM
XP_REL_15	59	73	15 A	RELATED TYPE/NUM/STS
XP_REL_TYP	74	75	2 A	RELATED TYPE
XP_REL_NUM	76	87	12 A	RELATED CORE NUMBER
XP_REL_STS	88	88	1 A	RELATED STATUS

PARCEL MASTER

PCPARC00 P RECORD FORMAT: PARCP00 RECORD LENGTH: 345

FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION
PM_PAR_14	1	14	14 A	PARCEL TYPE/NUM
PM_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS
PM_PAR_TYP	30	31	2 A	PARCEL TYPE
PM_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER
PM_PAR_STS	44	44	1 A	PARCEL STATUS
PM_IAEXIST	45	45	1 A	I/A PARCEL EXISTS? A="I" record will contain "A" if both exist. I="A" record will contain "I" if both exist
PM_CARE_OF	46	46	1 A	LAST CARE OF
PM_MAIL_NM	47	76	30 A	MAIL NAME
PM_MAIL_A1	77	106	30 A	ADDR LINE 1
PM_MAIL_A2	107	136	30 A	ADDR LINE 2
PM_MAIL_CT	137	152	16 A	MAIL CITY
PM_MAIL_ST	153	154	2 A	MAIL STATE
PM_MAIL_ZP	155	164	10 A	MAIL ZIP CODE
PM_PROP_AD	165	206	42 A	PROPERTY ADDRESS
PM_PROP_ZP	207	209	5,00 P	PROPERTY ZIP CODE
PM_EFF_DAT	210	217	8,00 S	EFFECTIVE DATE
PM_EXP_DAT	218	225	8,00 S	EXPIRATION DATE
PM_LOCN_CD	226	228	4,00 P	LOCATION CODE

PM_PARC_CD	229	230	2	A	PARCEL CODE
PM_ZONING	231	235	5	A	ZONE
PM_DEEDCDT	236	243	8,00	S	DEED CHANGE DATE
PM_DEEDRF1	244	253	10	A	DEED REFERENCE 1
PM_DEEDRF2	254	263	10	A	DEED REFERENCE 2
PM_DEEDRF3	264	273	10	A	DEED REFERENCE 3
PM_DEEDRF4	274	283	10	A	DEED REFERENCE 4
PM_DEEDRF5	284	293	10	A	DEED REFERENCE 5
PM_LANDREC	294	295	3,00	P	#OF LAND RECS
PM_IMPRECS	296	297	3,00	P	#OF IMPROVEMENTS
PM_PI_YEAR	298	300	4,00	P	PHYSICAL INSPECTION YEAR
PM_TAXAREA	301	303	5,00	P	TAX CODE AREA
PM_TAX_KEY	304	318	15	A	TAX KEY
PM_TAXYEAR	319	321	4,00	P	TAX YEAR
PM_PAIDFLG	322	322	1	A	TAX FULLY SATISFIED
PM_TAX_AMT	323	328	11,02	P	TAX/SPECIAL CHARGE
PM_PV_AREA	329	329	1,00	P	CAMA AREA NUMBER
PM_PV_NBHD	330	336	7,00	S	CAMA NEIGHBORHOOD
PM_PV_ACRE	337	345	9,04	S	CAMA LEGAL ACREAGE

APPEALS

PCAPPL00 P RECORD FORMAT: APPEAL0 RECORD LENGTH: 169

FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION
AP_PAR_14	1	14	14 A	PARCEL TYPE/NUM
AP_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS
AP_PAR_TYP	30	31	2 A	PARCEL TYPE
AP_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER
AP_PAR_STS	44	44	1 A	PARCEL STATUS
AP_REC_NUM	45	47	3,00 S	RECORD NUMBER
AP_CHG_RSN	48	51	4 A	APPEAL CHANGE REASON
AP_GROUNDS	52	71	20 A	GROUND FOR APPEAL
AP_OLD_VAL	72	80	9,00 S	APPEAL PRIOR VALUE
AP_NEW_VAL	81	89	9,00 S	APPEAL NEW VALUE
AP_CHG_DAT	90	97	8,00 S	DATE OF ADJUSTMENT
AP_PET_NAM	98	133	36 A	PETITIONERS NAME
AP_FIL_DAT	134	141	8,00 S	DATE OF FILING
AP_HEAR_DT	142	149	8,00 S	DATE OF HEARING
AP_FIN_DAT	150	157	8,00 S	FINAL DATE
AP_DET_DAT	158	165	8,00 S	DETERMINATION DATE
AP_STATUS	166	169	4 A	APPEAL STATUS

LEGAL DESCRIPTION

PCLEGL00 P RECORD FORMAT: LEGAL00 RECORD LENGTH: 284

FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION
LG_PAR_14	1	14	14 A	PARCEL TYPE/NUM
LG_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS
LG_PAR_TYP	30	31	2 A	PARCEL TYPE
LG_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER
LG_PAR_STS	44	44	1 A	PARCEL STATUS
LG_LINE_1	45	84	40 A	LEGAL DESC LINE 1
LG_LINE_2	85	124	40 A	LEGAL DESC LINE 2
LG_LINE_3	125	164	40 A	LEGAL DESC LINE 3
LG_LINE_4	165	204	40 A	LEGAL DESC LINE 4
LG_LINE_5	205	244	40 A	LEGAL DESC LINE 5
LG_LINE_6	245	284	40 A	LEGAL DESC LINE 6

PARCEL NAME FILE

PCNAME00 P RECORD FORMAT: NAMEP00 RECORD LENGTH: 78

FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION
NM_PAR_14	1	14	14 A	PARCEL TYPE/NUM
NM_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS
NM_PAR_TYP	30	31	2 A	PARCEL TYPE
NM_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER
NM_PAR_STS	44	44	1 A	PARCEL STATUS
NM_REC_NUM	45	47	3,00 S	RECORD NUMBER
NM_CARE_OF	48	48	1 A	CARE OF
NM_OWNER	49	78	30 A	NAME

PARCEL CATEGORY VALUES

PCCATG00 P RECORD FORMAT: CATGP00 RECORD LENGTH: 84

FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION
CA_PAR_14	1	14	14 A	PARCEL TYPE/NUM
CA_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS
CA_PAR_TYP	30	31	2 A	PARCEL TYPE
CA_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER
CA_PAR_STS	44	44	1 A	PARCEL STATUS
CA_CAT_NUM	45	46	2,00 P	CATEGORY
CA_SHT_NUM	47	48	3,00 P	RECORD#
CA_REV_YR	49	51	4,00 P	REVIEW YEAR
CA_QNTY	52	56	9,03 P	QUANTITY
CA_UNIT	57	58	2 A	UNIT
CA_VALUE	59	63	9,00 P	VALUE
CA_HO_MRKT	64	68	9,00 P	HOMEOWNER MARKET
CA_HO_EXPT	69	73	9,00 P	HOMEOWNER EXEMPTION
CA_HO_FLAG	74	74	1 A	ELIGIBLE FOR HO EXMPT?

Y=yes
Blank=no
D=Disallowed

CA_CB_MRKT	75	79	9,00	P	CIRCUIT BREAKER MARKET
CA_HS_MRKT	80	84	9,00	P	HARDSHIP MARKET

PERMITS

PCPERM00 P RECORD FORMAT: PERMIT0 RECORD LENGTH: 191

FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION
PE_PAR_14	1	14	14 A	PARCEL TYPE/NUM
PE_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS
PE_PAR_TYP	30	31	2 A	PARCEL TYPE
PE_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER
PE_PAR_STS	44	44	1 A	PARCEL STATUS
PE_REF_NUM	45	64	20 A	PERMIT REF NUMBER
PE_FLD_NUM	65	71	7,00 S	FIELD VISIT REC
PE_FIL_DAT	72	79	8,00 S	PERMIT FILING DATE
PE_CAL_DAT	80	87	8,00 S	PERMIT CALLBACK DT
PE_INACT_D	88	95	8,00 S	PERMIT INACTIVE DT
PE_CERT_DT	96	103	8,00 S	DATE CERTIFIED FOR OCCUPANCY
PE_DESCRIP	104	163	60 A	PERMIT DESCRIPTION
PE_TYPE	164	167	4 A	PERMIT TYPE
PE_SOURCE	168	171	4 A	PERMIT SOURCE
PE_PHONE_N	172	191	20 A	PERMIT CONTACT#

SALES

PCSALE00 P RECORD FORMAT: SALEP00 RECORD LENGTH: 65

FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION
SL_PAR_14	1	14	14 A	PARCEL TYPE/NUM
SL_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS
SL_PAR_TYP	30	31	2 A	PARCEL TYPE
SL_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER
SL_PAR_STS	44	44	1 A	PARCEL STATUS
SL_SALE_DT	45	50	6,00 S	SALE DATE
SL_VALID	51	51	1 A	VALID SALE?

(Y=Valid sale, N=Not valid sale,
M=Valid sale/Multiple parcel sale,
O=Not valid sale/Multiple parcel sale

Note: for multiple parcel sales, the first parcel will have Y or N, and all additional parcels will have M or O)

SL_PRICE	52	61	10,00 S	SELLING PRICE
SL_PERS_PR	62	62	1 A	PERSONNAL PROPERTY IN SALE?

SL_CONST	63	63	1	A	CONSTANT
SL_DESIG	64	65	2,00	S	SALES DESIGNATOR (1-17)

SPECIAL CHARGES

PCSPEC00 P RECORD FORMAT: SPECLP0 RECORD LENGTH: 54

FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION
SP_PAR_14	1	14	14 A	PARCEL TYPE/NUM
SP_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS
SP_PAR_TYP	30	31	2 A	PARCEL TYPE
SP_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER
SP_PAR_STS	44	44	1 A	PARCEL STATUS
SP_CODE	45	46	3,00 P	SPECIAL CODE
SP_UNITS	47	50	7,03 P	SPECIAL UNIT
SP_AMOUNT	51	54	7,02 P	SPECIAL AMOUNT

***** Files associated with Improvements *****

IMPROVEMENTS

PCIMPC00 P RECORD FORMAT: IMPCP00 RECORD LENGTH: 246

FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION
IM_PAR_14	1	14	14 A	PARCEL TYPE/NUM
IM_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS
IM_PAR_TYP	30	31	2 A	PARCEL TYPE
IM_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER
IM_PAR_STS	44	44	1 A	PARCEL STATUS
IM_NUMBER	45	49	5 A	IMPROVEMENT NUMBER (R01, R02, etc..)
IM_DWELL_N	50	54	5 A	DWELLING NUMBER (D=Residential dwelling, C=commercial, M=Manufactured housing)
IM_LIN_NUM	55	62	8 A	LINE NUMBER
IM_PROP_N1	63	65	5,00 P	House number 1
IM_PROP_N2	66	68	3 A	House number 2
IM_PROP_D1	69	70	2 A	Direction 1
IM_PROP_SA	71	86	16 A	Street name
IM_PROP_D2	87	88	2 A	Direction 2
IM_PROP_ZP	89	91	5,00 P	Zip code
IM_APPR_IN	92	95	4 A	Appraiser initials
IM_INSP_DT	96	103	8,00 S	Inspection date
IM_OI_ONLY	104	104	1 A	Other imp only
IM_REV_YR	105	108	4,00 S	Review year
IM_CLASS	109	112	4 A	Class

IM_USE_COD	113	116	4,00	S	Use code
IM_UNITS	117	117	1,00	S	Number of units
IM_MKT_GRD	118	121	4	A	Market grade
IM_YR_BLT	122	125	4,00	S	Year built
IM_EFF_YR	126	129	4,00	S	Effective year
IM_CONFORM	130	130	1	A	Conforming
IM_EST_VAL	131	135	9,00	P	Estimated value
IM_STORIES	136	137	2	A	Number of stories
IM_BEDROOM	138	139	2,00	S	Bedrooms
IM_BATHRM	140	143	4,02	S	Bathrooms
IM_FIREPLC	144	145	2,00	S	Fireplaces
IM_1ST_CLS	146	149	4	A	1st floor class
IM_1ST_SQF	150	153	7,00	P	1st floor square feet
IM_2ND_CLS	154	157	4	A	2nd floor class
IM_2ND_SQF	158	161	7,00	P	2nd floor square feet
IM_BAS_CLS	162	165	4	A	Basement total class
IM_BAS_SQF	166	169	7,00	P	Basement total square feet
IM_ATT_CLS	170	173	4	A	Attic total class
IM_ATT_SQF	174	177	7,00	P	Attic total square feet
IM_SIDING	178	181	4,00	S	Siding 1
IM_ROOFING	182	185	4,00	S	Roof cover 1
IM_TOT_SQF	186	189	7,00	P	TOTAL SQFT
IM_FUEL_GS	190	193	4,00	S	Gas
IM_FUEL_OI	194	197	4,00	S	Oil
IM_FUEL_EL	198	201	4,00	S	Electric
IM_FUEL_SL	202	205	4,00	S	Solid
IM_HEAT_1	206	209	4,00	S	Heating system 1
IM_HEAT_2	210	213	4,00	S	Heating system 2
IM_HEAT_3	214	217	4,00	S	Heating system 3
IM_BAS_CST	218	222	9,00	P	Main improvement base cost
IM_EXT_VAL	223	227	9,00	P	VALUE INCL
GARAGE/CARPORTS					
IM_PCT_CPT	228	229	2,02	S	Percent complete
IM_GAR1_CL	230	233	4	A	Gar/car1 class
IM_GAR1_TP	234	234	1,00	S	Gar/car1 type
IM_GAR1_SF	235	237	5,00	P	Gar/car1 area
IM_GAR2_CL	238	241	4	A	Gar/car2 class
IM_GAR2_TP	242	242	1,00	S	Gar/car2 type
IM_GAR2_SF	243	245	5,00	P	Gar/car2 area
IM_EXEMPT	246	246	1	A	Exempt improvement

IMPROVEMENT CATEGORY VALUES

PCICAT00 P RECORD FORMAT: ICATP00 RECORD LENGTH: 64					
FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION	
IC_PAR_14	1	14	14 A	PARCEL TYPE/NUM	
IC_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS	
IC_PAR_TYP	30	31	2 A	PARCEL TYPE	
IC_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER	
IC_PAR_STS	44	44	1 A	PARCEL STATUS	
IC_CAT_NUM	45	46	2,00 P	CATEGORY	
IC_SHT_NUM	47	48	3,00 P	RECORD#	
IC_REV_YR	49	51	4,00 P	REVIEW YEAR	
IC_QNTY	52	57	11,03 P	QUANTITY	
IC_UNIT	58	59	2 A	UNIT	
IC_VALUE	60	64	9,00 P	VALUE	

IMPROVEMENT IMAGE FILE

PCIMAGE0 P RECORD FORMAT: IMAGE00 RECORD LENGTH: 152					
FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION	
II_PAR_14	1	14	14 A	PARCEL TYPE/NUM	
II_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS	
II_PAR_TYP	30	31	2 A	PARCEL TYPE	
II_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER	
II_PAR_STS	44	44	1 A	PARCEL STATUS	
II_NUMBER	45	49	5 A	IMPROVEMENT	
II_REC_NUM	50	52	3,00 S	RECORD NUMBER	
II_IMAGE	53	152	100 A	IMAGE PATH/FILE	

LAND RECORDS

PCLAND00 P RECORD FORMAT: LANDP00 RECORD LENGTH: 91					
FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION	
LD_PAR_14	1	14	14 A	PARCEL TYPE/NUM	
LD_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS	
LD_PAR_TYP	30	31	2 A	PARCEL TYPE	
LD_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER	
LD_PAR_STS	44	44	1 A	PARCEL STATUS	
LD_CAT_NUM	45	46	2,00 S	CATEGORY	
LD_LOC_NUM	47	50	4 A	LOCATION	
LD_CLS_NUM	51	55	5 A	CLASS	
LD_TYP_NUM	56	60	5 A	TYPE	
LD_REC_NUM	61	62	3,00 P	RECORD#	
LD_QNTY	63	68	11,03 P	QUANTITY	
LD_UNIT	69	70	2 A	LAND UNIT	
LD_VALUE	71	75	9,00 P	VALUE	
LD_APPR_IN	76	79	4 A	APPRAISAL INIT	
LD_APPR_DT	80	87	8,00 S	APPRAISAL DATE	
LD_REV_YR	88	91	4,00 S	REVIEW YEAR	

LAND CHARACTERISTICS

PCLNDC00 P RECORD FORMAT: LNDPC00 RECORD LENGTH: 91

FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION
LC_PAR_14	1	14	14 A	PARCEL TYPE/NUM
LC_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS
LC_PAR_TYP	30	31	2 A	PARCEL TYPE
LC_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER
LC_PAR_STS	44	44	1 A	PARCEL STATUS
LC_NEIGH_T	45	45	1 A	NEIGHBORHOOD TYPE U=Urban S=Suburban R=Rural V=Recreational (Vacation)
LC_ZONING	46	50	5 A	ZONING
LC_TREND	51	51	1 A	LOT TREND S=Stable I=Improving D=Declining
LC_OFFSITE	52	52	1 A	OFFSITE
LC_PACCESS	53	53	1 A	PUBLIC ACCESS
LC_PRIVATE	54	54	1 A	PRIVATE
LC_ASPHALT	55	55	1 A	ASPHALT CONCRETE
LC_GRAVEL	56	56	1 A	GRAVEL DIRT
LC_SIDEWLK	57	57	1 A	SIDEWALKS
LC_CURBS	58	58	1 A	CURBS GUTTERS
LC_ALLEY	59	59	1 A	ALLEY
LC_TOPO	60	60	1 A	TOPOGRAPHY L=Low F=Flat/level I=Intermediate slope S=Steep slope
LC_WATER_F	61	62	1 A	WATERFRONT L=Lake R=River/creek A=Accretion B=Bluff land F=Flood plain S=Beach(sand?) G=Grade
LC_ELECT	63	63	1 A	ELECTRICITY
LC_GAS	64	64	1 A	GAS
LC_UNDER_G	65	65	1 A	UNDERGROUND ELEC/TEL
LC_CABLE	66	66	1 A	CABLE TV
LC_PUB_WTR	67	67	1 A	PUBLIC WATER
LC_PRI_WEL	68	68	1 A	PRIVATE WELL
LC_SEWER	69	69	1 A	PUBLIC SEWER

LC_SEPTIC	70	70	1	A	SEPTIC SYSTEM
LC_DIMEN_F	71	78	8,03	S	DIMENSION FF
LC_DIMEN_D	79	86	8,03	S	DIMENSION DEPTH
LC_LOCATE	87	87	1	A	LOCATION
LC_AMENIT	88	88	1	A	AMENITIES
LC_LANDSCP	89	89	1	A	LANDSCAPING
LC_VIEW	90	90	1	A	VIEW
LC_DETRIM	91	91	1	A	DETRIMENTS

OTHER IMPROVEMENTS

PCOTH100 P RECORD FORMAT: OTHER00 RECORD LENGTH: 84

FIELD NAME	START	END	LENGTH/TYP	DESCRIPTION
OI_PAR_14	1	14	14 A	PARCEL TYPE/NUM
OI_PAR_15	15	29	15 A	PARCEL TYPE/NUM/STS
OI_PAR_TYP	30	31	2 A	PARCEL TYPE
OI_PAR_NUM	32	43	12 A	PARCEL CORE NUMBER
OI_PAR_STS	44	44	1 A	PARCEL STATUS
OI_NUMBER	45	49	5 A	IMPROVEMENT NUMBER (R01, R02, etc...)
OI_DWELL_N	50	54	5 A	DWELLING NUMBER

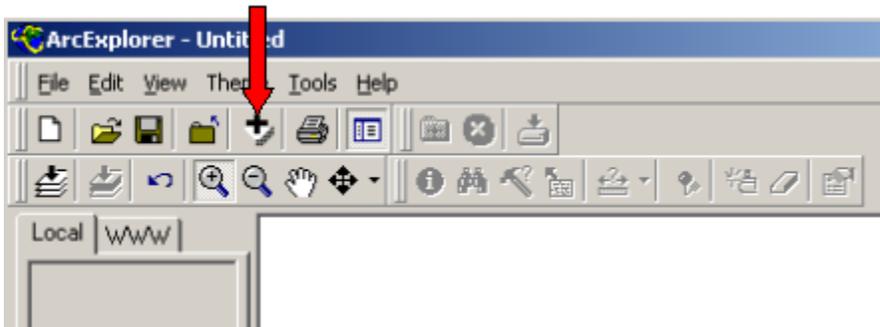
This is the improve sequence
Number: 01, 02, G01,G02, etc...)

OI_USE_COD	55	62	8 A	USE CODE
OI_CLASS	63	66	4 A	Class
OI_TOT_SQF	67	70	7,00 P	TOTAL Sq ft
OI_YR_BLT	71	74	4,00 S	Year built
OI_BAS_CST	75	79	9,00 P	BASE COST
OI_VALUE	80	84	9,00 P	EXTENDED VALUE

Section 2: Adding the Parcel Layer

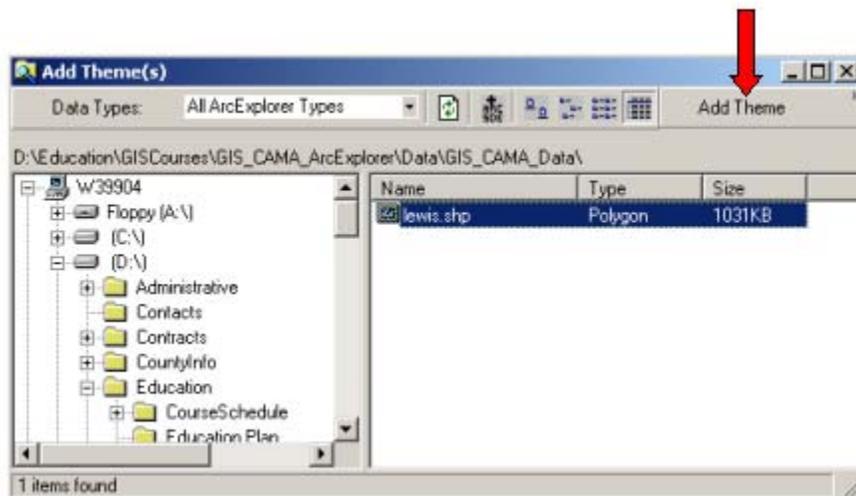
This section will teach you how to add the parcel layer with attached CAMA attributes that the mapper has made available to you on the server.

- First, open the ArcExplorer program by <double-clicking> the ArcExplorer icon on the desktop or by going to START | PROGRAMS | ESRI | ARCEXPLORER 2.0.
- <Click> the **Add Theme(s) to View** button.



This will bring up the Add Theme(s) window.

- <Browse> to the location of the parcel layer on the server and select the parcel layer shapefile. You may need to ask your mapper where it is saved.
- With the parcel layer selected, <select> the **Add Theme** button.



This added the parcel layer to the legend in ArcExplorer.

Section 3: Viewing Parcel Attributes

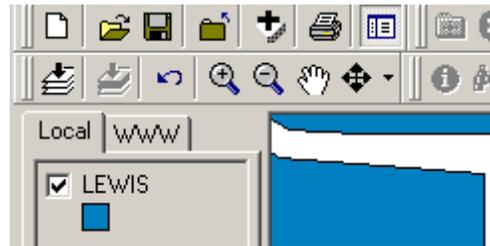
This section will demonstrate how to use the Identify tool to view parcel attributes.

- In the legend, ensure that your parcel layer is checked so that it can be viewed and that it is active.

You can make the parcel layer active by clicking on the parcel layer in the legend. The Identify button will not be active (available to use) if the parcel theme is not active. Notice how the Identify button is grayed out in the illustration of the inactive theme.



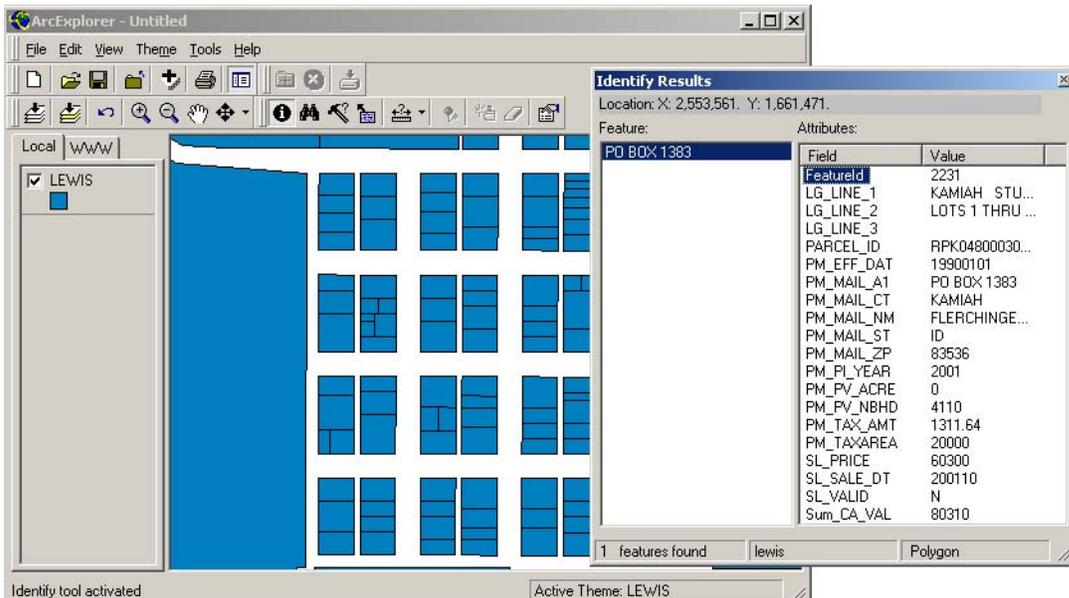
Inactive parcel theme



Active parcel theme

- <Select> the **Identify** button. 
- Now <zoom> into the area of the parcel you want information for and select the parcel by <clicking> on the parcel in the map view.

The Identify Results window will appear showing you the attributes for the parcel you selected. Note: Select the column heading named “field” if you want to view the attributes in alphabetical order.

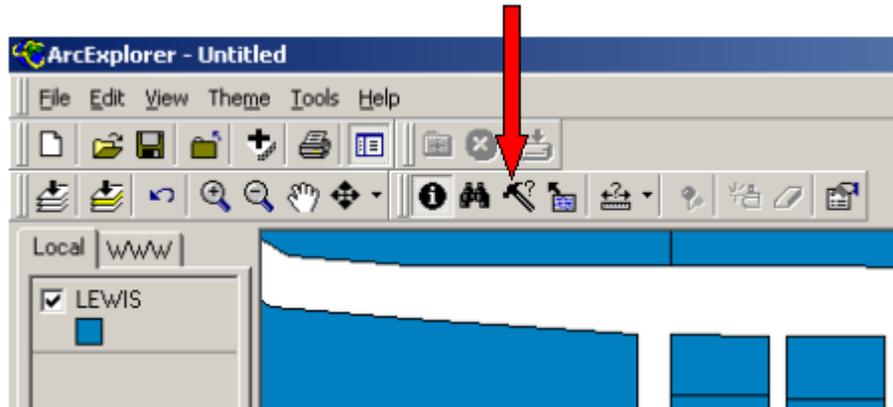


Section 4: Querying the Parcel Layer

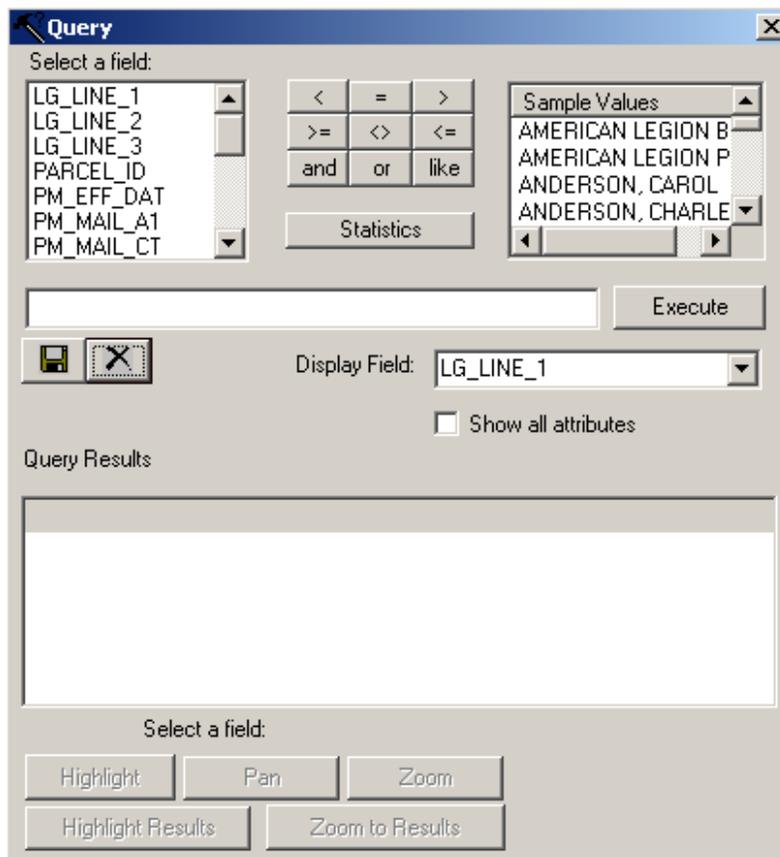
This section will take you through the steps of building a query.

Example 1: The following query example will locate the property owned by Carol Anderson.

- <Select the **Query Builder** button



This will open the Query Window



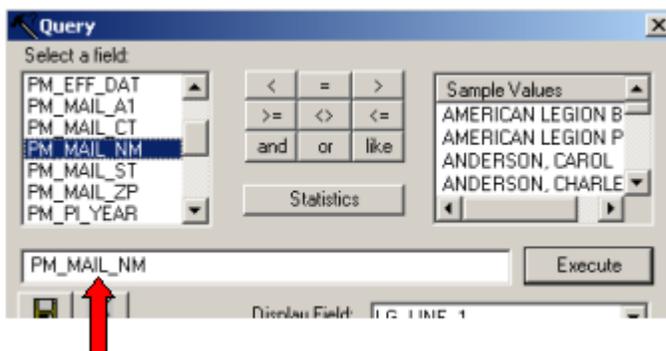
The query window will allow you to build a query expression. You choose a field, an operator and a value to complete a simple expression. For Example:

Field Operator Value
Owner Name = 'Anderson, Carol'

Let's try it in ArcExplorer!

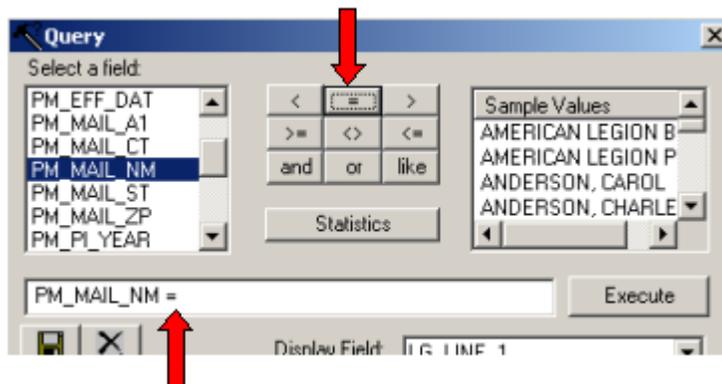
- In the Query window, <select> the field called PM_MAIL_NM. This field contains all the owners names.

You'll notice that it added the field in the query expression.



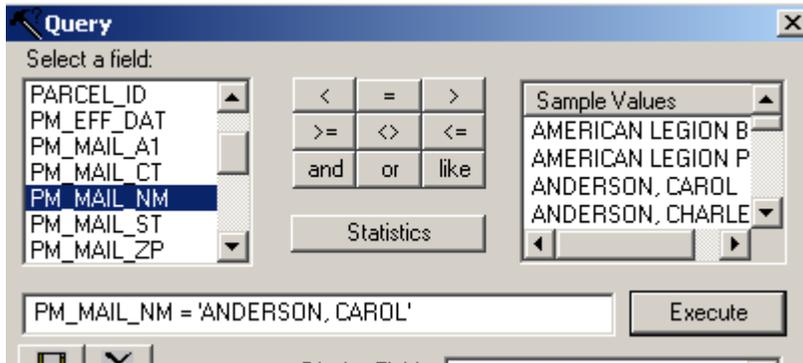
- Next, <select> the operator. We will use the = operator in this query.

You'll notice that it added the = to the query expression.



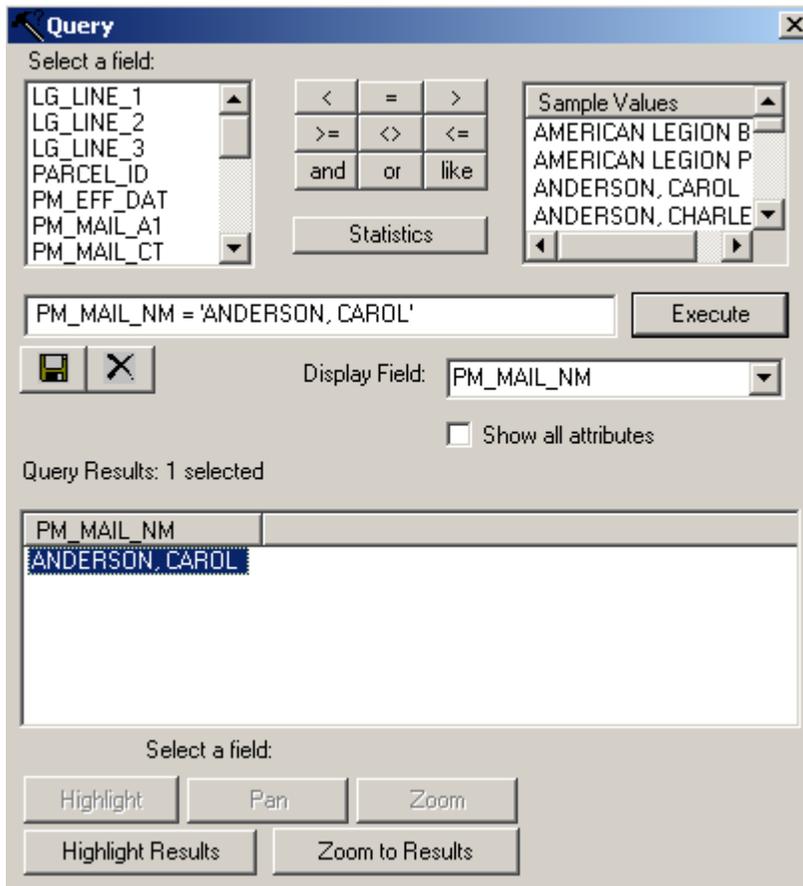
- To complete the statement, select the value. <Scroll down> through the sample values until you find ANDERSON, CAROL and <select> the name.

You'll notice that the statement is now complete.



- <Select> the **Execute** button.
- <choose> PM_MAIL_NM for the display field.

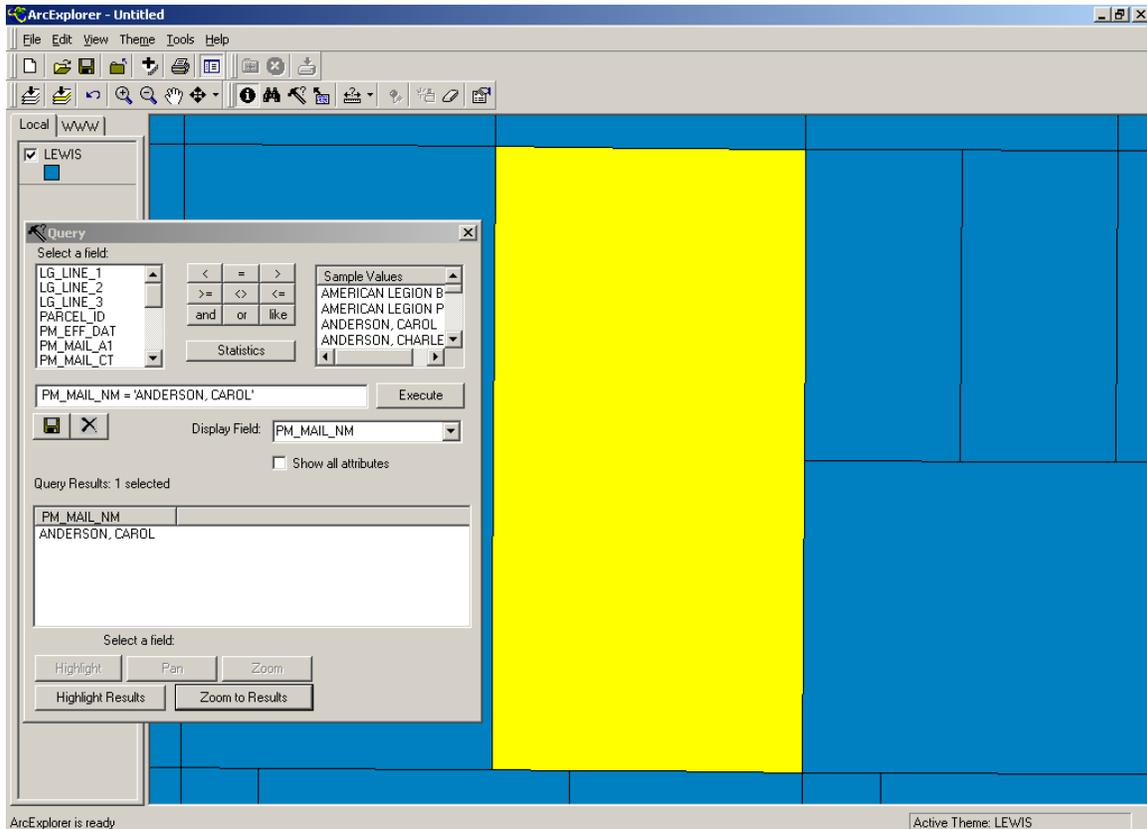
You'll notice it is displaying ANDERSON, CAROL in the Query Results and that 1 record is selected.



<Select> the **Zoom to Results** button.

<Select> the **Highlight Results** button.

You've now highlighted and located Carol Anderson's parcel in the county.



<Select> Carol Anderson's parcel with the **Identify** button to see how many acres she owns and what the value of the property is.

Note: You could have built the following query to find all Andersons and then scroll down in the query results to find Carol: PM_MAIL_NM like 'ANDERSON%'

Notice that % is the character used as a wildcard in ArcExplorer.

You would need to select Carol's name from the query results list and select the **Highlight** button and **Zoom** button to locate her parcel. Selecting the Highlight Results and Zoom to Results in this situation would highlight and zoom to all parcels owned by any Anderson in the county.

Example 2: The following query example will identify and locate all the properties that haven't been appraised in the last five years.

- <Select> the **Query** button
- Build the following query using what you learned in Example 1:

PM_PI_YEAR < 1999 and PM_PI_YEAR <> 0

You'll notice that this expression is two simple expressions combined with the AND operator. The first expression selects all parcels that were inspected before 1999 and the second expression ensures that we don't select null values.

- <Select> the **Execute** button

You'll notice that 89 parcels were selected.

- <Select> the **Highlight Results** and **Zoom to Results** buttons

This will highlight all the parcels that met the search criteria. The appraiser now has a map that he can use to plan a strategy to appraise the parcels and be in compliance.

Creating a report of the results

The attributes results can be saved to a text file. If you wanted a report that included more than just the parcel number, it may be easier for someone that knows ArcView to create a report of this information. ArcView contains a Crystal Reports extension for creating nice reports.

- To create the text file from the search results, <select> the **Parcel Number** field from the Display Field drop-down list.

- <select> the **Save** button  and <browse> to the location where you want to save the file.

- <open> the file in a program such as Microsoft Word or Excel to print the list of parcel numbers.

Example 3: The following query example will identify and locate all the properties that have a total value that ranges between \$50,000 and \$100,000.

<Select> the **Query** button

Build the following query using what you have learned:

Sum_CA_VAL <= 100000 and Sum_CA_VAL >= 50000

You'll notice that this expression is two simple expressions combined with the AND operator. The first expression selects all parcels that have a value of \$100,000 or less and the second expression selects all parcels that have a value of \$50,000 or more. The key here is using the AND operator instead of the OR operator.

Using the **AND** operator selects parcels that meet both criteria. In this case, only the parcel values ranging between \$50,000 and \$100,000 will be selected.

Using the **OR** operator selects parcels that meet one or both criteria. The result is all parcels being selected. An example of using the OR operator would be if you were trying to find land owned by the BLM or Forest Service.

PM_MAIL_NM = 'B L M' or PM_MAIL_NM = 'Forest Service'

<Select> the **Execute** button

You'll notice that 1168 parcels were selected.

<Select> the **Highlight Results** and **Zoom to Results** buttons

This will highlight all the parcels that met the search criteria.

Challenge:

Select all parcels with valid sales that occurred between the years 1999 and 2002 having a sales price ranging between \$100,000 and \$150,000.

Answer:

SL_VALID = 'Y' and SL_SALE_DT <= 200212 and SL_SALE_DT >= 199901 and SL_PRICE <= 150000 and SL_PRICE >= 100000

27 parcels selected

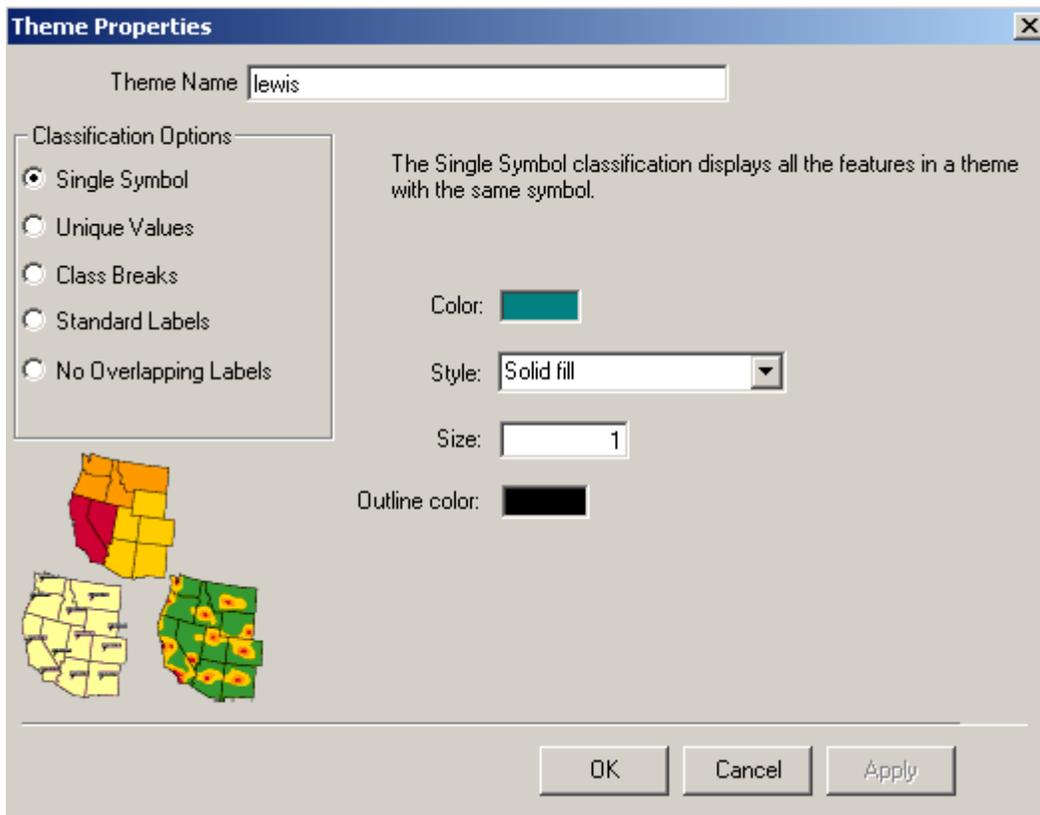
Section 5: Visualizing the CAMA Data

This section will give you an idea of a few ways that you can view your CAMA data spatially.

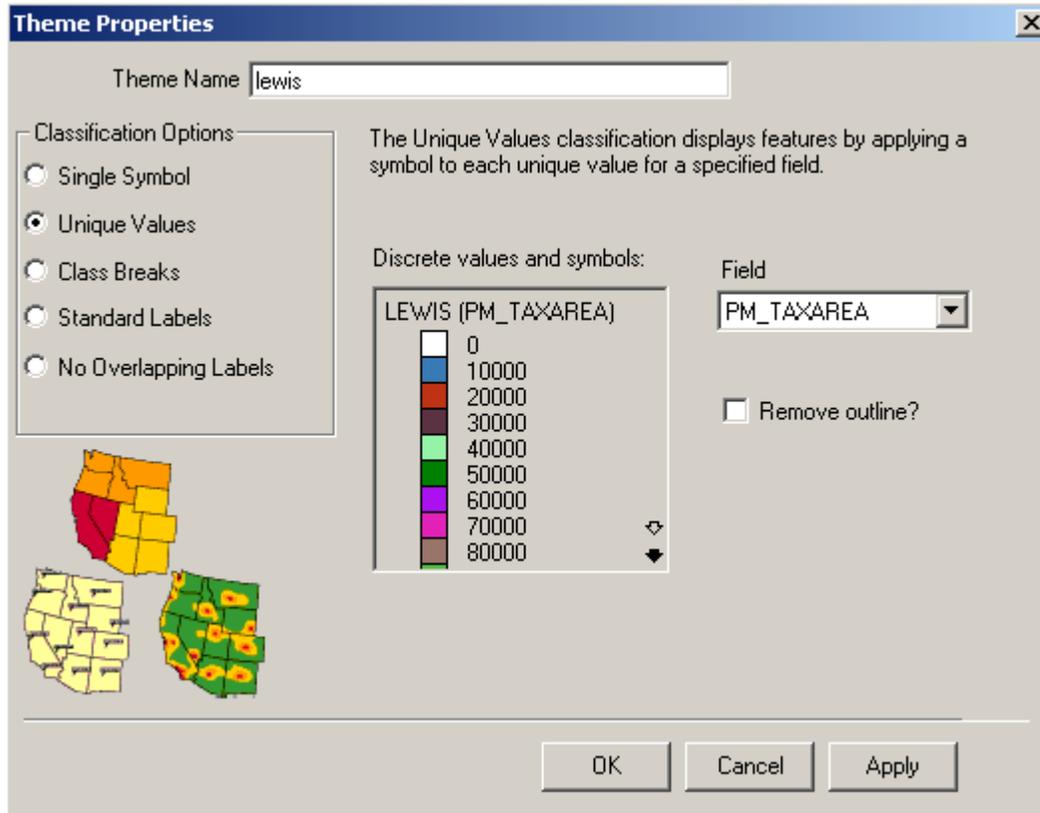
Example 1: QA/QC Tax Code Area Numbers

- <Double-click> on the parcel layer in the legend

This will open the Theme Properties window



- <Select> the radial button for **Unique Values** as your classification option.



- <Select> **PM_TAXAREA** from the Field drop-down menu. (This Field contains the tax code area number using Lewis County's format.)

- <Select> **Yes** to the window that appears saying there is more than 100 values.

Note: You can change any color by <double-clicking> on the colored squares in the list of discrete values. Yellow is the highlight color, so you may want to change any squares that are yellow.

- <Select> **OK**

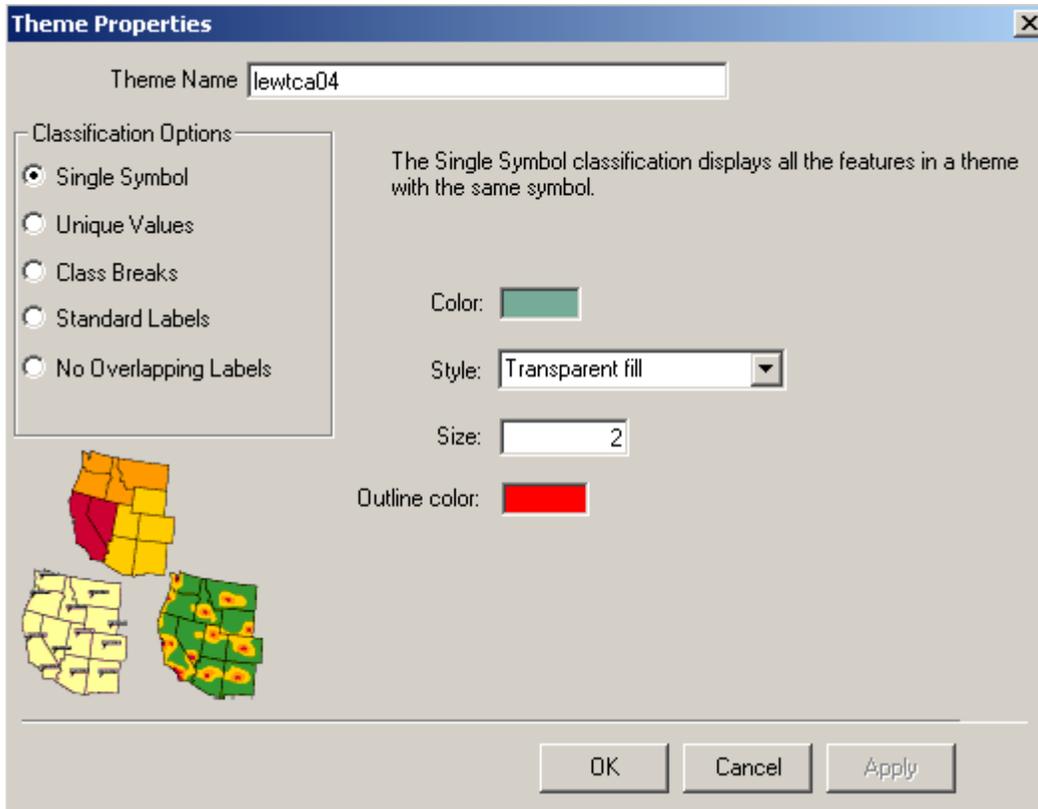
You'll notice that all the parcels are color-coded based upon the tax code area number.

Now we will add the **County's Tax Code Area (TCA) Shapefile**.

- <Select> the **Add Theme(s) to View** button and browse to the (TCA) shapefile and add this layer to the Map View making sure it comes in as the top layer.

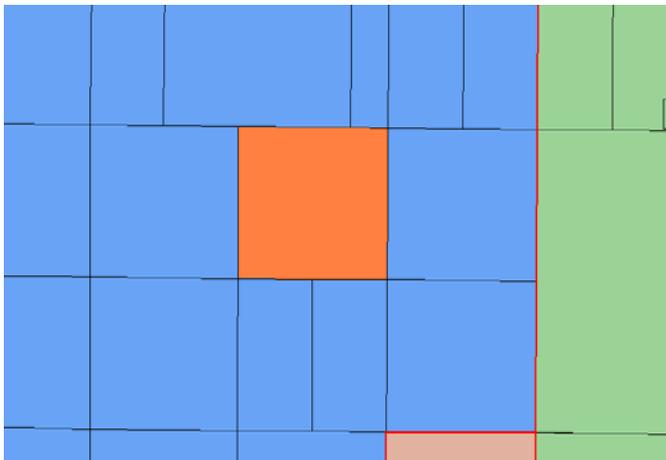
- <Double-click> on the **TCA** layer in the legend.

This will open the Theme Properties window.



- For Style, <select> **Transparent fill**
- For Size, <type> **2**
- For Outline Color, <select> **Red**
- <Select> **OK**

You should have a map that looks similar to the following with red outlines and colored parcels.



In the previous illustration, you'll notice the orange parcel surrounded by the blue parcels. All the parcels in a tax code area should be the same color. The orange parcel is coded wrong in the AS400 and should be corrected. This is a very simple way of detecting errors in your data.

Example 2: Creating a Neighborhood map

This is similar to what we did in example 1, except we are color-coding the neighborhood field instead of the TCA field. We could do this with zoning and physical inspection year as well.

- <Double-click> on the parcel layer in the legend

This will open the Theme Properties window

- <Select> the radial button for **Unique Values** as your classification option.
- <Select> **PM_PV_NBHD** from the Field drop-down menu. (This Field contains the neighborhood that the parcel is located in.
- <Select> **Yes** to the window that appears saying there is more than 100 values.
- <Select> **OK**

You'll notice that all the parcels are color-coded based upon the neighborhood it falls in.

