NEARC Northeast Arc Users Group

Spring Workshops

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Trials and Tribulations

Building Web Services

in Less Than Six Months

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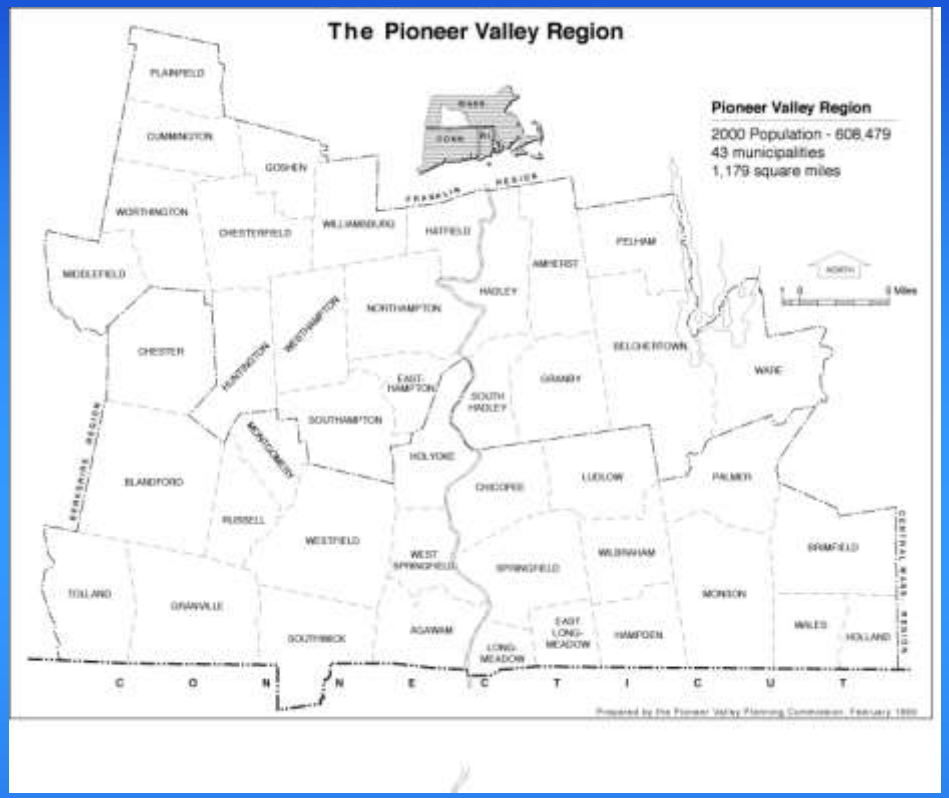
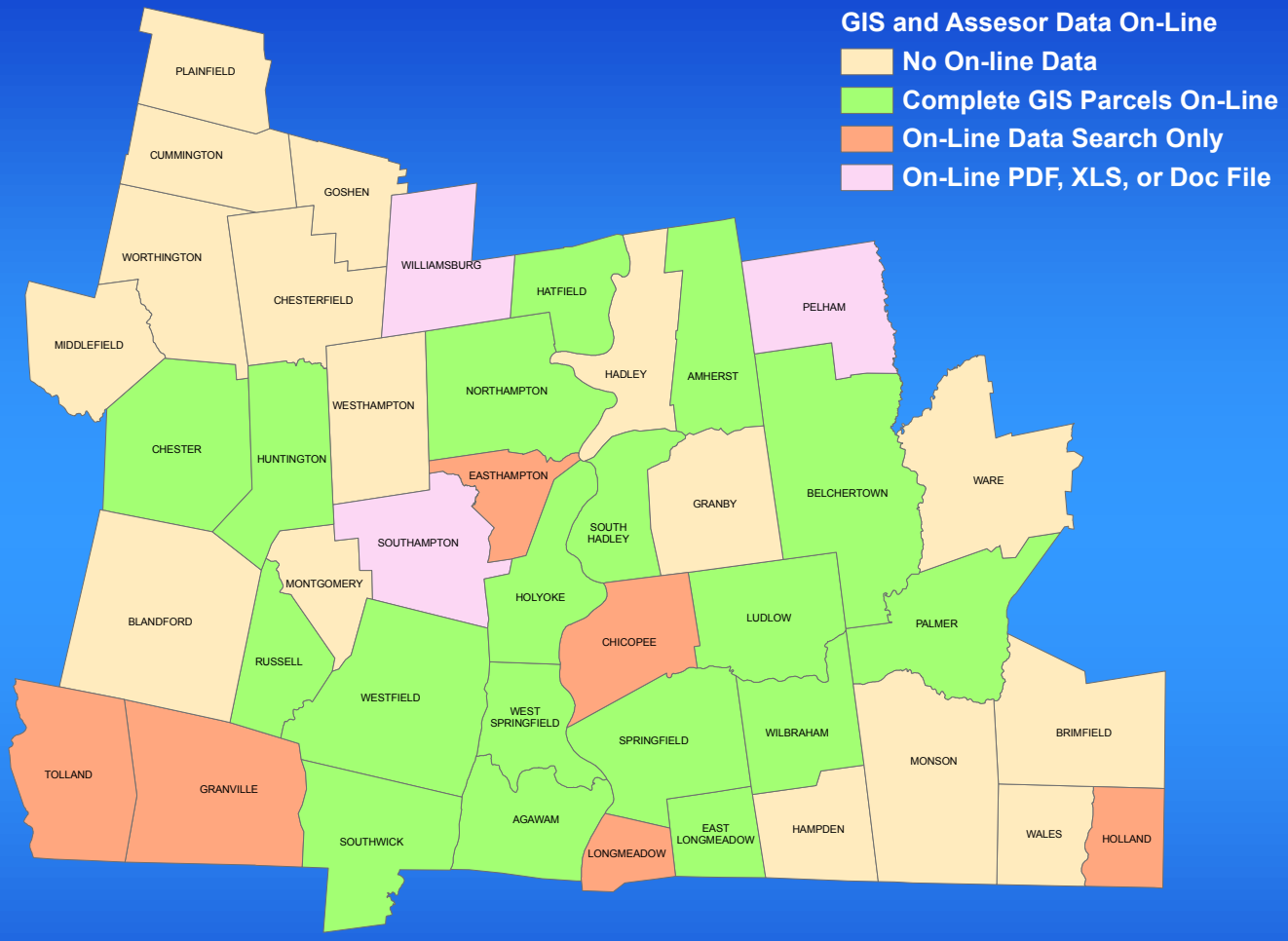
pvpc Pioneer Valley Planning Commission

Pioneer Valley Planning Commission



43 Communities

Population range: 426 to 152,000


GIS and Assesor Data On-Line
No On-line Data
Complete GIS Parcels On-Line
On-Line Data Search Only
On-Line PDF, XLS, or Doc File
PLAINFIELD
CUMMINGTON
GOSHEN
WORTHINGTON
CHESTERFIELD
WILLIAMSBURG
HATFIELD
PELHAM
MIDDLEFIELD
WESTHAMPTON
NORTHAMPTON
HADLEY
AMHERST
CHESTER
HUNTINGTON
EASTHAMPTON
GRANBY
BELCHERTOWN
WARE
SOUTHAMPTON
SOUTH HADLEY
MONTGOMERY
HOLYOKE
BLANDFORD
CHICOPEE
LUDLOW
PALMER
RUSSELL
WESTFIELD
WEST SPRINGFIELD
SPRINGFIELD
WILBRAHAM
BRIMFIELD
TOLLAND
GRANVILLE
AGAWAM
MONSON
SOUTHWICK
LONGMEADOW
EAST LONGMEADOW
HAMPDEN
WALES
HOLLAND

Pioneer Valley Planning Commission GIS capacity:

2 full time GIS staff

1 Graphic Artist for publishing and out-sourced web site

2 interns – 1 GIS and 1 Videographer

2 Seats of ArcInfo Desktop 9.3.1 with Spatial Analyst, 3D Analyst, Network Analyst

1 Seat of ArcView 9.3.1

2 Workstations XP Pro, 250GB, 3.0ghz dual processor, 1TB external drives for backup

3 Mac's for desktop publishing and video editing

ArcView workstation is an old warhorse, Win 2000 , 50GB 1.9ghz

2TB and 3TB network appliances for data storage.

100 baseT and 1000 baseT network with 1 T1 outside connection

Total of 35 years experience with ESRI products

Pioneer Valley Planning Commission Staff:

5 Support Staff

10 Transportation Planners with usually 4 interns

8 Land Use Planners with 2-3 interns

17 Community Development Planners

5 Administrators…

All wanting maps yesterday!

Problem:

Small communities in the region do not have the resources for GIS software, hardware and staff and probably never will.

Small communities in the region have mostly part-time volunteer staff and officials.

Many medium sized communities also lack resources due to the economy.

Officials in these communities are very interested in obtaining or providing the services that they see their larger neighbors have, like on-line assessor data and maps, emergency managers want up-to-date maps and planning boards, fire and police want to be able to see their town from various vantage points.

Concept:

PVPC is charged by legislature to provide technical and planning support to our communities.

PVPC would build GIS web applications using data from MassGIS and projects PVPC had completed for the towns including imagery.

The web applications would provide interactive Internet mapping to the community at low cost.

PVPC would administer the Web Site, hardware and data.

Requirements:

ArcServer Standard Workgroup & training for 2

Database system - SQL Server Express 2008

Server software – Microsoft Server 2008 64 bit, .Net Framework 3.0, 3.5 and 4. Visual Web Developer Studio

Server hardware – Inline ESRI Intel Core 2 3ghz, 1333 GHz front side bus, 4 GB ram, 2 1000 megabit Intel network cards, 3 x 1TB Sata Raid 5 hot-swap drives, server rack model.

Interactive Web Mapping – General Purpose Viewer, Applied Geographics, Inc. including 3 days of training.

A 1 GB to T1 router used for a firewall

A separate external IP address for your server.

Total Cost: $32,000

What has to be learned:

Windows Server 2008

ArcServer

SQL Server

Internet Information Services (IIS)

General Purpose Viewer which uses SQL Server for data and IIS scripts for the web applications.

Visual Web Developer is a very handy editor for web scripting and page layout. Easier than using Notepad or WordPad and it's free. But, it is another thing to learn.

And of course, ArcGIS with the Web services tool.

4 Communities were recruited to participate:

Chester, Population 1,300

Huntington, 2,100

South Hadley, 17,200

Ludlow, 21,000

The smaller two are rural and PVPC had just completed creating GIS parcels for them. The large communities had active contracts to create parcel data.

South Hadley Web Site:

http://66.152.242.251/SouthHadley/ParcelSearch.aspx

Wrap Up:

It can be done.

It is a lot of new things to learn so don't be afraid to ask for help.

In an amazingly short period of time, it will suddenly make sense

Make a simple flow chart of the steps and then follow it.

Backup, Backup, Backup