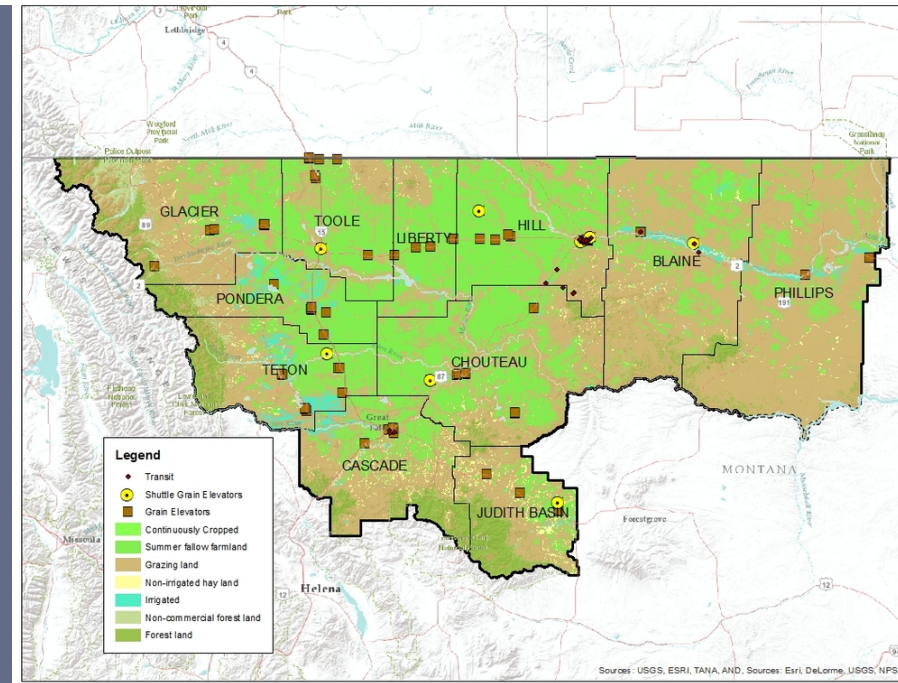


THE UTILITY OF MAPPING

Vibrant Futures: Webinar # 2

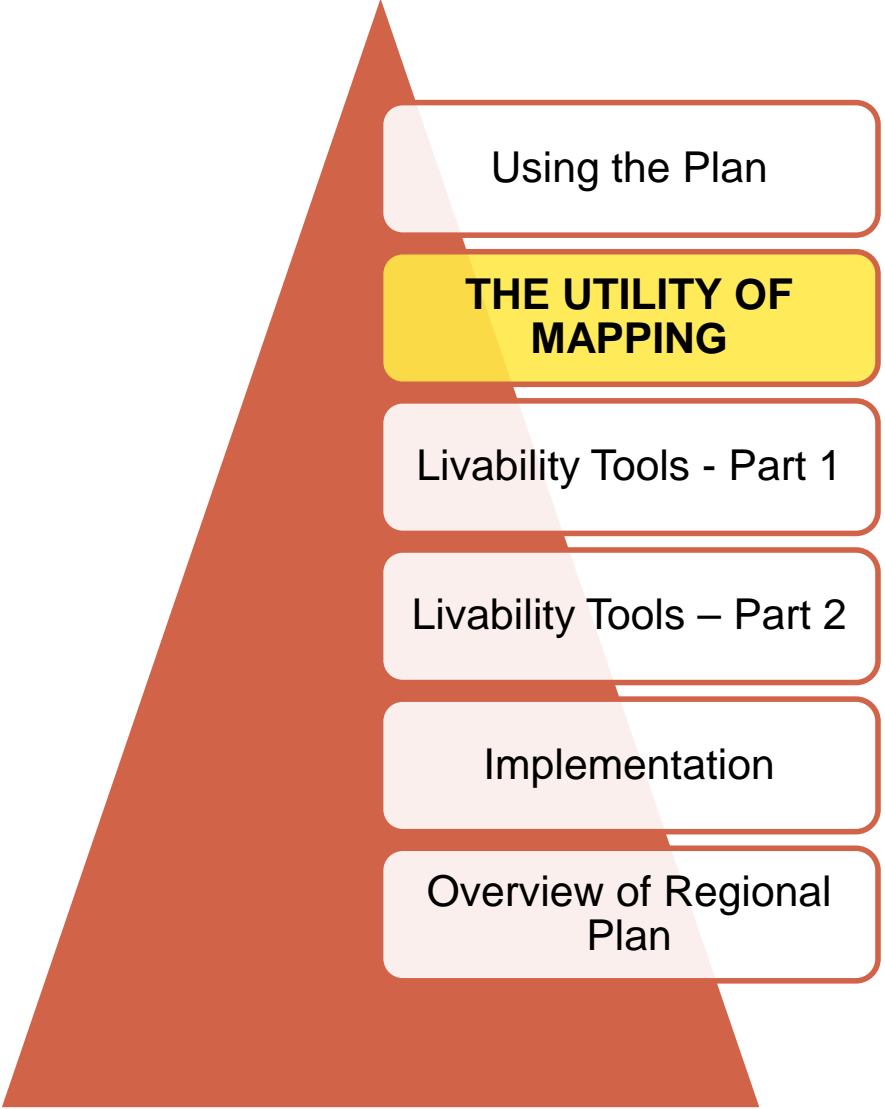


Vibrant Futures

Mission:

To enable the communities of Northcentral Montana to complete a region-wide visioning, planning, capacity building, and information exchange system that will help coordinate and move forward existing local plans to create a comprehensive response to high priority needs and opportunities for a more economically and environmentally sustainable development.





Using the Plan

**THE UTILITY OF
MAPPING**

Livability Tools - Part 1

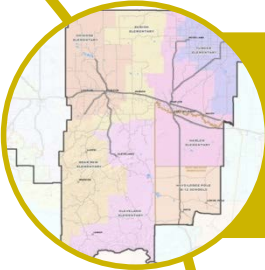
Livability Tools – Part 2

Implementation

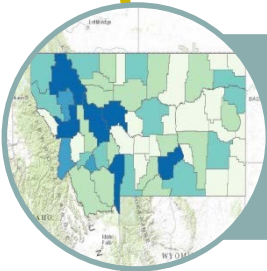
Overview of Regional
Plan

- Welcome
- Second of Six Webinars
- Webinars will be on-line

Learning Objectives



1. Learn how to download county level maps as PDF files from the Vibrant Futures web site and state web site.



2. Learn how to use interactive web maps with the basic ArcGIS viewer.



3. Learn the utility of maps for planning, business plans and grant writing.

Poll – Use of Maps



PART 1: COUNTY MAPS

Overview - <http://vibrantfuturesmt.org>



Ready made
maps



County Level
only



PDF Files



Most common for
Growth Policies

Demonstration



Poll



PART II: INTERACTIVE MAPS

Acknowledgements

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Poll



Map Data and Sources

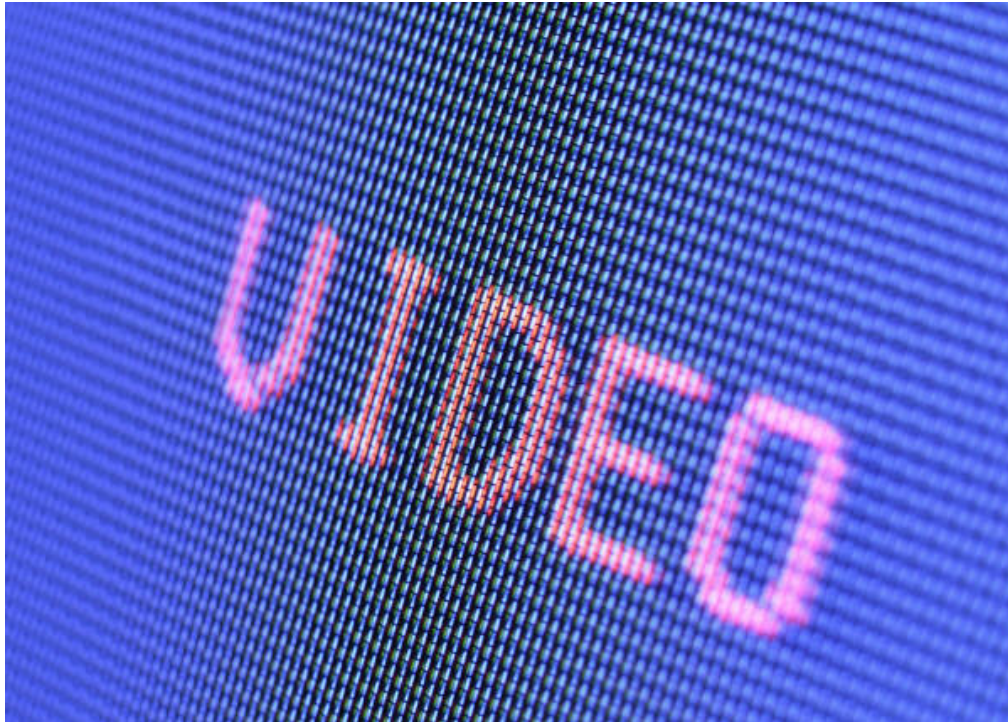
- Handout – Vibrant Futures Map sources
- List of attributes in township map layer
- ArcGIS Online
- Federal Sources
- State Sources



Interactive Montana Web Maps

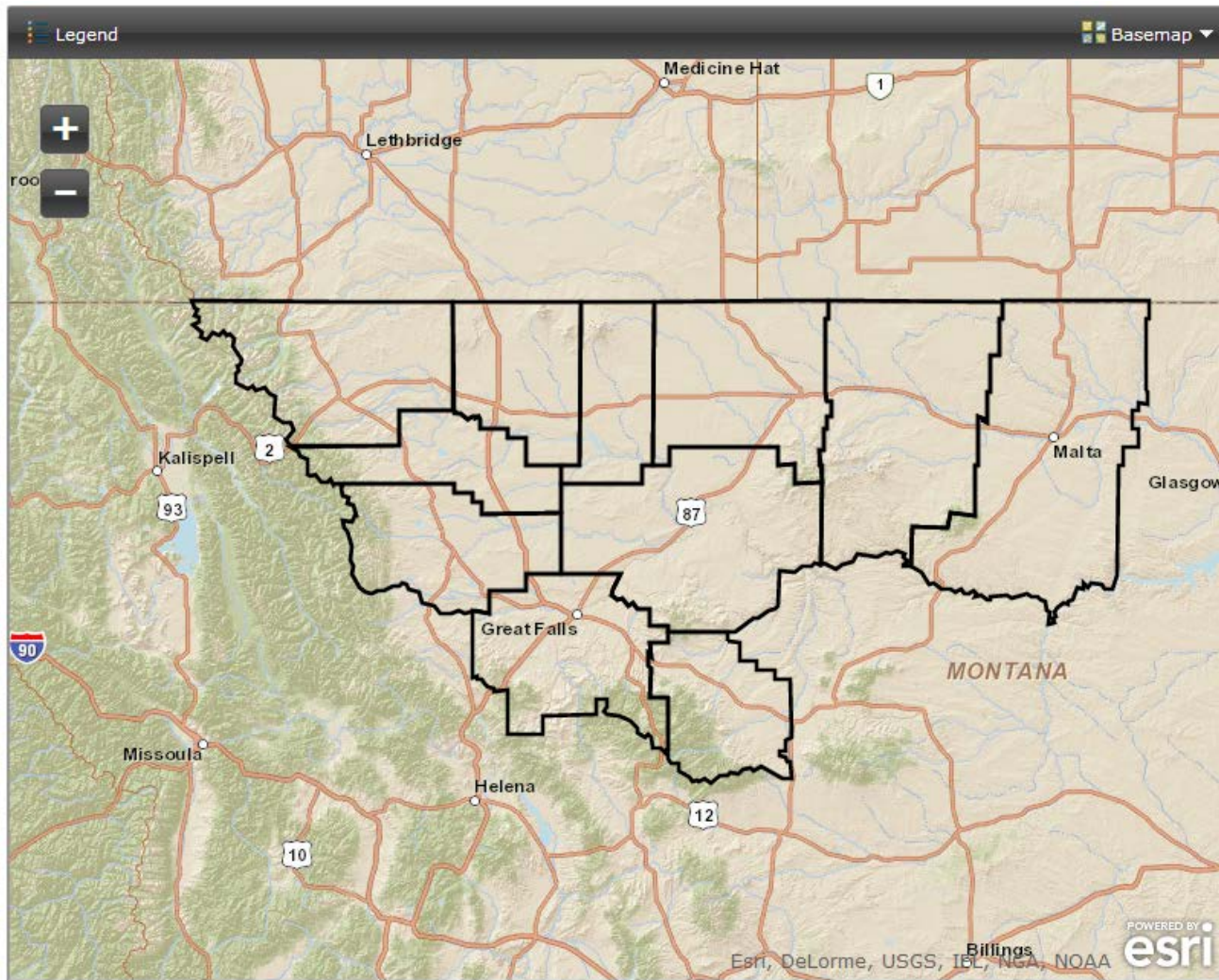
- Montana GIS Clearinghouse (Montana State Library)
 - <http://nris.mt.gov/gis/> (Clearinghouse Home Page)
 - http://apps.msl.mt.gov/Geographic_Information/Data/DataList/
- Montana Dept of Commerce (CEIC)
 - <http://ceic.mt.gov/Maps/InteractiveMapsIndex.aspx>
- Montana Site Selector
 - <http://www.montanasiteselector.com/>
- Montana Fish, Wildlife and Parks
 - <http://fwp.mt.gov/doingBusiness/reference/maps/> (All MDFWP maps)
 - <http://fwp.mt.gov/gis/maps/caps/> (CAPS – Terrestrial and Aquatic Web Maps)
- Montana Traveler Information Map
 - <http://roadreport.mdt.mt.gov/map/>
- Montana Broadband Internet Map
 - <http://mtbroadband.org/interactive-broadband-map/>
- Montana Dept of Environmental Quality
 - <http://svc.mt.gov/deq/wmadst>

What is ArcGIS.com?



Let's Look at the Dynamic Maps

<http://mapcoop.com/vf-healthy-healthy-webmaps>



[View Larger Map](#)

Overview

- Simple, no experience necessary
- Use on all computing platforms with web browser or apps
- Free with optional organizational subscription
- Choose different world class base maps
- Region wide data but can zoom in to your back yard
- Query map information
- Print map as a PDF
- Can turn layers on & off (optional)
- Data analysis

Capabilities of ArcGIS Web Map Clients

9:13:51 PM 8/22/2013

Capabilities	ArcGIS.com map viewer	Operations Dashboard	Collector	ArcGIS Explorer Desktop	ArcGIS for Desktop 10.1	ArcGIS for Android, iOS, and Windows Phone
Viewing layers						
ArcGIS Server tiled map services	✓	✓	✓	✓	✓	✓
ArcGIS Server dynamic map services	✓	✓	✓	✓	✓	✓
ArcGIS feature services	✓	✓	✓		✓	✓
ArcGIS image services	✓	✓	✓	✓	✓	✓
Hosted feature services	✓	✓	✓		✓	✓
Hosted tiled map services	✓	✓	✓	✓	✓	✓
Secure ArcGIS Server services	✓	✓	✓	✓	✓	✓
OpenStreetMap	✓	✓	✓	✓	✓	✓
OGC WMS	✓	✓	✓	✓	✓	✓
OGC WMTS	✓					
Tile layers	✓					
GeoRSS	✓					
Shapefiles	✓	✓	✓	✓	✓	✓
CSV	✓	✓	✓	✓	✓	✓

Voice of Paul Wick, Teton County Planner and Weed Coordinator

Welcome to Teton County



... where dinosaurs roamed

Teton County Courthouse
P.O. Box 610
Choteau, MT 59422
www.tetoncount.org
406-466-2151
TTY or TTD 406-466-3976

Teton County History * Contact Information

- *Ambulance
- *Recorder & Elections
- *Clerk of District Court
- *Conservation District
- *County Attorney
- *County Commissioners
- *Department of Revenue
- *DES/Fire Chief
- *Extension Office
- *GIS Data
- *Health Department
- *Hospital/Nursing Home
- *Justice of the Peace
- *Nursing Home
- *Planner
- *Road Department
- *Sanitarian
- *Sheriff
- *Superintendent of Schools
- *Treasurer
- *Weed Department
- *Youth Court

Teton County Planning Board

Paul Wick
PO Box 610
Choteau, MT 59422
Phone: 406-466-2155
TTD or TTY: 406-466-3976
noxweed@3rivers.net

Responsibilities include development and administration of Teton County Development Plan, administration of Teton County's Subdivision Regulations, enforcement of Floodplain Regulations, and overall land use management for the County. Our responsibilities also include the review of certificates of survey prior to filing with the County Clerk and Recorder for clerical errors and omissions and to insure exempt divisions of land are in compliance with the provisions outlined in the Montana Subdivision and Platting Act.

[Draft Development Permit Regulations Overview](#)
[Draft Development Permit Regulations](#)

To review the entire Teton County Growth Policy please click on the following links and review all four documents (Adobe Reader required).

[Growth Policy Plan](#)
[Profile Part 1](#)
[Profile Part 2](#)
[Profile Part 3](#)

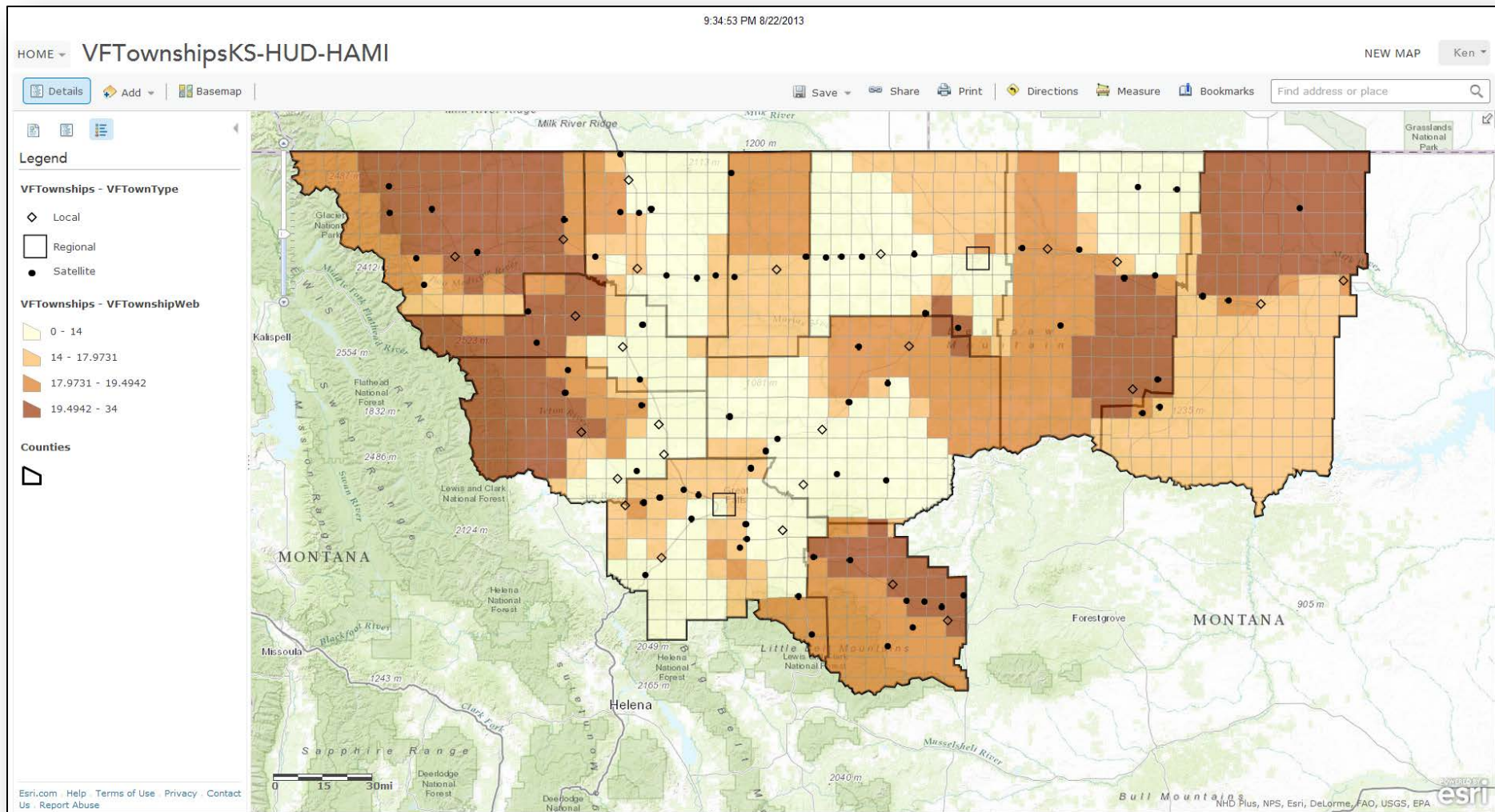
Teton County is not zoned but has adopted a development system that requires permits be issued for any commercial or industrial uses outside the incorporated communities of Choteau, Dutton and Fairfield.

Teton County Planning Board Members:

Lillian Alfson - Chairman - City of Fairfield
Bonnie Cray
Leona Huidokoper
Vicki Baker - Conservation District Representative
Craig Tucker
Dave McDunn-City of Dutton
Jodi Rogers-City of Choteau
Tom Maltby
Dan Robertson
Mike Munoz USFS representative, non-voting member



Arcgis.com Map Viewer Demonstration



PART III: THE UTILITY OF MAPS

Case Study #1- Health Services and Aging Population

Where are the aging populations in the region over 65 and over 70?

How does that compare to proximity to hospitals and the capacity of those hospitals?

Similar comparison for assisted living facilities?

Case Study # 2 – Business Broadband Infrastructure, Work Force and Telemedicine Potential

How available is broadband internet in the region?

Where are the areas with higher speed broadband suitable for business or telemedicine applications?

How do these areas compare to availability of health services and health workers?

Voice of Sheila Rice

Executive Director of NeighborWorks Montana

NeighborWorks® Montana

15th Anniversary



Over the past 15 years, NWMT has made
3,957 loans worth **\$48 million**, leveraging
\$355 million in first mortgages.

IN 10 YEARS OF HOMEOWNERSHIP



THE BUYERS using these loans will gain **\$150 million** in equity



THE LENDERS

making the first mortgage will
earn **\$140 million** in interest

THE REAL ESTATE AGENTS



have been paid **\$16 million** in commissions



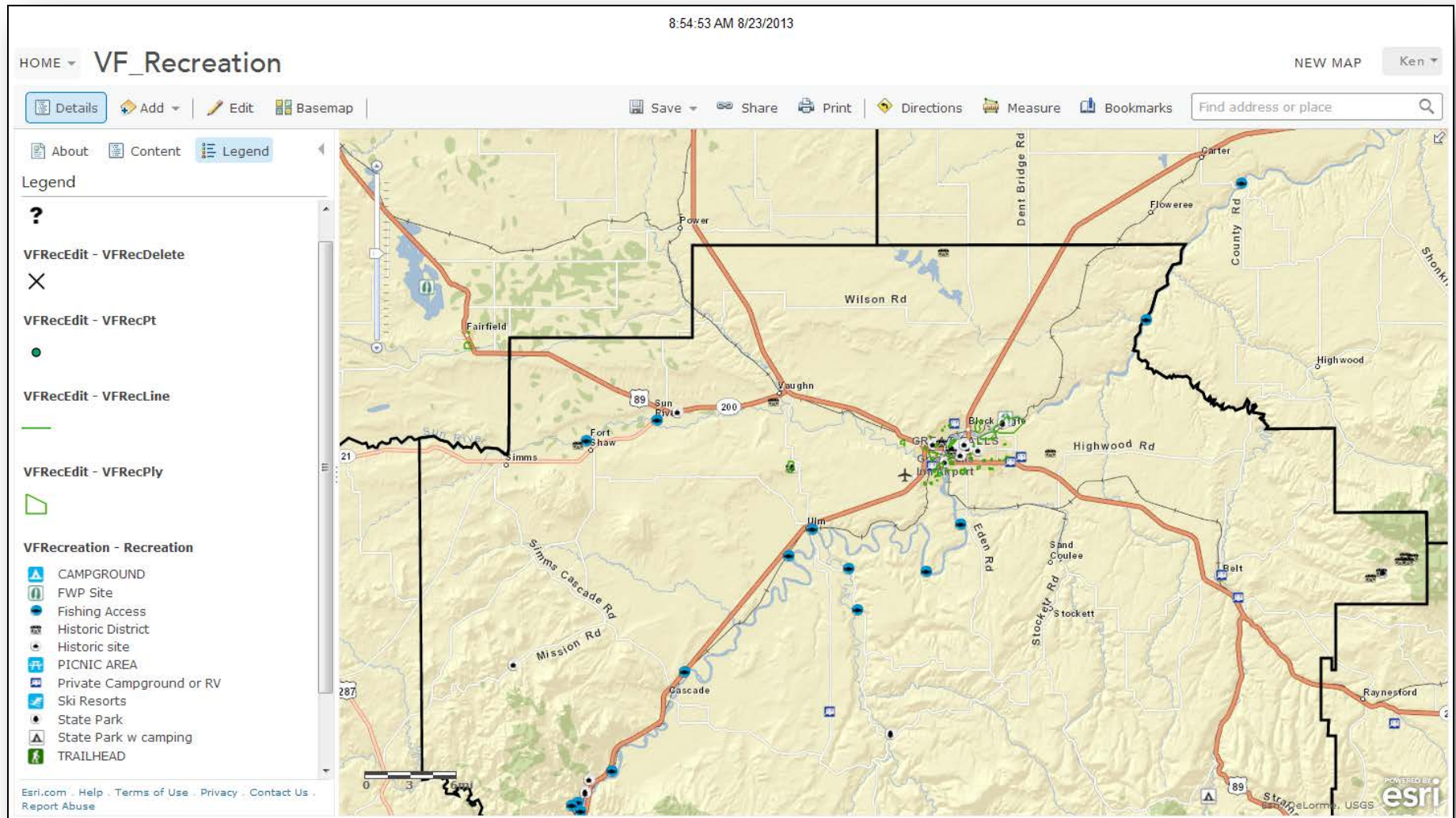
Case Study #3 – Weatherization Grants for Low Income Residents

- A goal is to prioritize housing energy conservation grants, technical support and education in areas in the region with the most need for energy savings.
- Where are the largest proportion of low income families and households in the region based on HUD criteria for median household income levels?
- How do energy expenditures compare to age of housing in the region?
- Where are the homes older than 1970 that are the most likely candidates for weatherization improvements?

PART IV: COMMUNITY MAPS

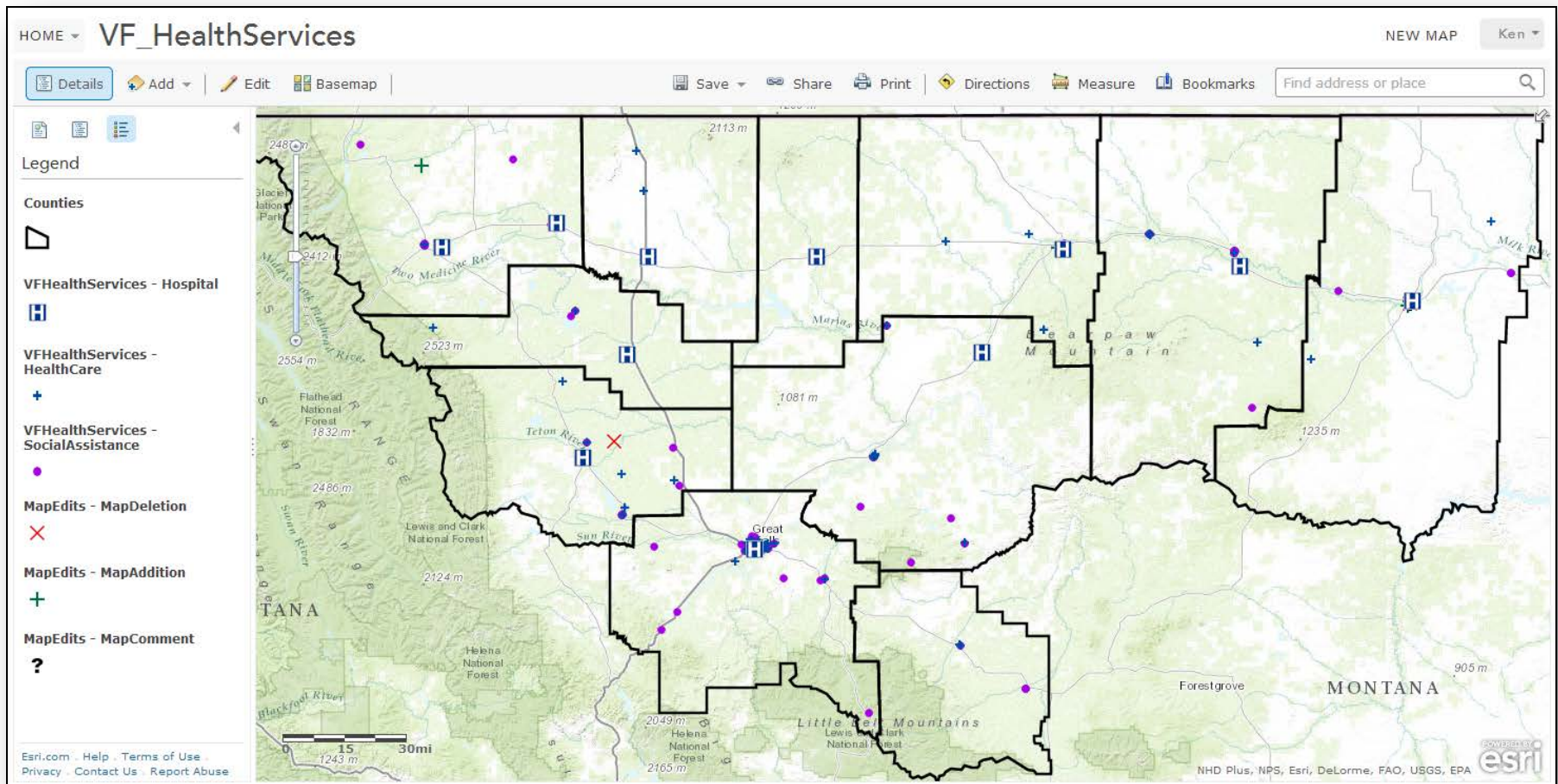
Crowdsourcing and vetting map content in rural communities

Healthy Lifestyle – Recreation & Fitness



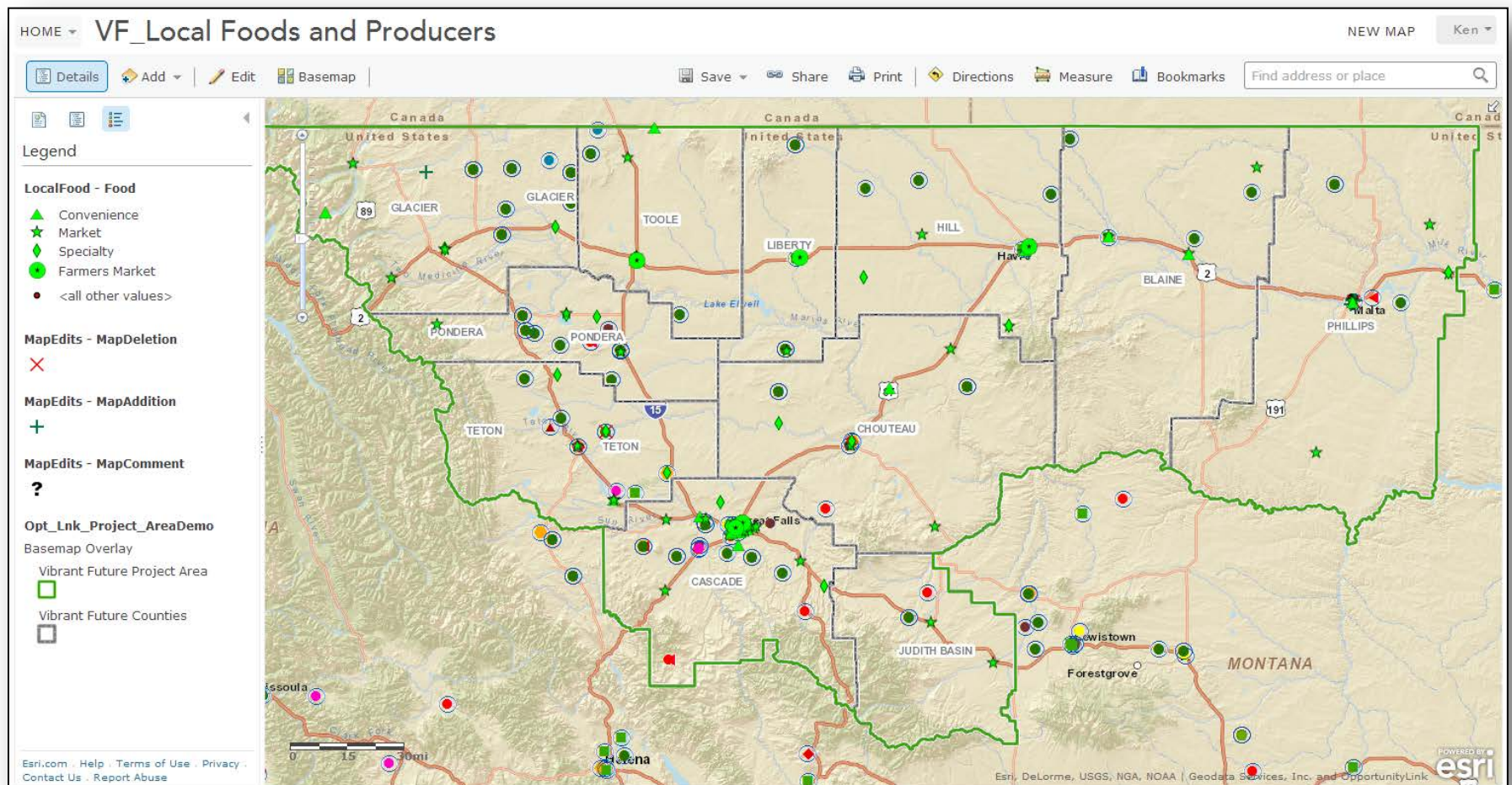
Health Services – Medical & Social

- Improving and validating medical and social services



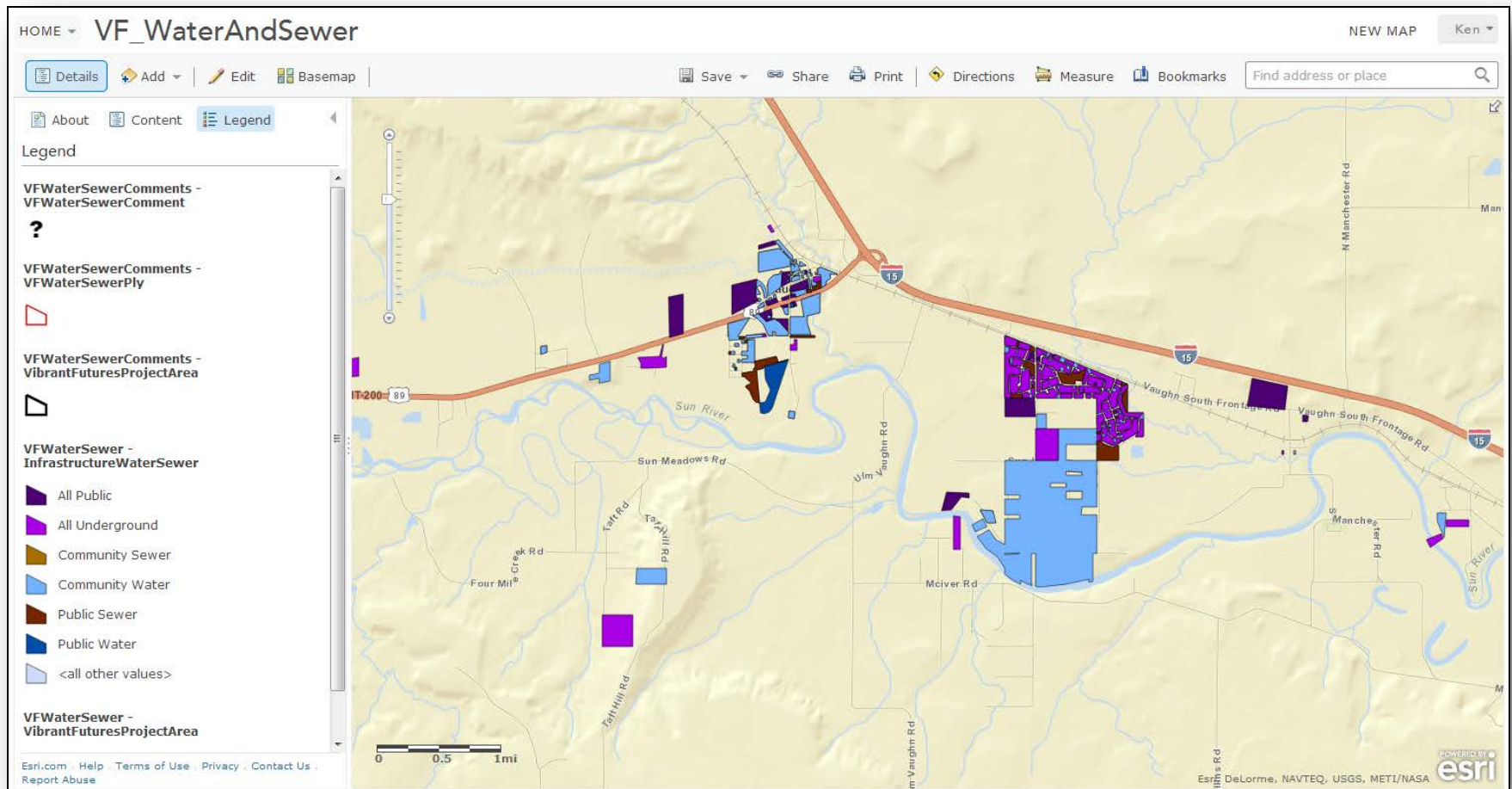
Local Food

- Improving and validating local producers and consumers and value added businesses



Water and Sewer Infrastructure

- Improving and validating cadastral water and sewer parcel data from Montana Dept. of Revenue



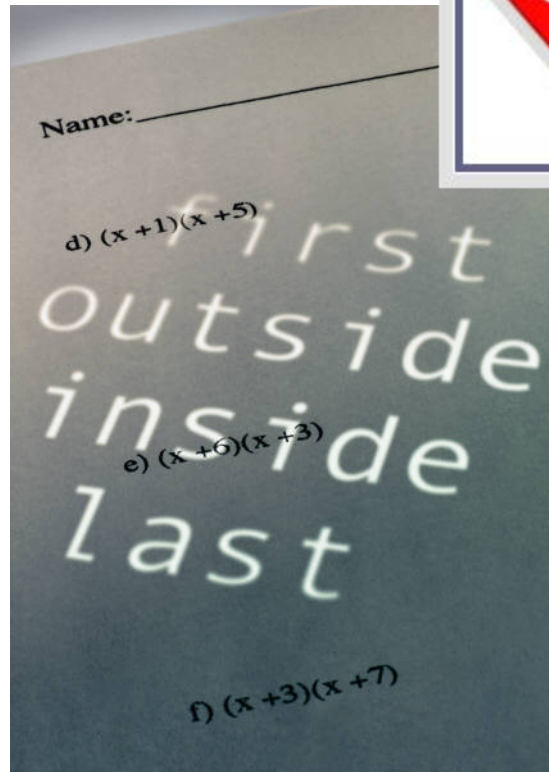
PART IV: WRAP-UP

Resources

- Online Web Training & Assistance
 - Vibrant Futures Training materials
 - <http://vibrantfuturesmt.org>
 - Esri Resource Center Help and Training for ArcGIS.com
 - <http://resources.arcgis.com/en/help/arcgisonline/index.html#//010q00000003000000>
 - CEIC Training
 - <http://ceic.mt.gov/Maps/TrainingArcGISonline.aspx>
 - Geodata Services, Inc. Map Coop
 - <http://www.mapcoop.com>
- Opportunity Link future trainings

Evaluation

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- Next Webinar – Livability Principles, Part
 - (Tues, Sept. 24, 10:00am)
- Reminder – Webinar will be on-line
- Thanks for participating