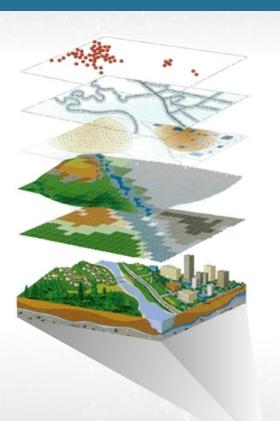
## CORE ELEMENTS of a GIS LEADERSHIP MINDSET



Slides for the Closing Presentation

### GIS LEADERSHIP ACADEMY URBAN AND REGIONAL INFORMATION SYSTEMS ASSOCIATION

DR. BARRY WELLAR. C.M., GISP

PAST PRESIDENT, URISA (1978)
PROFESSOR EMERITUS, UNIVERSITY OF OTTAWA
PRESIDENT, INFORMATION RESERARCH BOARD

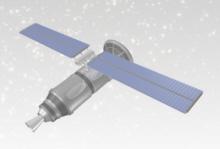
wellar.barry@gmail.com

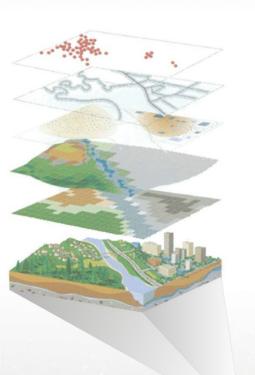
http://wellar.ca/informationresearch/



TORONTO, ONTARIO August 23, 2019

### **CORE ELEMENTS OF GIS LEADERSHIP MINDSET**

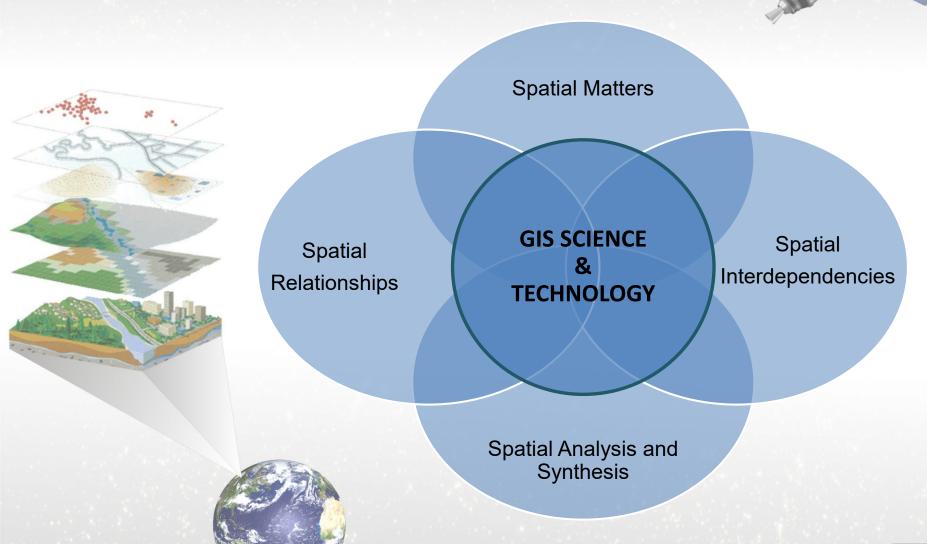




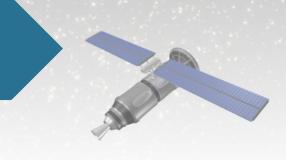
# A SAMPLER OF THINGS TO BEAR IN MIND WHEN DEVELOPING A SET OF BELIEFS TO GUIDE YOUR ROLE AS A GIS LEADER

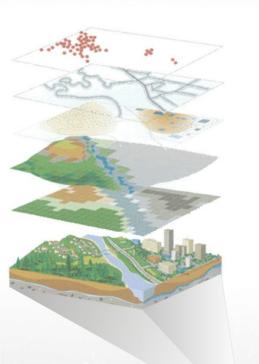


### **MAPROSCOPIC PERSPECTIVE**



## MAPROSCOPIC PERSPECTIVE: OPEN TO ALL NON-TRIVIAL SPATIAL MATTERS, ESPECIALLY ATTENTION GRABBERS

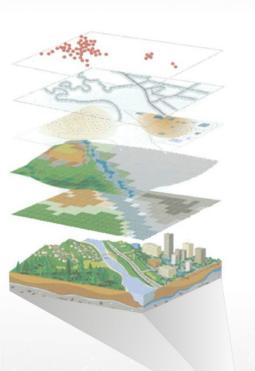




Automated Vehicle Trips
Avalanches
Bike Path Traffic
Doomsday Air Pollution
Doomsday Land Destruction
Doomsday Water Scenarios
Fish Stock Depletion
Fish Stock Regeneration
Floodplains

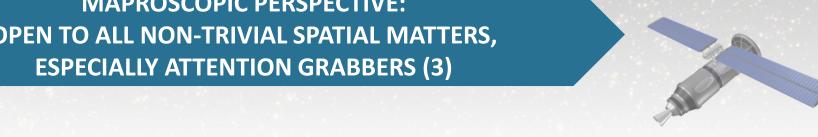
### **MAPROSCOPIC PERSPECTIVE:** OPEN TO ALL NON-TRIVIAL SPATIAL MATTERS, **ESPECIALLY ATTENTION GRABBERS (2)**

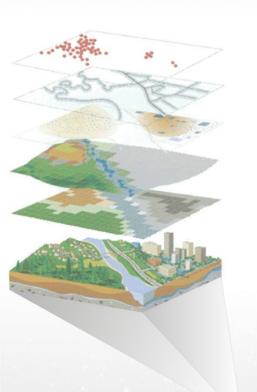




**Floods Greenspace Gain Greenspace Loss Hurricane Events/Impacts** Landslides Land Use Re-Zonings **Natural Resource Stewardship Property Tax Rates and Arrears Road Intersection Performance** 

### **MAPROSCOPIC PERSPECTIVE:** OPEN TO ALL NON-TRIVIAL SPATIAL MATTERS,





**Sensitive Lands Loss** 

**Sidewalk Winter Maintenance** 

**Tornado Patterns** 

**Traffic Congestion** 

**Traffic Enforcement Citations** 

**Vehicle Collisions** 

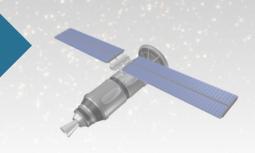
**Voter Turnout** 

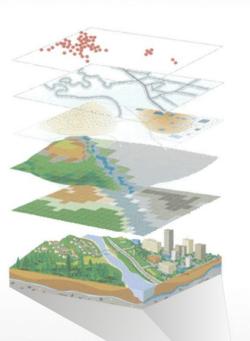
Walkability

**Water Resource Stewardship** 

Wildfires

## PACE SETTER PERSONA: ALL SIGNS POINT TO YOU AS "THE GURU" OF GIS OPPORTUNITIES

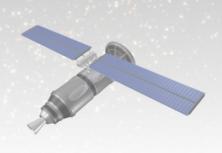


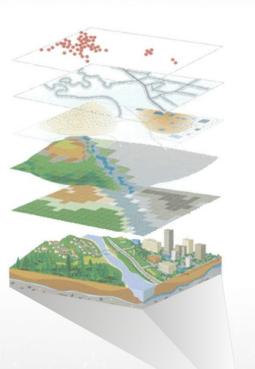


POLICY SUPPORT
PROGRAM SUPPORT
PLANNING SUPPORT
OPERATIONS SUPPORT
LOGISTICS SUPPORT
MARKETING SUPPORT
ANALYTICS SUPPORT
MEDIA COMMUNICATIONS
CITIZEN ACCESS TO PUBLIC RECORDS



### GIS "SEED CATALYST" ENTREPRENEUR



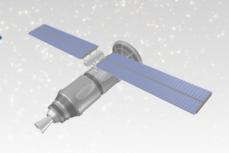


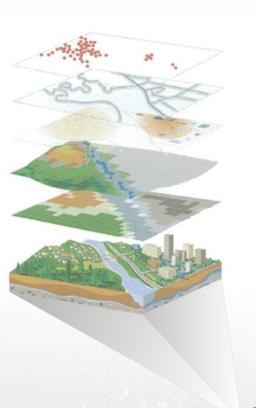
#### **GIS-BASED PRODUCTIONS**

-- SLIDES, IMAGES, GRAPHICS, PHOTOS, VIDEOS -AS IMAGINATION GERMINATORS



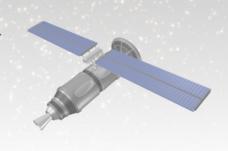
### "PRIME THE PUMP" GIS AGENT

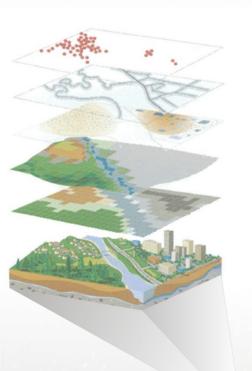




### PURPOSING DIRECTIVE MESSAGES THAT SERVE AND PROMOTE THE USE OF GIS

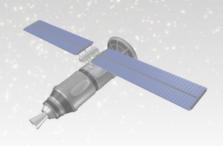
### GIS "PRIME THE PUMP" EXAMPLE

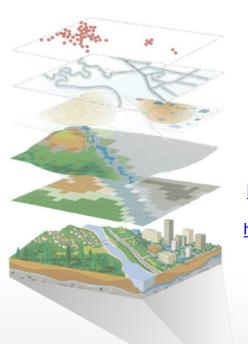




SUGGEST SPECIFIC CONFERENCES TO PEOPLE
WHO YOU WANT TO THINK ABOUT GIS PRODUCTS,
SERVICES, APPLICATIONS, FUNDING

### WHOLE RESEARCH APPROACH





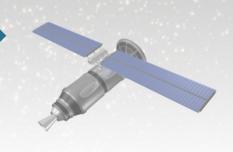
## CURIOSITY-DRIVEN RESEARCH METHODOLOGY + CLIENT-DRIVEN RESEARCH DIRECTIVES

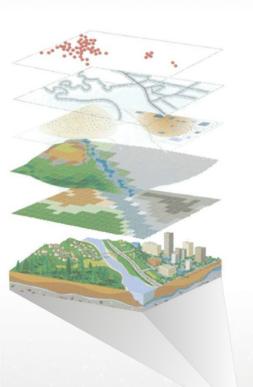
https://www.igi-global.com/chapter/significant-advances-applied-geography-combining/63591

https://www.semanticscholar.org/paper/Significant-Advances-in-Applied-Geography-from-and-Wellar/2d150ead6097ca193fcfc7888fb9f04ce41eb4c5



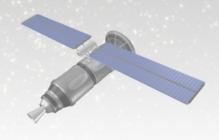
### **GIS FOUNDATION ARCHITECT**

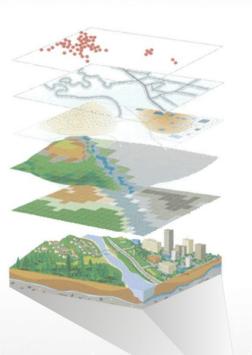




## USING PILLARS TO HELP PEOPLE KEEP THEIR HEADS, WHILE ALL ABOUT THEM OTHERS ARE LOSING THEIRS

#### **PILLAR EXAMPLE**





#### PILLARS OF INFORMATION RESEARCH

(INFORMATION RESEARCH BOARD, INC.)

CITIZENS AND INFORMATION
INFORMATION RESEARCH METHODS
INFORMATION 'NOISE'

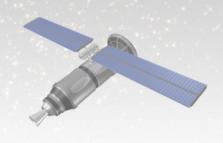
INFORMATION INFRASTRUCTURE

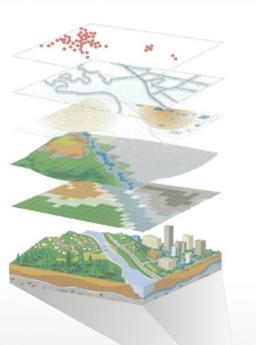
INFORMATION POLITICS, POLICIES, and PROGRAMS

INFORMATION ALTERNATIVES TO GOVERNMENT RECORDS

http://wellar.ca/informationresearch/6Pillars.html

### **BUILD ON WHAT IS KNOWN (1)**



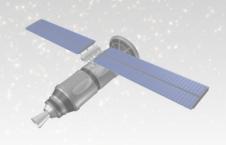


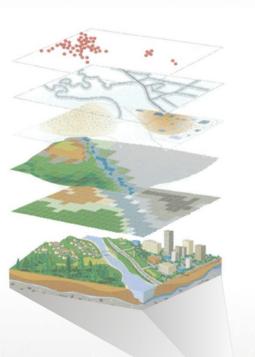
## Foundations of Urban and Regional Information Systems and Geographic Information Systems and Science

CHAPTER 1, TABLE 1. AN INDICATIVE LIST OF DOMAINS DISCUSSED IN URISA PROCEEDINGS PAPERS:

**200 DOMAINS IN 2012** 

### **BUILD ON WHAT IS KNOWN (2)**





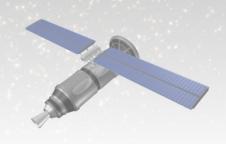
## Foundations of Urban and Regional Information Systems and Geographic Information Systems and Science

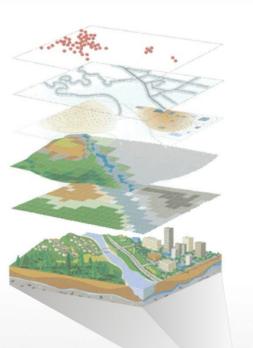
CHAPTER 10, TABLE 2. SPECIAL INTEREST GROUPS

46 SIGs IN 2012



### **BUILD ON WHAT IS KNOWN (3)**



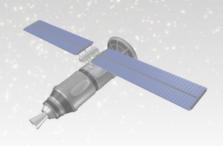


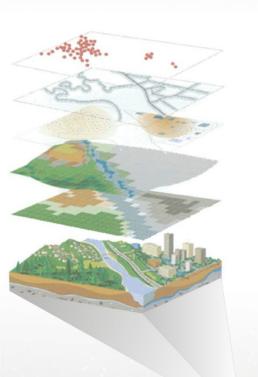
## Foundations of Urban and Regional Information Systems and Geographic Information Systems and Science

CHAPTER 11, TABLE 3. PARTIAL LISTING OF URISA WORKSHOPS

**208 WORKSHOPS IN 2012** 

### **GIS ENVELOPE PUSHER**





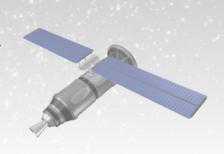
The Emergence of Geographic Information Systems as a Core Public Policy Research Tool:

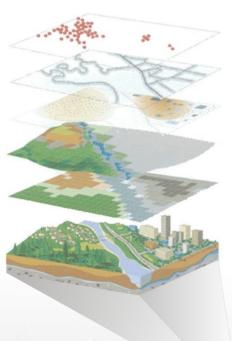
Comments on the <u>Paradigm Shift</u>

http://wellar.ca/wellarconsulting/FLDC\_Presentation\_Wellar\_FINAL.pdf



### ORIGINAL CONTRIBUTOR TO GIS EDUCATION, TRAINING, RESEARCH, APPLICATIONS, MANAGEMENT



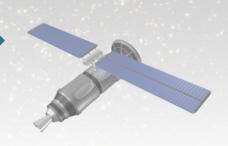


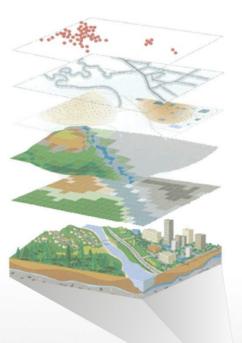
Thoughts about Creating New Risk Assessment Paradigms to Demonstrate How Geographic Factors Affect the Human Impacts of Natural Disasters

http://www.wellar.ca/wellarconsulting/RotaryPresentation.pdf



### LEGACY ELEMENTS: PERSONAL, PROFESSIONAL, COLLEGIAL





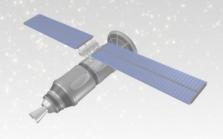
IN CONCLUSION, I BELIEVE THAT IF THESE KINDS OF CONSIDERATIONS ARE PART OF YOUR MINDSET AS YOUR CAREER UNFOLDS, THEN YOUR PERSONAL, PROFESSIONAL, AND COLLEGIAL LEGACIES WILL TESTIFY TO YOUR ROLE AS A GIS LEADER.

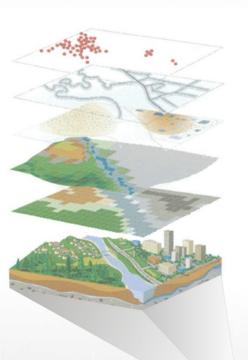
#### GIS PROSPECTIVE - GIS RETROSPECTIVE

http://wellar.ca/wellarconsulting/COLLOQUIUM PROCEEDINGS.pdf



### **ACKNOWLEDGEMENT**





I wish to thank Sam Herold, Technical Advisor, Information Research Board, for his invaluable advice on slide content, and on the design features of the slide deck. We have collaborated on many reports, presentations, and postings over the past **15 years**, and I am grateful for Sam's assistance in preparing *Core Elements of a GIS Leadership Mindset* for the 2019 URISA GIS Leadership Academy meeting in Toronto.

