Agenda

• Welcome, Announcements & Introductions
• St. Louis Chamber, Tabitha Sarris, VP Investor Relations
• The St. Louis 2020 Tech Talent Readiness Project, Stacy Hollins, Maryville University
• NGA Tech Focus Areas, Mark Munsell, CTO, NGA
• STEM Workforce Preparedness Institute, Freddie Wills, Harris Stowe State University
• Career Pathways in St. Louis Region, Dawn Towles-Richards, Missouri Department of Elementary and Secondary Education
• Geospatial Arch Grants, Julie Maurer, Arch Grants
• GeoFutures Update, Andy Dearing, Spatial STL Advisors
• T-REX/Geosaurus Update, Patty Hagen/Mark Tatgenhorst, T-REX
• Subcommittee Updates
  • University/R&D Subcommittee - Patty Hagen
  • Workforce Development - Enbal Shacham
  • K-12 Subcommittee Update - Sekhar Prabhakar
What is the SLAWG?

The SLAWG is a volunteer-based group formed under the U.S. Geospatial Intelligence Foundation (USGIF), a 501c3 educational nonprofit dedicated to supporting the geospatial intelligence tradecraft. It is a group of industry, government, academic and community partners with a goal to clarify pathways for education and training for geospatial careers and certifications in the St. Louis region, and identify needs for new pathways to integrate with existing efforts.
Introductions in Chat Window...

- Name
- Organization
- Email (if desired)
Welcome, St. Louis Chamber

Tabitha Sarris, VP Investor Relations
USGIF Upcoming Events

Ronda Schrenk, USGIF
USGIF Update and Events

- GEOConnect Mainstage (Wednesdays at 1300 EDT)
  - 27 May: NGA Tech Focus Area: Artificial Intelligence
  - 3 Jun: GEOINT-Enabled Cities
  - 10 Jun: NGA Technology Strategy
  - 17 Jun: GEOINT from my Basement
  - 24 Jun: NGA TFA: Data Management
  - 1 Jul: St. Louis Topic!!!!

- GEOConnect Training (at 1300 EDT)
  - 28 May: Quantum Computing
  - 2 Jun: Data Fusion at the Tactical Edge

- Fall events
  - Sep: GEOIntegration Summit (Sept)
  - 13-15 Oct: Geospatial Gateway Forum/GeoResolution
Upcoming Events

- May 27, NGA Tech Focus Area: Artificial Intelligence, 12 pm
- May 27, Activating the Digital Workforce: COVID19 and the Future of Work, 5 pm
- May 28, ArcGIS Pro Editing, 12 pm
- May 28, Quantum Computing, 12 pm
- May 28, Digitize and Visualize Supply Network and Dependencies, 2 pm
- June 2, Feature Extraction from Imagery, 12 pm
- June 2, Data Fusion at the Tactical Edge, 12 pm
- June 3, Women and GIS Webinar Series, 11 am
- June 3, GEOINT-Enabled Cities, 12 pm
- June 4, Real-Time Maps and Last-Mile Logistics, 11 am
- June 4, Data Science in ArcGIS Using Python and R, 12 pm
- June 9, ModelBuilder: A Visual Scripting Environment, 12 pm
- July 13-15, Esri International User Conference (Virtual)
- July 30, SLUG, COLLAB by GeoSLU, 4220 Duncan, 1:30 - 3:30 pm
- October 15, SLUG, SLDC, 1520 Market, Suite 2000, 1:30 - 3:30 pm
- …more to come! (all times in CDT)
The St. Louis 2020 Tech Talent Readiness Project

Stacy Hollins, Maryville University
2020 Tech Talent Readiness Project
TECH TALENT READINESS
PROJECT GOAL

Have a positive impact on the tech talent shortage in the St. Louis region through collaborative insight and ACTION.

Key Action to Achieve Goal:

The 2020 St. Louis Tech Talent Readiness Digital Report

This high-profile, collaborative report will define the region’s tech talent challenges through data, insights and human stories. It will also identify actions and solutions that we will commit to as a community.
Diversity & Access
True innovation requires broad diversity of backgrounds and perspectives and all people deserve opportunity in our bright future.

Action
Data and information are important to understand a challenge, but real progress comes from turning information into targeted, smart action.

Partnership
The tech talent crisis impacts our collective ability to thrive. From the largest corporation to the smallest school, we must work together to respond.

Innovation
Our world and our community is changing fast. Success demands new, adaptive ideas and actions.

Stories Behind Statistics
We cannot look at our challenges in terms of data and statistics alone. We will find and share the human stories that make the issues real.
PROJECT TIMELINE

1. Opening of the Maryville Fusion Center @CIC – a hub for partner collaboration
2. Work with partners to collect current, existing talent data and insights for our region and the U.S.
3. Participate in Strategic Foresight Workshop to imagine our shared future
4. Tech Talent Readiness Report release and unveiling experience
5. Invite influencers and leaders to join us
6. Bring teams together for three unique collaborative experiences
7. Design and produce collaborative Tech Talent Readiness Digital Report
8. Move 2-3 action areas forward
QUESTIONS?
NGA Tech Focus Areas

Mark Munsell, CTO, NGA
STEM Workforce Preparedness Institute

Freddie Wills, Harris Stowe State University
The Office of STEM Initiatives (The OSI)

Freddie E. Wills, Jr., Ph.D.
Assistant Vice President for STEM Initiatives & Director, MOLSAMP
The OSI Overview

The Office of STEM Initiatives (OSI) at Harris-Stowe State University (HSSU) is committed to developing and implementing initiatives that broaden participation of underrepresented minority (URM) students in Science, Technology, Engineering, and Math (STEM). In addition, The OSI supports faculty development to enhance pedagogy and cultivates partnerships with other academic institutions, as well as, public and private organizations to advance STEM at HSSU.

As societal STEM issues present challenges to the St. Louis region and beyond, The OSI understands its role to contribute to the public good. Through a four prong strategy approach, The OSI collaborates closely with faculty, students, staff and administration to: advance undergraduate research; innovate programs and activities; support teaching and learning; and generate opportunities for institutional advancement at HSSU.

The OSI provides leadership for undergraduate research, the Honors College, academic partnerships in STEM, and several National Science Foundation grant funded research programs.
Notable Projects

**STEM Workforce Preparedness Institute**
The STEM Workforce Preparedness Institute is an intensive on-line academic immersion program that engages rising junior and senior underrepresented minority STEM students in a four-week professional development experience.

**MOLSAMP COVID – 19 Undergraduate Research Project**
The MOLSAMP summer 2020 REU will integrate the current Public Health focus on the coronavirus and the accompanying pandemic; and the translation of foundational STEM-related concepts to critically understand and mitigate the pandemic and its apparently disparate impacts on communities of color.
Institute Purpose
As Harris-Stowe State University (HSSU) expands its academic focus in STEM degree programs, The Office of STEM Initiatives (The OSI) looks to strengthen workforce readiness of the University’s STEM students. In addition, The OSI aims to enhance the professional identity of Harris-Stowe STEM students, heighten student employability, strengthen student marketability, cultivate entrepreneurship mindsets, and showcase the professional competencies of HSSU STEM students.
Cultivating Entrepreneurship Mindsets

HSSU looks to engage with St. Louis Entrepreneurship Ecosystem for:

- Institute Lectures
- Institute Mentors
- Institute Internship

Harris-Stowe State University: The Office of STEM Initiatives
Career Pathways in St. Louis Region

Dawn Towles-Richards,
Missouri Department of Elementary and Secondary Education
Career Pathways in St. Louis Region
Dawn Richards, EdD

MO Department of Elementary and Secondary Education
Office of College and Career Readiness
Career Pathways Director, St. Louis Region
dawn.towles-richards@dese.mo.gov
WHAT DO I DO?

• Form partnerships
  – Secondary Schools
  – Post-secondary institutions
  – Industry

• Educate Educators
  – Teacher Externships
  – Industry tours
  – Professional Development
What is a Career Pathway?

- Business Management & Administration
- Finance
- Information Technology
- Marketing

- Agriculture, Food & Natural Resources

- Business, Management & Technology

- Natural Resources Agriculture

- Human Services

- Education & Training
  - Government & Public Administration
  - Hospitality & Tourism
  - Human Services
  - Law, Public Safety, Corrections & Security

- Foundation Knowledge & Skills

- Industrial & Engineering Technology
  - Architecture & Construction
  - Manufacturing
  - Science, Technology, Engineering & Math
  - Transportation, Distribution & Logistics

- Arts & Communication

- Arts, Audio-Visual Technology & Communications

- Health Services

- Health Science
PLAN OF ACTION

• Moving to virtual format
• Looking to partner with companies in GIS Industry
  – Create a clear GIS pathway for schools
  – Provide industry tours and professional development for teachers
Geospatial Arch Grants

Julie Maurer, Arch Grants

What Every Startup Needs to Know about Arch Grants in 2020
GeoFutures Update

Andy Dearing
GeoFutures Update
May 27, 2020 – SLAWG Meeting
Strategic Pathway for STL GeoFutures

**Vision:** Build upon St. Louis region’s substantial assets and deep connections to geospatial development for national security to further transformative, equitable and inclusive growth as a global center of excellence for advanced technology applications of locational data in leading industry sectors and community services.

The pathway to success for St. Louis recognizes the region’s competitive advantage is the ability of its talent base to adopt and integrate the latest advances in computing and data sciences into geospatial applications that enhance the value of locational data for decision-making and situational awareness to ensure our nation’s security, grow businesses and address community needs.

**Proposed Objectives for Near-Term and Longer-Term Success**

**Today**
- St. Louis geospatial assets found in talent, applications and leading industry sectors

**Legacy**
- St. Louis’ strong legacy in mapping, geospatial analysis; extensive activities primarily related to National Security and Defense

**Next 5 years**
- Preeminent hub for National Security, GeoINT
- Major Center for Geo-related Tech & Applications in:
  - Transportation & Logistics
  - Precision Ag
  - Population Health
  - Community-led Smart Cities activities in North St. Louis neighborhoods

**Next 10 years**
- Establish STL as globally-renowned center of geospatial excellence across business functions, smart city applications, and a leader in the 4th Industrial Revolution
Rollout of Strategic Growth Plan

• Launch Event – virtual event on 23 June (11a-12p CT) - invite to be sent to SLAWG distro.

• Final report – will be hosted on Alliance and SLDC websites.

• GeoConnect GeoFutures Rollout – July 1 (12p-1p CT)

• Will have ongoing GeoConnect sessions in August / September to highlight various segments of the report.
THE FUTURE OF GEOSPATIAL IS STLMADE
T-REX Update, T-REX BYTES and Geosaurus at Home

Patty Hagen and Mark Tatgenhorst, T-REX, Geosaurus
T-REX BYTES
University/R&D Subcommittee Updates

Patricia Hagen, PhD, Subcommittee Chair
Workforce Development Subcommittee Update

Enbal Shacham, PhD, Subcommittee Chair
K-12 Subcommittee Update

Sekhar Prabhakar, Subcommittee Chair
SPRING 2020 UPDATE

Sekhar Prabhakar, SLAWG K-12 Subcommittee

• From the GatewayGIS cohort of the Clyde C. Miller Career Academy:
  o Two outstanding high school seniors received awards as interns of CWTI (Countering Wildlife Trafficking Institute) during recent “driveway drop off”.
  o One high school senior coached elementary and middle school youth of the Teen Tech Center at Herbert Hoover Boys and Girls Club.
  o Two high school seniors accepted into NSA/DHS Center of Academic Excellence in Cyber Defense Education at UMSL.
  o A local foundation donated funds to cover 15 high school students for GeoSLU geospatial data summer program.

Motto: Act locally. Think globally.

Philosophy: “To develop a complete mind: Study the science of art; study the art of science. Learn how to see. Realize that everything connects to everything else.” – Leonardo da Vinci

Mission: Bridging the digital, geographical, cultural, racial, and economic divide
SPRING 2020 UPDATE

- In collaboration with Clyde C. Miller Career Academy, St. Louis Public Schools, St. Louis Youth Jobs, and GeoSLU, GatewayGIS offers support of the IT & Cyber Security Summer Academy 2020 Distance Learning Initiative (Mid-June to mid-August) Note: Need more internship sponsors.

- GatewayGIS goes virtual! Thanks to website hosting by CEdge Software Consultants and the website redesign team of college and high school student interns. Stay tune to this summer’s launch date.

Motto: Act locally. Think globally.

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Takeaways

Career Opportunities (Full-Time/Internships)
• Submit opportunities: Derek Collins (dcollins@stlcounty.gov) at the county workforce office and he can make sure it is listed on MO state job listing.

Events/Messaging
• Submit calendar events to Tara Mott (tmott@esri.com)
• Flashtalks for the Next Meeting?
• Want to join the group? Email WorkingGroups@usgif.org

Members should look to join at least one sub committee and share GEOINT Opportunities!
Next Meetings – Most Likely All Virtual

• **June 24**, Zoom, 1 – 3 pm
• **July 29**, Harris Stowe State University, TBD
• **August 26**, Microsoft Technology Center (MTC)  
  • 4220 Duncan, 5th floor, 2 – 4 pm (if in person)
• **September 30** - TBD
• **October 28** - TBD
• **November 18** - TBD
• **December 16** - TBD
Thank You for Attending!