

### Workforce Development

Southeastern Asphalt User/Producer Group  
(SEAUPG) 2019 Annual Meeting and Exhibits  
November 18-21, 2019, Baton Rouge, LA



Presenter  
Isaac L. Howard



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### Acknowledgements

Rachel Booth, Jessica Bullock, Taylor Cagle,  
Alexis Krohn, Jessica Lewis, Willie Thomas



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### Workforce is a Hot Topic

- A literature review shows concerns with losing very high percentages of the workforce over the next few years
- **NCHRP 02-25: Workforce 2030--Attracting, Retaining, and Developing the Transportation Workforce: Design, Construction, and Maintenance**
  - <https://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=4544>
- \$700,000 – May 2019 to May 2021 – ICF Incorporated (PI – Dr. C.B. Cronin)

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#### MSU-CMRC and Workforce Development

- Industry/Agency supporters suggested more promotional/workforce development activities beginning in the later part of 2016 – reflected in CMRC meeting minutes in spring of 2017
- This was somewhat new territory – some example activities
  - Presentations at non-engineering venues
  - K12 educational module development
  - Promotional/education videos
  - Workforce survey

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#### MSU-CMRC and Workforce Development

- **Highly** non-scientific observations of presenter – absolutely no data – just one set of ears
  1. Funding, safety, and workforce are some of the easiest topics to get a spirited discussion going where lots of people want to participate
  2. Our industry clearly understands the need to develop a future workforce, but there are lots and lots and lots of perspectives
  3. Target audience (e.g. K12, community colleges, universities, other industries, unemployed, correctional facilities.....) is a topic and varies over time and between people
  4. The need for workforce development **tools** seems to be an area w/ some agreement, but what those tools are, or what/how they need developed circles back to points 2 & 3

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#### SEAUPG 2017

- *Agency, Industry, & University Partnerships: Workforce Development & Implementable Solutions*
  - collaborated with Dr. Amit Bhasin – UT Austin for presentations & panel session
- 2017 focused on activities for current engineering students (e.g. industry interactions, materials panels, summer classes taught at construction sites, undergraduates involved in research...)
  - lesser emphasis on K12, tools, or other workforce components (e.g. equipment operators, truckers)

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### SEAUPG 2017: I-269 K12 Promotional Video



On June 26, students were collecting data



Cathy Pendleton & Toni Robinson (Ergon) & Fara Foster (Lehman-Roberts) were directing the video

But to everyone's disappointment, this was the best silly face I could come up with at the end of the day




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### Post SEAUPG 2017 Workforce Development *tools*

- 13 videos created – I-269 was first
- These videos are free for anyone to use – they have different topics, vary in length from 1 to 17 minutes, and focus on several construction related topics (asphalt is not the only focus)
- These videos can be viewed on YouTube or the full video can be downloaded from Vimeo – see next slide

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Video	YouTube Link	Vimeo Link
I-269 and People That Made it Possible	<a href="https://www.youtube.com/watch?v=PC5w025Lg">https://www.youtube.com/watch?v=PC5w025Lg</a>	<a href="https://vimeo.com/225377676">https://vimeo.com/225377676</a>
Construction Matters 2: Safety	<a href="https://www.youtube.com/watch?v=8Q2m0p0m0m0">https://www.youtube.com/watch?v=8Q2m0p0m0m0</a>	<a href="https://vimeo.com/218858731">https://vimeo.com/218858731</a>
Construction Matters 2: Recycling	<a href="https://www.youtube.com/watch?v=8Q2m0p0m0m0">https://www.youtube.com/watch?v=8Q2m0p0m0m0</a>	<a href="https://vimeo.com/218858731">https://vimeo.com/218858731</a>
Construction Matters 2: Networks	<a href="https://www.youtube.com/watch?v=8Q2m0p0m0m0">https://www.youtube.com/watch?v=8Q2m0p0m0m0</a>	<a href="https://vimeo.com/218858731">https://vimeo.com/218858731</a>
Construction Matters 2: The Military	<a href="https://www.youtube.com/watch?v=8Q2m0p0m0m0">https://www.youtube.com/watch?v=8Q2m0p0m0m0</a>	<a href="https://vimeo.com/218858731">https://vimeo.com/218858731</a>
Construction Matters 2: Quality of Life	<a href="https://www.youtube.com/watch?v=8Q2m0p0m0m0">https://www.youtube.com/watch?v=8Q2m0p0m0m0</a>	<a href="https://vimeo.com/218858731">https://vimeo.com/218858731</a>
Construction Matters 2: Sustainability	<a href="https://www.youtube.com/watch?v=8Q2m0p0m0m0">https://www.youtube.com/watch?v=8Q2m0p0m0m0</a>	<a href="https://vimeo.com/218858731">https://vimeo.com/218858731</a>
How to Build a Highway in Mississippi	<a href="https://www.youtube.com/watch?v=8Q2m0p0m0m0">https://www.youtube.com/watch?v=8Q2m0p0m0m0</a>	<a href="https://vimeo.com/218858731">https://vimeo.com/218858731</a>
Fast Facts – Building Blocks for Adults	<a href="https://www.youtube.com/watch?v=8Q2m0p0m0m0">https://www.youtube.com/watch?v=8Q2m0p0m0m0</a>	<a href="https://vimeo.com/218858731">https://vimeo.com/218858731</a>
Fast Facts – Building our Future	<a href="https://www.youtube.com/watch?v=8Q2m0p0m0m0">https://www.youtube.com/watch?v=8Q2m0p0m0m0</a>	<a href="https://vimeo.com/218858731">https://vimeo.com/218858731</a>
Fast Facts – Erosion Control	<a href="https://www.youtube.com/watch?v=8Q2m0p0m0m0">https://www.youtube.com/watch?v=8Q2m0p0m0m0</a>	<a href="https://vimeo.com/218858731">https://vimeo.com/218858731</a>
Fast Facts – Let's Share the River	<a href="https://www.youtube.com/watch?v=8Q2m0p0m0m0">https://www.youtube.com/watch?v=8Q2m0p0m0m0</a>	<a href="https://vimeo.com/218858731">https://vimeo.com/218858731</a>
Fast Facts – Pipe Production	<a href="https://www.youtube.com/watch?v=8Q2m0p0m0m0">https://www.youtube.com/watch?v=8Q2m0p0m0m0</a>	<a href="https://vimeo.com/218858731">https://vimeo.com/218858731</a>

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### Example - Construction Matters 2 Video Series

- Workforce Development Implications

- People are more likely to enter a field if they can see value or believe in it
- Show people how much construction touches their life in positive ways
- Let people see one video at a time how many opportunities there are to make a difference to causes that many care about in present day (e.g. recycling, sustainability, better life for children, etc.)
- These videos are intended to highlight the importance of construction and the people of construction




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### A second **tool** – survey – 467 responses



Survey Occurred Feb to Mar of 2017: IRB-17-253 (exempt)  
**MS- 49% CO- 20% Other USA – 29% International -1%**

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### Interactive Poll Question 1 (optional participation)

Did you fill out this survey two years ago?

- A – Yes
- B – No
- C – Don't Remember

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### Interactive Poll Question 2 (optional participation)

How satisfied are you working with  
transportation infrastructure?

- A – Not Satisfied
- B – Somewhat Satisfied
- C – Satisfied
- D – Very Satisfied

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### Interactive Poll Question 3 (optional participation)

When you were in high school, was the  
vast number of career paths available in  
transportation infrastructure clear and as  
available as you would have liked?

- A – No, not at all
- B – No, not really
- C – Yes, somewhat
- D – Yes, very available

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### Survey Results From 2017

How satisfied are you working with  
transportation infrastructure?

Group (Responses)	All Data (467)	MS Only (209)	CO Only (91)	Other USA (129)
Not Satisfied	2%	1%	1%	2%
Somewhat Satisfied	8%	5%	18%	7%
Satisfied	46%	45%	47%	38%
Very Satisfied	44%	48%	34%	53%
Satisfied + Very Satisfied	90%	93%	81%	91%

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### Survey Results From 2017

When you were in high school, was the vast number of career paths available in transportation infrastructure clear and as available as you would have liked?

Group (Responses)	All Data (467)	MS Only (209)	CO Only (91)	Other USA (129)
No, not at all	30%	28%	26%	40%
No, not really	51%	56%	44%	47%
Yes, somewhat	16%	14%	26%	12%
Yes, very available	2%	2%	3%	1%
Both No's	81%	84%	70%	87%

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### So How Did We React to Survey Findings? Answer: Working on K12 Education Module

- **Theme:** Transportation Infrastructure - Paving Everyone's Road to Success
- **Goal:** Better promote opportunities for several professions
- **Audience:** 8<sup>th</sup> - 12<sup>th</sup> graders
- **Scope:** Four part idea to expose students to transportation infrastructure

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### K12 Module - Student Exercises – Plan to Date

- **Part 1:** What would your life be like without transportation infrastructure? Document all ways that transportation infrastructure affects your life over time (e.g. 1 week). Focus on where your life would be without infrastructure.
- **Part 2:** Who made the transportation infrastructure described in assignment 1 possible? List all the types of jobs you think were needed to create the transportation infrastructure possible.
- **Part 3:** Students watch I-269 video and are presented with survey results – idea is to get them thinking why construction/transportation infrastructure?, when construction?, and how construction?  

- **Part 4:** Close the loop from assignments 1 to 3 & reinforce that you can be involved in any one of dozens of roles and make a positive impact to transportation infrastructure

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### What Are Others Doing?

- **Indiana** Asphalt Pavement Association (IAPA) & Future Farmers of America (FFA) Partnership
- Goal: raise awareness of rewarding and meaningful careers in the asphalt industry
- [https://www.asphaltindiana.org/apai\\_and\\_ffa\\_partnership.php](https://www.asphaltindiana.org/apai_and_ffa_partnership.php)

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### What Are Others Doing?

#### TRB 2019 Workforce Development Summary

John Hickey



#### **Oregon**

- **Continued focus on different ideas**
  - ‘Crummy’ buses
  - Continuing education
  - Counseling/personal management
  - Breakrooms
  - Mentoring
  - Leveraging technology
- **Cultivate current personnel**

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### What Are Others Doing?

Richard Barcaskey



#### Future Road Builders Overview



- Future Road Builders - the name
- Build up public-private partnerships
- Support the industry
- Support the industry
- Support the industry
- Support the industry
- Support the industry
- Support the industry

#### Outreach & Social Media

- High Schools and Career Technical/Educational
- Pre-Apprentice & Job Training Programs
- Career Fairs and Events
- Community-Based Organizations
- Steady Social Media presence

#### Future Activities

- Expand network of FRB users
- Offer customized FRB Programs to other locations

#### **Pennsylvania**

TRB 2019  
Workforce  
Development  
Summary

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### What Are Others Doing?

#### TRB 2019 Workforce Development Summary

Buddy Hobart



- Generation Y, or Millennials, bring new ideas, innovation, and energy as they enter the workforce AND their expectations and demands are unique.
- Generation Y is more than we've been led to believe. They value authenticity, flexibility, and recognition.
- Attract the best young talent in preparation for the mass retirement of Baby Boomers and Gen X
- Inspire motivation in Millennial employees, reducing dissatisfaction and turnover costs
- There are 80 million Millennials, and they are transforming the modern workforce.

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### What Are Others Doing?

#### TRB 2019 Workforce Development Summary

Audrey Copeland



NAPA

#### Three Pillars for Focus

1. Create & communicate a compelling story on the positive benefits & opportunities for career growth & advancement in the asphalt industry
2. Build a comprehensive & collaborative network of partnerships with stakeholders inside & outside industry to recruit, retain, and develop workforce
3. Help fulfill the promise made to those recruited into asphalt industry by assisting members to create recreational environments & provide opportunities for workers




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### Workforce Going Forward

- TRB plans to have a **webinar** organized by AFK10 (webinar leads – Bob McGennis of Holly Frontier & Pete Capon of Reith Riley) on workforce development – estimate of March 2020
- **Videos** – please feel free to use any of the videos produced – feedback on how they could have been better is also welcomed
- **Survey results** – workforce is happy but didn't know about their careers in high school – need tools to convey to future workforce  
– Let's see what you thought...interactive poll results

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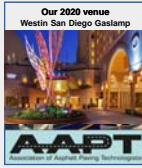
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### 95th AAPT Annual Meeting & Technical Sessions

The 2020 Annual Meeting will be held March 22-25, 2020  
Westin San Diego Gaslamp Quarter, San Diego, California USA



**Our 2020 venue**  
Westin San Diego Gaslamp

#### 2020 Annual Meeting

The Annual Business Meeting and Technical Sessions of the Association of Asphalt Paving Technologists (AAPT) will be March 22-25, 2020 in San Diego, California at Westin San Diego Gaslamp Quarter. The annual meeting includes asphalt-related technical sessions comprised of peer-reviewed papers, and invited presentations on specific topics in the AAPT-ISAP International Forum, and Symposium as well as a Student Poster Session.

Visit <http://asphalttechnology.org/annual-meeting.html> for more details as they become available.

**Important dates**  
December 2019 - Annual Meeting registration opens  
March 22-25, 2020 - Annual Business Meeting and Technical Sessions

AAPT Office:  
6775 Lake Drive, Suite 215  
Lino Lakes, MN 55014  
Phone: 651-253-9188  
Email: [aapt@asphalttechnology.org](mailto:aapt@asphalttechnology.org)



For the latest information please check our web site at: <http://www.asphalttechnology.org>

### Become an AAPT Member!

- Have access to a wealth of information and emerging technologies including free webinars
- Be an integral part of a technical community comprised of individuals from all parts of the asphalt industry (material suppliers, researchers, agency owners, consultants, and equipment manufacturers)
- Enjoy the camaraderie of colleagues in the field during annual meetings at attractive venues
- Be a part of lively debates on important technical issues
- Belong to a North American-based organization with significant international membership and focus
- Be a member of an association that operates without organizational biases; policies set by and for individual members by an elected Board.
- Support the next generation of asphalt technologists through a robust student scholarship program

<http://asphalttechnology.org/membership.html>



**Thank You!**

