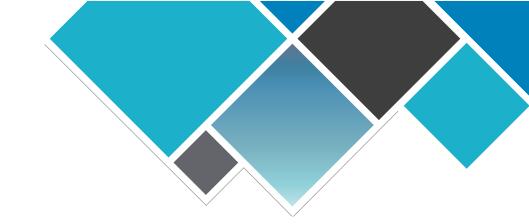




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EXECUTIVE SUMMARY

Every five years, Wade Trim develops a strategic plan that provides the long-term guidance to carry our firm into the future. The world has changed drastically since we implemented Vision 2022, our current plan. New technologies, tools, and trends continue to impact the engineering industry and shape change.

To gain a better understanding of what trends might impact the clients we serve and our ability to provide innovative solutions, we interviewed some of our anchor clients about trends and patterns they expect to continue over the next few years. Interviewees represented a wide range of markets: commercial, industrial, energy/power, stormwater, water/wastewater, municipal and transportation.

This report organizes the information our clients shared into the STEEP analysis framework, common analysis tool used to group the external forces that can impact business,industry, and marketplace decisions. The categories are Societal, Technological, Economic, Environmental and Political.



SOCIETAL

Societal influencers include factors that are likely to influence an individual's behavior, like changing demographics, relocation, lifestyles, and values.



TECHNOLOGICAL

Technology focuses primarily on technological advances and how that will impact individual and organizational success. This can be impacted by innovation, communication, accessibility, commitment, and adaptability.



ECONOMIC

Economic forces are those that can influence buying power, like an increase or decrease in sources of funding, taxes, interest rates, and competition.



ENVIRONMENTAL

Environmental changes and new regulations can greatly impact growth opportunities and organizational needs through the supply and demand for resources such as water, wind, food, and energy.



POLITICAL

While politics and local, state, and federal policies and relations inevitably affect almost all industries, shifts in power are likely to impact environmental, financial, and trade markets.





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CLIENT TRENDS REPORT 1 MAY 2022











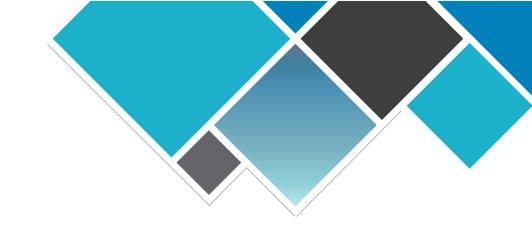


THE PROCESS AND TOP 5 TRENDS

We interviewed 21 clients, representing commercial, industrial, energy/power, water, municipal and transportation markets. All together, the clients interviewed made over 300 comments that we categorized into 27 trends within the STEEP framework. The following five

trends were mentioned the most in this survey. The percentages shown for each trend reflect the number of comments made for that trend as compared to the total number of comments made in the entire survey.

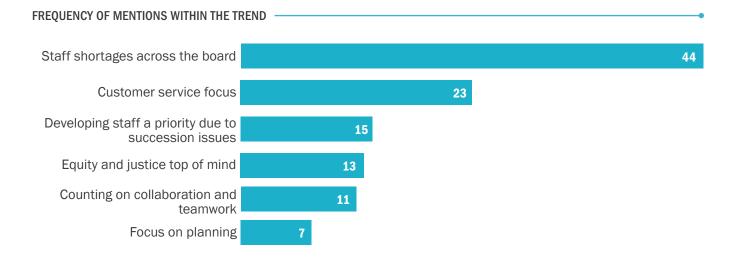
TOP 5 TRENDS Staff shortages across the board 14% Regulation impacts persist 12% Customer service focus 7% Using technology to improve efficiency Focused NOW on delivering programs 5%





SOCIETAL TRENDS

Hiring challenges and developing existing staff while dealing with continuing impacts from Covid put pressure on finding and keeping talent. Clients are also facing higher costs for labor and staff burnout due to heavy workload and restrictions on replacing employees lost to increasing retirements. At the same time, clients rightly expect increased focus on their needs. Clients expect collaboration and teamwork. Balancing recruiting, development and deployment of their team is a key strategic decision.



Clients face staff shortages, increased competition for talent and the need to develop staff to offset succession issues

- Accelerated retirements are causing smaller and shrinking in-house staff, and the loss of knowledge when experienced staff retire.
- Public clients can't compete with private sector compensation.
- Exploring outsourcing work to fill gaps.
- Creative programs, like "jail to jobs" are in use and there's a renewed focus on apprenticeships.
- Need to plan more for knowledge transfer and train next generation.

Client service still "rules"

- How a client feels about the company they do business with matters. Focus on being responsive and proactive. Look to constantly improve service and reliability.
- Communication and transparency are important, especially regarding rate changes.
- Clients need help with public outreach and education.
- Consultants need to communicate well with the clients' clients.





SOCIETAL TRENDS

Equity and justice are more than buzzwords

- There is cross-industry concern over fairness and equity regarding rates, access to community amenities, and impact of projects on poor neighborhoods.
- There is a need to be fair to rate payers and concern about the impact of rate increases on lower income communities.
- Clients need consultants to embrace concepts beyond "bricks and mortar" to find solutions to community impacts of rates.
- Some clients are using Infrastructure Investment and Jobs Act funding to address community access inequity.

Clients are counting on collaboration and teamwork

- The focus is on increased internal collaboration, removing silos and working better across departments.
- In some cases there has been success. In others, there is still work to be done.

Planning for the future

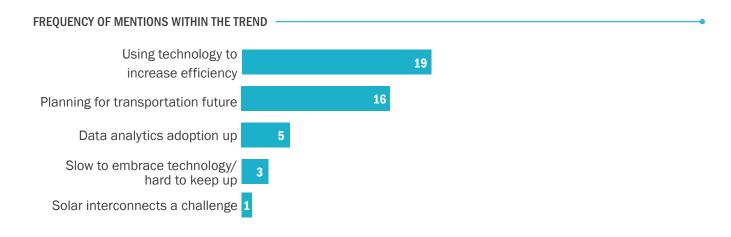
 Clients are using master planning and strategic planning to prepare for the future and focus on future needs.





TECHNOLOGICAL TRENDS

The systems-level impacts of technology continue to manifest as new platforms and applications are deployed into the marketplace. The pace of technological change coupled with an increasingly diverse range of application—autonomous vehicles, the "Internet of things", for example—create an adoption gap. However, adoption and effective management of new technologies will continue to be a key driver across industries and markets.



Using technology to improve efficiency

- Clients are looking to technology to help with regulatory compliance, treatment quality, asset management, real-time controls and managing systems.
- Technology helps with staffing problems, although elimination of staff is a concern for some.
- Some are behind on technology improvements and upgrades.

Planning for transportation future

- There is a ramping up of electric vehicles to meet consumer needs but reliable large battery storage and recycling is a challenge.
- The shift to more electric and less gas impacts gas stations. There are problems with replacing funding related to gas taxes, and grid concerns with more charging needs.
- Planning for automated/connected vehicles to reduce lanes.





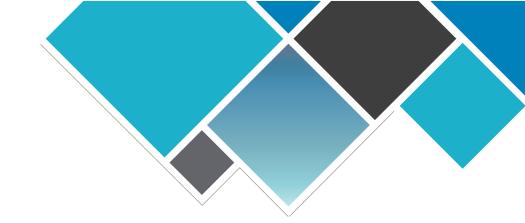
TECHNOLOGICAL TRENDS

Data analytics adoption up

- Some clients want to use big data to assess customer needs and fleet application.
- Big data and IoT are disrupters, but considered positive for decision making.

Some are slow to embrace or find it difficult to keep up

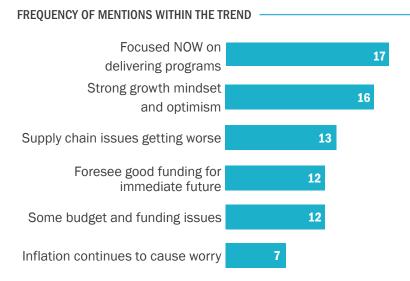
- It is difficult to keep up with technology change and concern over elimination of staff.
- Some are making progress toward catching up.





ECONOMIC TRENDS

While the pandemic's impact on the economy is still evident, there is a strong growth mindset and optimism over federal infrastructure funding. However, the optimism is tempered by concern over consultants ability to perform and the desire for local workforce. In addition, rising costs of construction materials due to supply chain issues and inflation are cause for worry.



Focused NOW on delivering programs

- There is a need to deliver projects now in preparation for new bigger programs and funding.
- Consent decrees continue to be a priority, but there is concern over consultants' ability to perform and an emphasis on using the local workforce.
- Alternative delivery may be needed to meet project demand.

Strong perpetual growth mindset and optimism

- There is strong growth and development in many areas, especially Florida and Texas.
- Growth is driving inflation, cost increases and supply chain issues, and it brings the need for additional staff, which is hard to recruit.





ECONOMIC TRENDS

Supply chain issues are getting worse

- Construction materials and replacement parts costs are escalating.
- Other materials costs, including computer chips and chemicals, are also soaring.
- Delays in shipping are also causing problems.
- Supply chain issues coupled with inflation has a double impact.

Foresee good funding for the immediate future

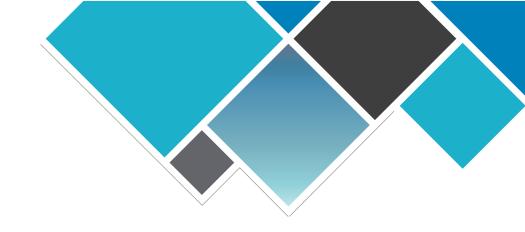
- Funding is in place to finally address long-time aging infrastructure problems, but there is concern over how to make best use of the funds.
- There is concern that funding may overwhelm ability to deliver projects and keep up with demand.
- Some have limited grant writing resources and need to outsource.

Yet still some budget and funding issues

- There is still the need to operate within budget constraints.
- Costs are rising but local officials hesitate to raise rates to keep up.
- Funding is still needed for water/sewer replacements, roads and trails.

Inflation continues to cause worry

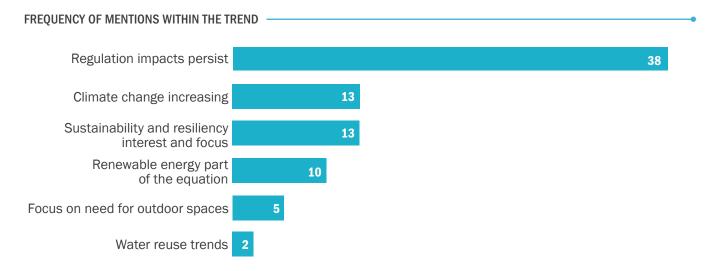
- Concerns over inflation driving up capital improvement costs.
- Inflation is related to supply chain issues but other drivers include fuel and housing costs.
- It may make water/wastewater rates unaffordable for some.





ENVIRONMENTAL TRENDS

Environmental concerns are ever present. Climate change is increasing and the impact of regulation persists. At the same time, sustainability and resiliency is a focus, and renewable energy is part of the equation. The infrastructure industry continues to work to address regulatory and community concerns about quality of life, health and the environment.



Regulation impacts persist

- Data collection and reporting is difficult with limited staff.
- PFAs and bio-solid disposals are issues with limited solutions.
- Regulations are delaying construction and driving up costs.
- The public is not receptive to dropping regulations.

Climate change increasing

- Storm restoration work has increased significantly.
- The frequency and severity of storms is a problem, with limited progress on prediction.
- Climate change has impacted water/wastewater systems, stormwater systems, bridges and power.
- There is a need for hardening facilities and disaster planning.

Sustainability and resiliency interest and focus

- Carbon footprint concerns lead to decarbonization goals and work on reducing emissions.
- Resiliency concerns impacting construction, plant siting and power. For example, moving power underground for resiliency.





ENVIRONMENTAL TRENDS

Renewable energy is part of the equation

- Coal is being eliminated, while natural gas is still part of the total energy solution.
- Renewable energy is key to being carbon neutral.
- There are cross function needs for solar/wind/hydro power.

Focus on the need for outdoor spaces

Good parks, trees, trails and walkable area a focus and draw for communities

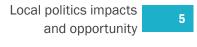




POLITICAL TRENDS

Local governments continue to provide fertile ground for strong relationships with local officials. However some officials wield influence with limited knowledge of the work being done. There is strong support for the Infrastructure Investment and Jobs Act.

FREQUENCY OF MENTIONS WITHIN THE TREND



Support for IIJA

Politics drives some site selections 1

Global partner value questioned 1

Local politics impacts and opportunity

- Public officials have a lot of influence without much knowledge of the work being done.
- There is understanding that current support could change with the election cycle.

Support for Infrastructure Investment and Jobs Act

Very positive support of the IIJA includes roads and bridges and water/wastewater investments.

Politics drives some site selections

Some receive political incentives and abatement assistance.

Global partner value questioned

China and India partners now not as valued.













ACKNOWLEDGEMENTS

Wade Trim thanks all participants. The interview sessions provided a rare opportunity for us to discuss relevant and timely issues. We are grateful to the industry leaders who shared their time, ideas and energy with us. Your input will not only help us provide more innovative solutions for our clients, it will be fundamental as we plan for our future.

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