

The Next BIG Thing

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The Next Big Thing Cards represent trends that may impact our utilities or the City of Tacoma. These trends may be watched or may help to shape our goals or strategies moving forward.

Spring - Silent Generation

- WW2, Korea, Vietnam
- Great Depression
- Weather Generation
- Men Worked, Women Stayed Home

Summer - Boomer

- Mc Generation
- Kennedy, MLK assassination
- Rosa Parks, Civil Rights Act
- Moon Landing
- Watergate

Fall - Gen X

- Aids, DARE, Stranger Danger
- Fall of Berlin Wall
- Exxon Valdez Spill
- Energy Crisis
- Work Hard, Play Hard

Winter - Millennial, Gen Z


- iGeneration, Technology
- Shattered by Parents
- OJ Simpson, Oklahoma City Bombing
- Great Recession
- 9/11, Terrorism

The BIG Sort



- ◆ Deal all of the cards to the members at your table
 - ◆ Each person review the cards to determine what existing department goal it falls into.
 - ◆ Put your more confident ones to the top
- ◆ Take turns presenting your cards and discuss most appropriate goal it fits into.
 - ◆ Cards may fit into several goals, do your best
 - ◆ It may not fall into any goal, set it aside

1. Perception of Environmental Services



**Environmental Services
Customer Satisfaction Survey
Report of Results**

March 2017

Overall ES is still rated well, but multiple services have had declines in customer perception since 2009 (e.g., garbage collection services, sewer conservation loan program, flood responses, etc.). Also, few residents were familiar with many of the services provided by ES.

Source: ES Survey

How will this impact the future of ES?

2. More City-to-City Collaborations



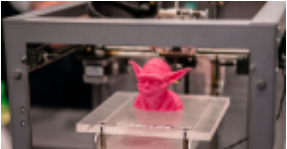
City leaders are increasingly forming their own global or regional coalitions to address their most pressing issues, especially in the absence of leadership at the national or state levels. Cities in the Puget Sound Region have partnered through the Government Performance Consortium.



Source: Alliance for Innovation, The Next Big Things

How will this impact the future of ES?

3. Decentralized Manufacturing & 3D Printing




The widespread use of 3D printing could profoundly affect the global economy. Production and distribution of material products could begin to be de-globalized with manufacturing of many goods closer to the consumer and on demand. Worldwide revenues from 3D printing are expected to grow from \$3.07 billion in 2013 to \$12.8 billion by 2018, and exceed \$21 billion by 2020.

Source: Next Big Things, the Alliance for Innovation; Wholers Report 2014

How will this impact the future of ES?

4. Lower Trust in Federal Government



Americans have been asked since 1980 if they trust the government in Washington to do what is right.

The public's trust in the federal government continues to be at historically low levels.

Source: Pew Research Center

How will this impact the future of ES?

5. More Diverse Demographics

The Seattle metro region's proportion of people of color is projected to increase from 32% in 2010 to 54% by 2040. A larger percent of the population will be foreign born. The City wants its workforce to reflect the population we serve; currently the City population is 64% white and the staff is 80% white.

Source: University of Southern California, Program for Environmental and Regional Equity, Presentation of Demographic Trends - Seattle Metropolitan Region, US Census.

How will this impact the future of ES?

6. Rising Sea Levels

The current and best available science projects sea level rise in the range of 3.9" to 56.3" for the Puget Sound area by 2100, with an additional 36" of storm surge during extreme events.

Source: "Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future", The National Academies Press, 2012.

How will this impact the future of ES?

7. Increased Use of Lean in Government

Washington State, whose Lean initiative began in September 2013, has reported a range of 18 specific improvements resulting in \$5.92 million in savings, \$27.4 million in avoided costs, and \$3.16 million in additional revenue.

Source: Six Sigma Daily - Government and Lean Imperative

How will this impact the future of ES?

8. Extreme Precipitation

By the 2050s, winters will be wetter and summers dryer in the Puget Sound. Projections for precipitation in spring and fall are not yet conclusive.

Sources: The Third National Climate Assessment, 2014, Ch. 2; Seattle Public Utilities Combined Sewer Overflow Reduction Program: Precipitation Intensity, Duration and Frequency Update, prepared by CH2M Hill for SPU; SPU's Puma Climate Research Project

How will this impact the future of ES?

9. More Digital Citizens

In the next 20 years, Millennials and the iGeneration will define what it means to be a digital citizen (a person with extensive skills, knowledge, and access to the internet to interact with public and private organizations).

Source: Alliance for Innovation, The Next Big Things

How will this impact the future of ES?

10. Worker Safety

In 2015-2016, City of Tacoma employees reported 667 injuries. With an aging workforce and many jobs involving physical labor, COT could see an increase in on the job injury (or re-injury).

Source: HR Performance Measures 2017-2018 Budget Book

How will this impact the future of ES?

11. Growth and Greater Population Density



The City of Tacoma is expecting 59,800 new housing units and 127,000 new residents to Tacoma by 2040. Active discussions are also taking place regarding annexation.

Source: City of Tacoma Comprehensive Plan

How will this impact the future of ES?

12. Retirement Wave



Currently, approximately 19% of TERS members are eligible to retire with full benefit and 12% at a reduced benefit. If the current membership did not change, 36% would be eligible to retire at full benefit by 2022 (and an additional 14% at reduced benefit).

Source: SAP; TERS

How will this impact the future of ES?

13. Gender Imbalance



Tacoma's population is 51% female but only 29% of the City of Tacoma employees are female.

Source: OEHR

How will this impact the future of ES?

14. Generational Workforce



25% of Tacoma's workforce is 55 and older (Boomers) and 23% is 20-34 (Millennials).

Source: SAP

How will this impact the future of ES?

15. Infrastructure Investment Gap



The City of Tacoma is facing 10s of millions of dollars of deferred maintenance costs over the next 20 years including Fleet, Facilities, Public Assembly Facilities, Transportation (Link Light Rails), and Streets.

Source: OMB Forecast Presentation (Slide 35)

How will this impact the future of ES?

16. Less Affordable Housing



In the third quarter of 2016, median home prices have surged 11% compared to only a 1.6% increase in average weekly income. Over longer periods both rents and home prices have continued to outpace income growth by a significant margin. 27% of all rental households in Tacoma are severely cost burdened.

Source: News Tribune, ATOM Data Solutions; Tacoma Community Needs Survey

How will this impact the future of ES?

17. Increased Unionization



The number of collective bargaining units at the City of Tacoma has increased from 27 to 29 in the past 3 years.

Source: COT Human Resources

How will this impact the future of ES?

18. More Modular and Open Technology



Modular systems will become increasingly important as they have been shown to reduce the cost of system ownership, accelerate the deployment of new functionality, and improve overall system stability. Governments will need to prioritize the move to an open environment, while understanding the related licensing and security considerations of open source solutions.

Source: Booz Allen Experts Predict the Trends That Will Impact Government Technology in 2016

How will this impact the future of ES?

19. Embracing Innovation



Since April 2015, 100 mid-sized cities have partnered with the Bloomberg Foundation to create a strong foundation for the effective use of data and evidence within city government using innovations from the Behavioral Insights Team, the Harvard Government Performance Lab, and Results for America.

Source: What Works Cities

How will this impact the future of ES?

20. Increased Financial Health

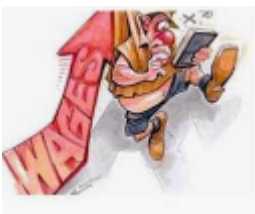
In the past two biennia, the City of Tacoma has achieved a 15% General Fund Reserve and received a one level upgrade in its bond rating by Moody's. In 2016 Fitch Ratings upgraded the City's bond rating from A+ to AA.



Source: Moody; Fitch; OMB

How will this impact the future of ES?

21. Increased Labor Costs per FTE



The actual labor costs per budgeted FTE is growing faster than inflation and has increased by 21% from 2009 to 2015 (3.25%/year).

Source: SAP

How will this impact the future of ES?

22. Increased Homelessness

The 2016 Point-in-Time count indicated a 37% growth in the homeless population from 2015 and a 100% increase in the chronically homeless population.



Source: Tacoma Community Needs Survey

How will this impact the future of ES?

23. Increased Demand for Work/Life Balance and Alternative Schedules

Since 1996 in the U.S. the percentage of organizations offering telecommuting has increased from 20% to 60%. 80% to 90% of the US workforce says they would like to telework at least part time.



Source: HR Professionals Magazine, Next Big Things, Alliance for Innovation.

How will this impact the future of ES?

24. Sharing Economy

Uber, AirBnB, Kickstarter - peer-to-peer networks are driving the economy; increases collaboration and collective consumption. Global average - in a global survey, 68% of people were willing to share their own assets and 66% were willing to share from others.



Source: Next Big Things, the Alliance for Innovation

How will this impact the future of ES?

25. Increased Automation



Oxford researchers estimate that by 2035, nearly half of all occupations in America could be automated. This is known as "unmanning."

Source: Alliance for Innovation, The Next Big Things

How will this impact the future of ES?

26. Citizen Engagement

Only 20 percent of Tacomas contacted their local elected officials over a 12-month period, while about 16% reported attending a public meeting. Low-income residents also aren't as active as those earning six-figure incomes. Low participation can lead to small interest groups having an overstated voice.



Source: Next Big Things, the Alliance for Innovation. And life according to Johnny O.

How will this impact the future of ES?

27. Structural Youth Unemployment

According to Larry Summers, the percentage of workers aged 25-54 who are not working has risen by a factor of more than three times over the course of a lifetime. If current trends continue it could well be that a generation from now a quarter of the middle-aged demographic will be out of work at any given moment.



Source: Next Big Things, the Alliance for Innovation; Larry Summers writes in the 2015 Global Economic Outlook

How will this impact the future of ES?

28. Accelerating Technology Adoption

Over the last century there has been a strong trend of ever-more-rapid adoption of new technology adoption.



Source: Pew Research Center

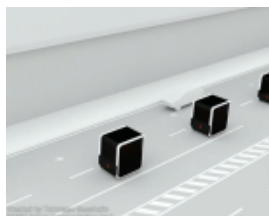
How will this impact the future of ES?

29. Advances in Transportation

When 2020 hits, you can bet it will start the decade of driverless cars.

Florida is the only state to expressly allow a truly driverless car. District of Columbia law also allows on the road in autonomous mode. Some other states have passed legislation allowing for AVs to be tested on public roads.

Drones are already beginning to have applications for government operations.

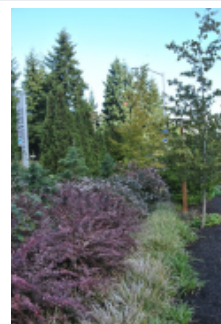


Source: [Wanis Kabbaj, Business Insider](#)

How will this impact the future of ES?

30. Green Infrastructure

In 2015, governments, water utilities, companies, and communities spent nearly \$25 billion on payments for green infrastructure for water. More than 400 programs in 62 countries invested in the natural ability of forests, wetlands, grasslands, and other ecosystems to ensure clean, reliable water supplies for cities and communities, and to combat threats from rapid urban expansion and agricultural pollution.



Source: [Alliance for Green Infrastructure](#)

How will this impact the future of ES?

31. Changes in Regulation

President Trump has issued an Executive Order directing the Administrator of the EPA and the Assistant Secretary of the Army for Civil Works to review the Clean Water Rule and publish for notice and comment a proposed rule rescinding or revising the rule, as appropriate and consistent with law. EPA and the Army intend to immediately implement the Executive Order and publish a Notice of Proposed Rulemaking to rescind or revise the rule.



Will the State enforce the status quo? After this administration will we see stricter requirements? Tertiary treatment for wastewater, end of pipe treatment for storm?

Source: [EPA](#)

How will this impact the future of ES?

32. Women in Leadership

Most Americans say women are about equal to men when it comes to key leadership traits such as intelligence and capacity for innovation, yet women still make up a small share of top leadership jobs.



Source: [PEW Research Center](#)

- US House and Senate, and State Legislatures has grown from 2-25% from 1965 to 2017.
- Governors 2 to 8%
- Mayors 20%
- Municipal Public Works Directors climbed to 6% 2004 to 2011, County Directors 17%.
- ES Management 16%

How will this impact the future of ES?

33. Contaminants of Emerging Concern

Contaminants of emerging concern (CECs), including pharmaceuticals and personal care products (PPCPs), are increasingly being detected at low levels in surface water, and there is concern that these compounds may have an impact on aquatic life.

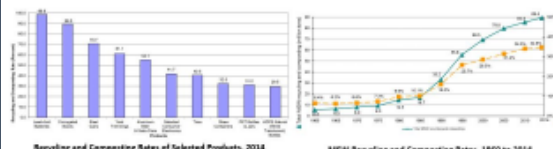


Since the TSCA Inventory was established in 1979, EPA has reviewed more than 39,000 new chemical submissions (called Premanufacture Notices or PMNs) and an additional 15,000 PMN exemption notices.

Source: [EPA](#)

How will this impact the future of ES?

34. Recycling & Composting Increase



Recycling and composting is a great way to recover value from our waste streams. But our rates are based on the amount of garbage disposed. As customers continue to practice conservation and increase diversion practices, it will put constraints on utility rate structures.

Source: [EPA](#)

How will this impact the future of ES?

35. Solid and Hazardous Waste



Washington is estimated to have 20 to 55 years of landfill capacity, which is reasonable number of years to plan and develop new landfill capacity.

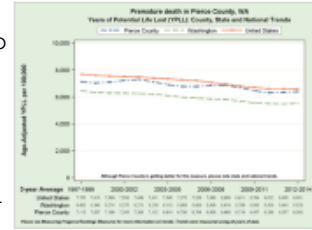
Source: ASCE Report Card for Washington

How will this impact the future of ES?



36. Health

2017 Report shows Pierce County with no overall movement putting us below average at 24th of 39 Counties.



Requirements for CDL drivers continue to become more onerous.

Source: County Health Rankings & Roadmaps

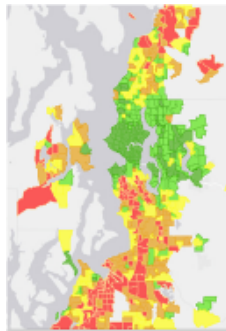
How will this impact the future of ES?



37. Opportunity

Equity is when everyone has access to the opportunities necessary to satisfy their essential needs, advance their well-being and achieve their full potential. Additionally, it is when social, economic and political outcomes are not predicted based upon a person's race, gender, age, or sexual orientation.

The PSRC Opportunity map is based on 20 indicators in 5 major categories, education, economic health, housing & neighborhood quality, transportation/mobility, health & environment.



Source: PSRC maps

How will this impact the future of ES?



38. Turnover Rates

A healthy annual employee turnover rate for an organization is approximately 10%. The City has a 2% turnover rate. How does this affect the way we think?



Source: City Manager's Office & Strategic Planning Office

How will this impact the future of ES?



39. WILD CARD –

What trend have you observed?

(Remember to include the direction of the trend e.g. increasing, decreasing...)

Source:

How will this impact the future of ES?



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What trend have you observed?

(Remember to include the direction of the trend e.g. increasing, decreasing...)

Source:

How will this impact the future of ES?

