



MANAGEMENT CONSULTING • INVESTMENT BANKING
for the ENGINEERING and CONSTRUCTION INDUSTRY

Investment Banking

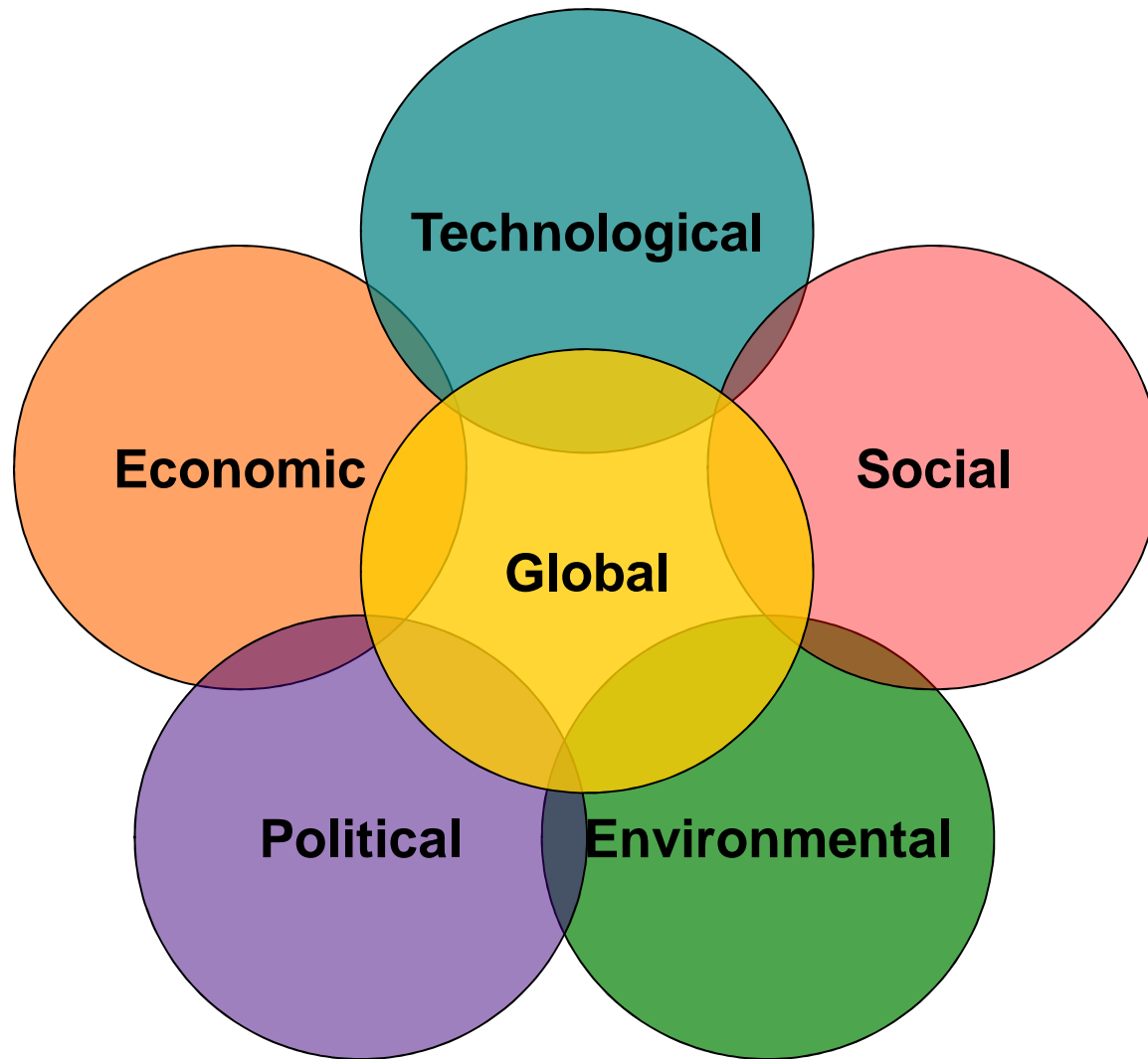
Trends Shaping Future Project Delivery

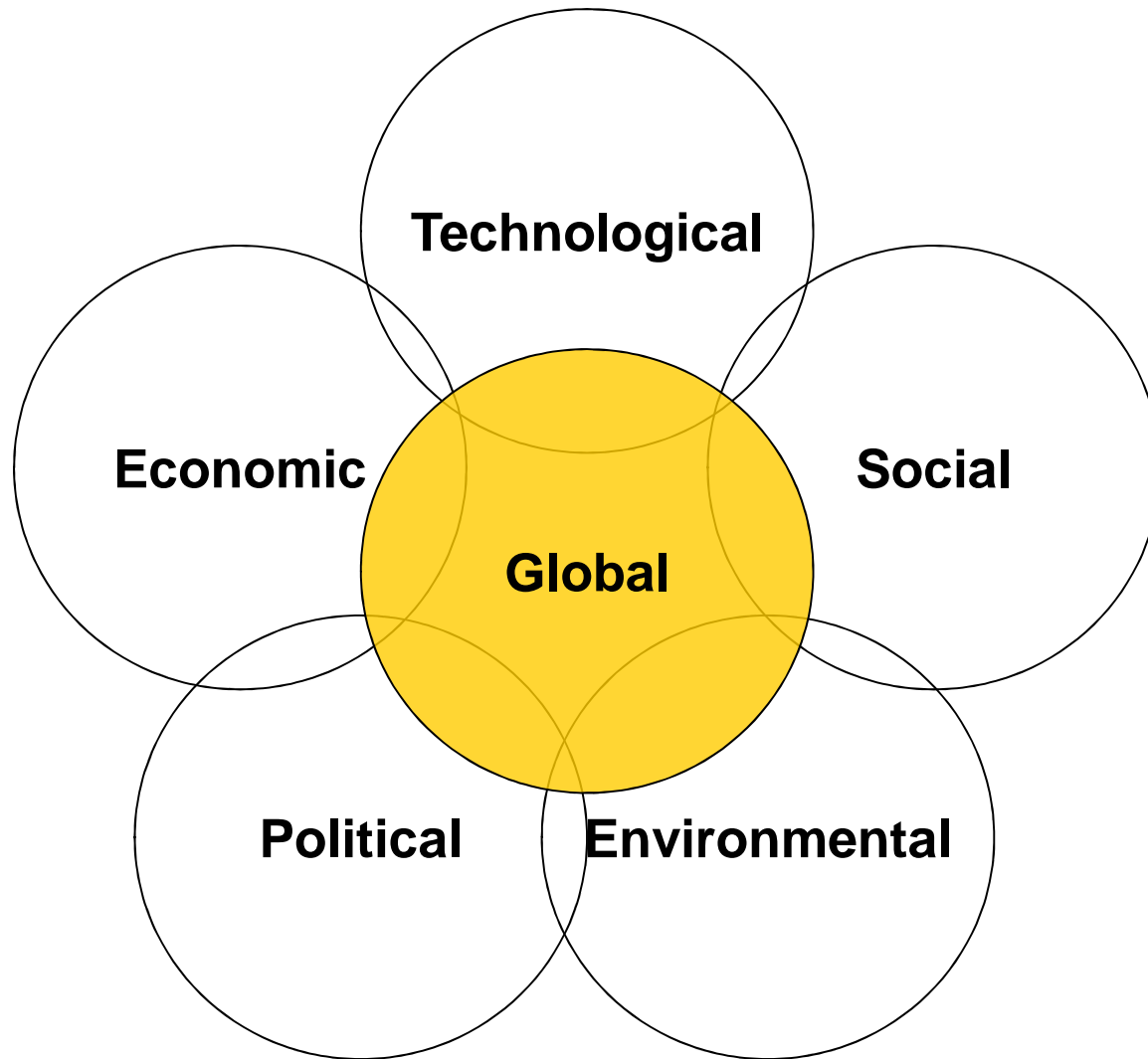
NWCCC
November 2, 2011

“It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change.”

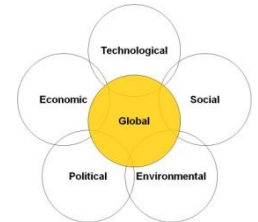
– Charles Darwin

1. Understand the trends
2. Use the trends to make strategic decisions

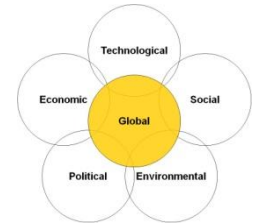




- § Global interdependence.
- § Repositioning of economic power.
- § Continued industry consolidation.

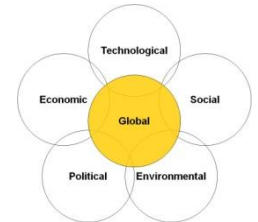


- § Continued volatility in commodities and energy.
- § Geopolitical uncertainty.

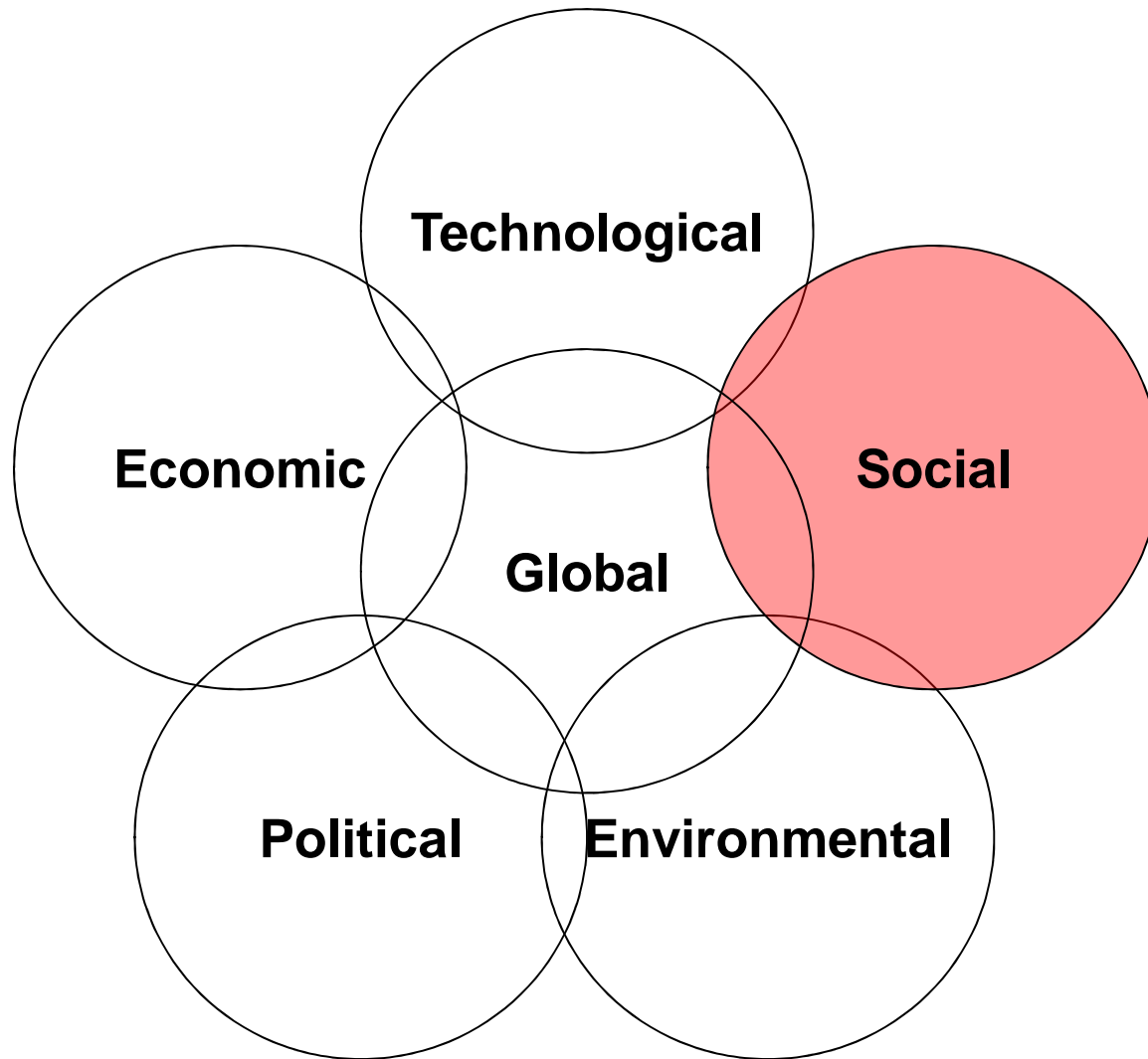


- § Global positioning for mega-contractors.
- § Increased sophistication of buyers/providers of construction services.
- § Strengthened value propositions.

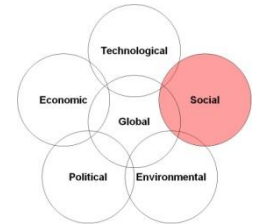




- § Worldwide dispersal of clients, projects, offices and staff.
- § Proliferation of alternative funding and delivery mechanisms (P3s).



- § Aging population.
- § Workforce mobility.



Availability of College Graduates – The Problem Is Demographic



- § Between 2005 and 2010, Census Bureau data indicates that:
- ✕ 15 to 24 year-old age group has increased by one million
 - ✕ 25 to 44 year-old age group has decreased by 436,000
 - ✕ 45 to 64 year-old age group has increased by 8.2 million

The Population is Aging, and This Hurts Construction

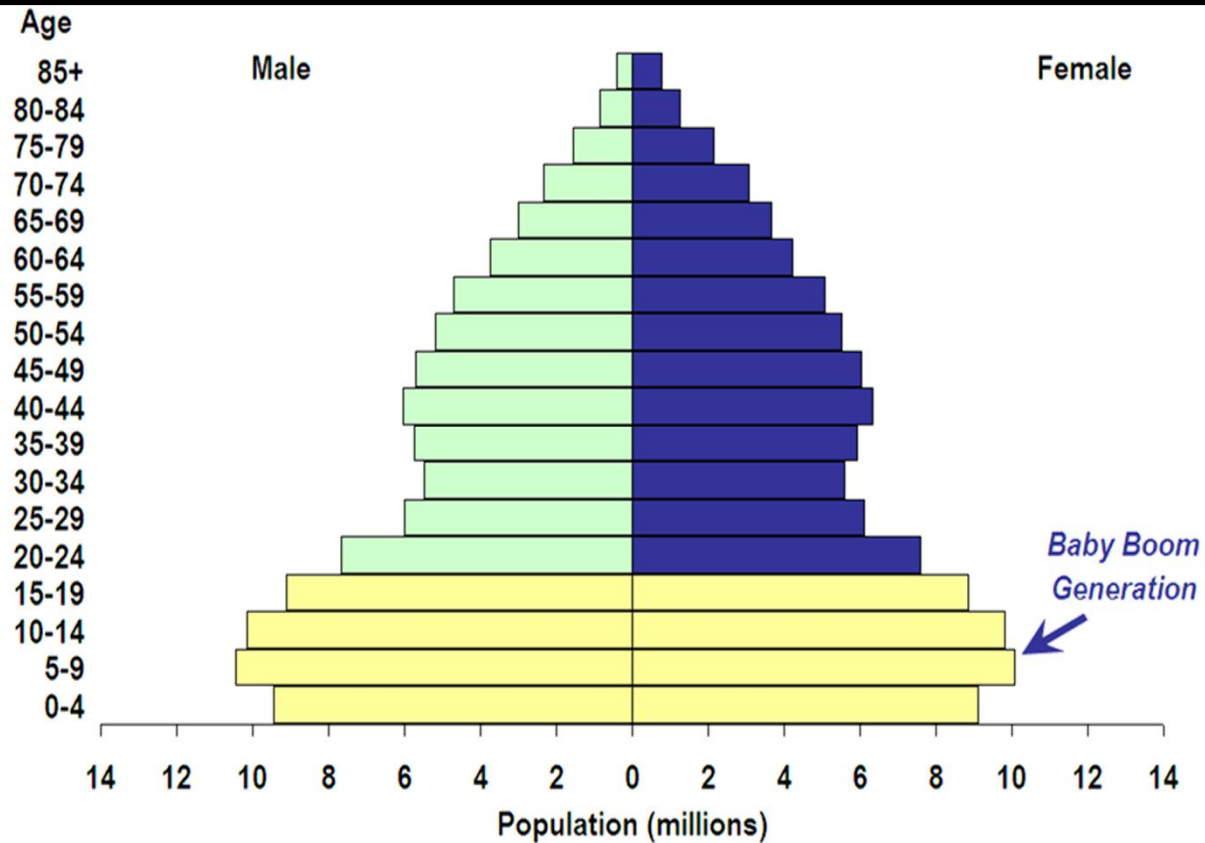


- § Elderly population in every state will grow at a faster rate than the total population.
- § Growth rate in the 65 and older population will be about 3.6 times the growth rate of the nation.
- § In 2030, 10 states will have more people 65 and older than under 18.

State	Median Age in 2030	Change from 2000
NM	44.8	10.2
WY	46.4	10.2
MT	46.0	8.5
ME	46.9	8.3
WV	46.7	7.8
DE	43.6	7.6
ND	43.2	7.0
FL	45.4	6.7
VT	43.9	6.2
PA	42.1	4.1

The Age Profile of the U.S. Population has Changed, From the End of the Baby Boom...

United States population by age and sex, 1967



Source: U.S. Census Bureau.

...to the Present and...



United States population by age and sex, 2005

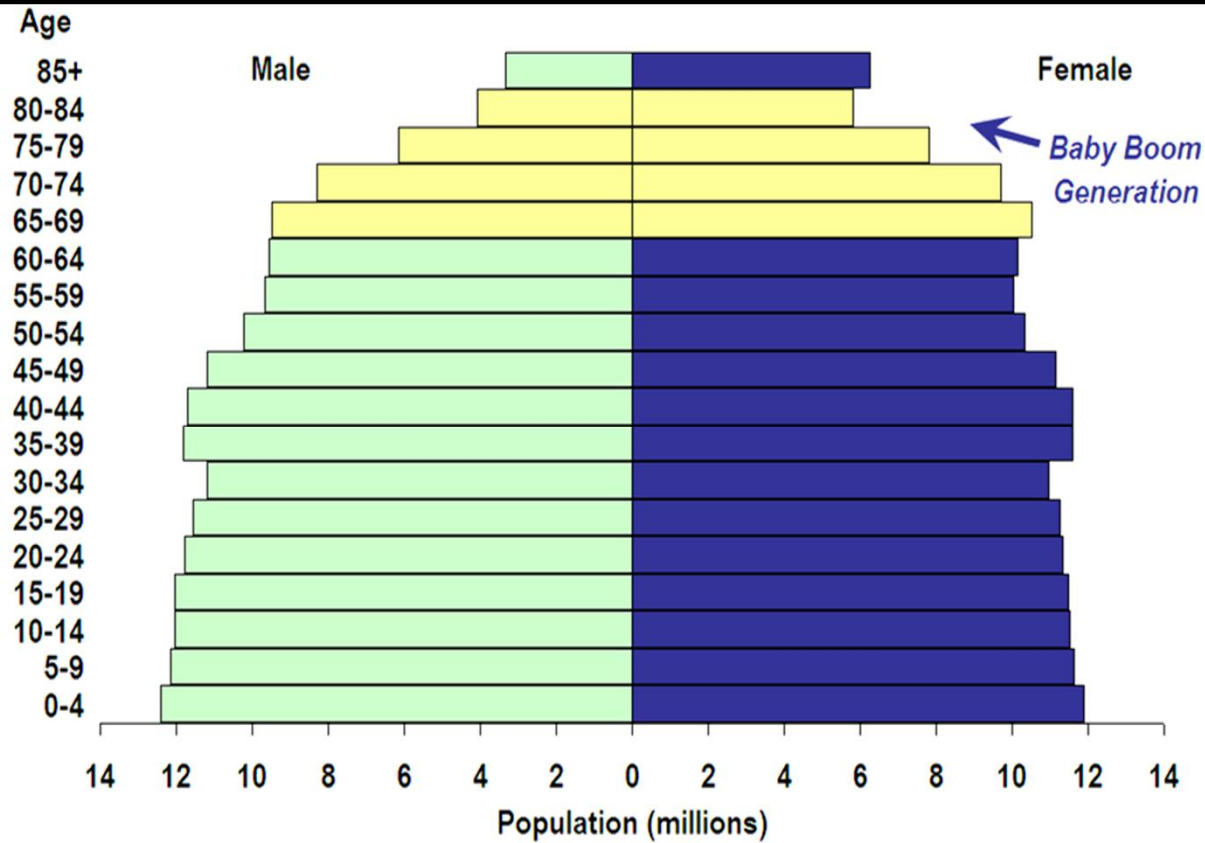


Source: U.S. Census Bureau.

...will Continue Into the Future



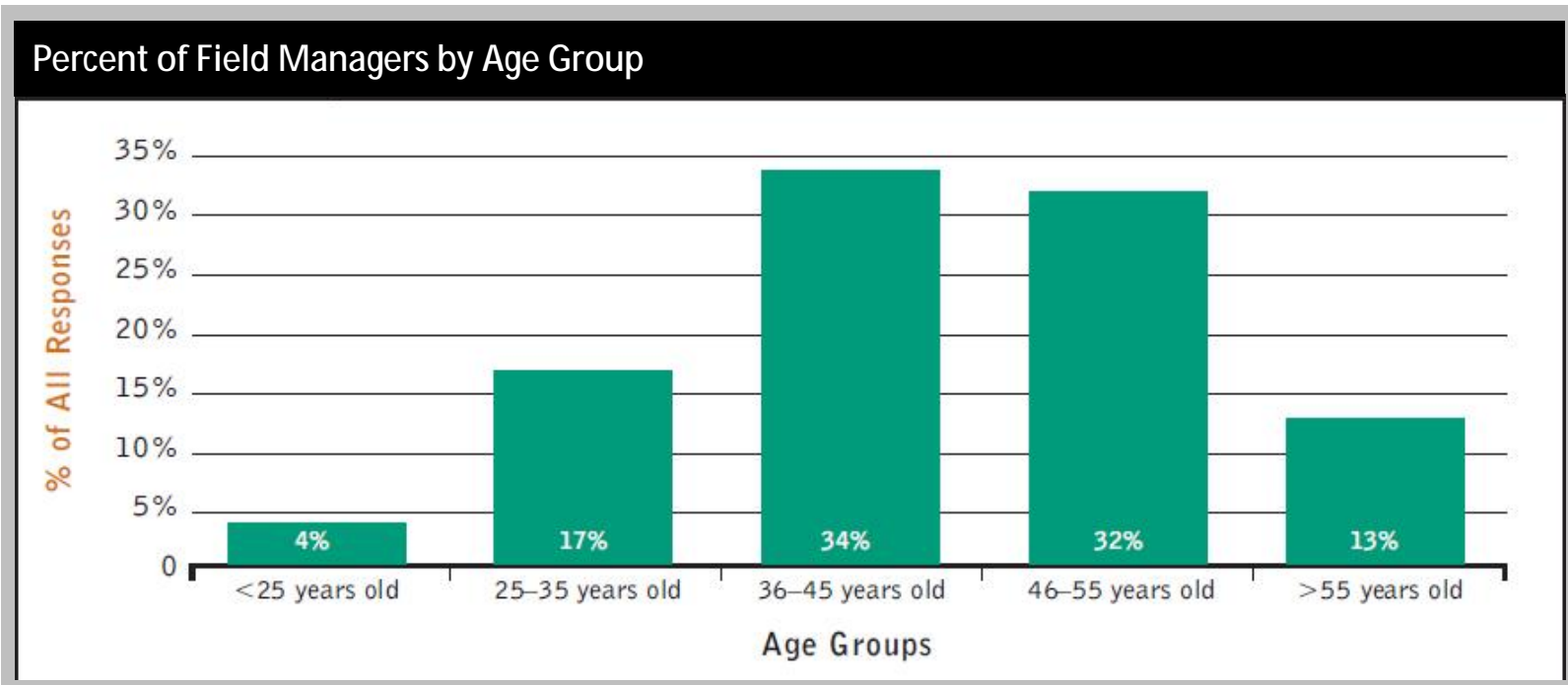
United States population by age and sex, 2030 (projected)



Source: U.S. Census Bureau.

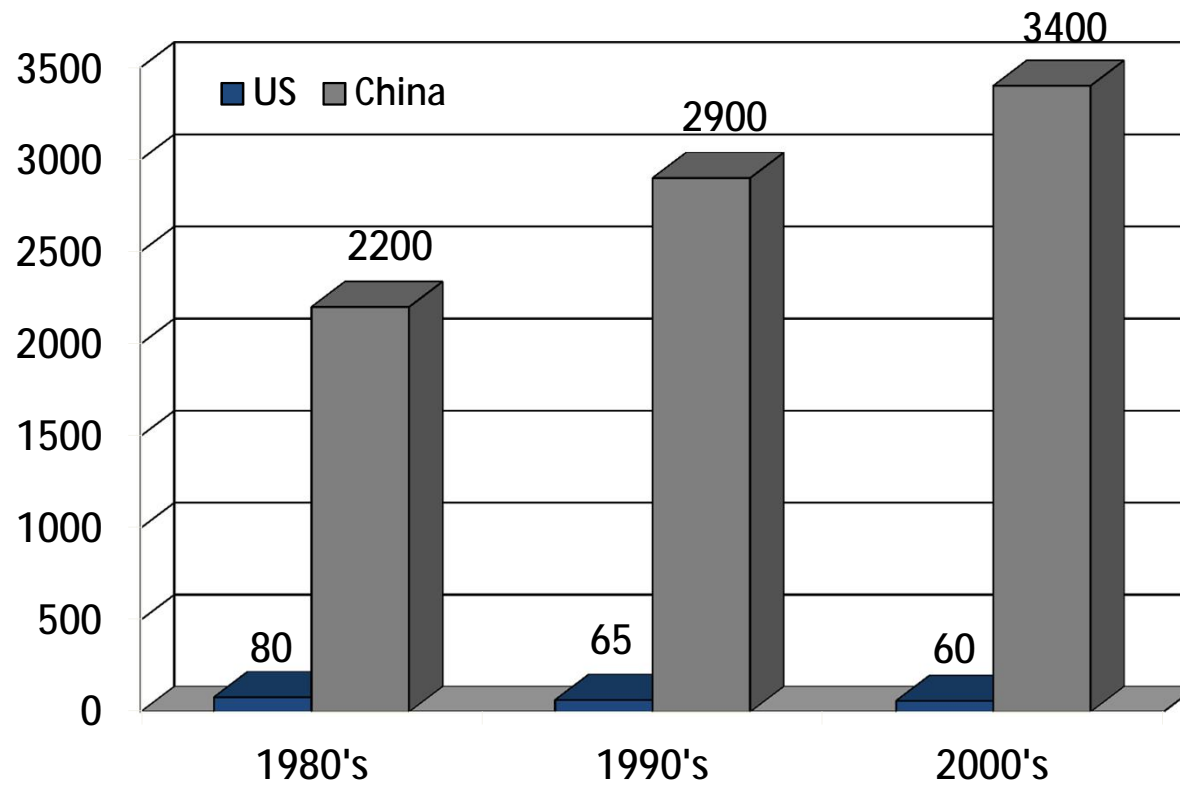
- § Jobsrated.com ranked 200 job titles based on five factors:
 - ✘ Physical and emotional work environment
 - ✘ Income
 - ✘ Long-term employment outlook
 - ✘ Physical demands
 - ✘ Stress
- § No construction industry job placed in the top 100
- § Ten industry jobs ranked lower than “Maid”
- § And five ranked below “Nuclear Decontamination Tech!”

The Superintendent Corps is Especially Endangered



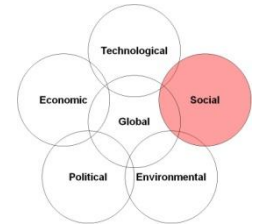
Source: FMI 2009 Contractor Productivity Survey Results

Number of Engineering Undergraduates

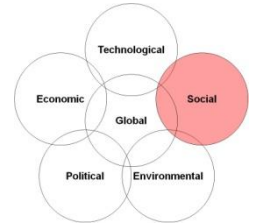


- § The statistics for this industry are challenging, and have been for a long time
- § Programs like ACE mentoring have sought to increase the attractiveness of the industry – so far little headway
 - ⌘ 75 million “millennials” are entering or have just entered the workforce – what do they want?

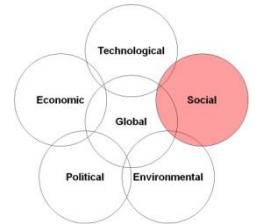
§ Urbanization will reach 60% of world population by 2030.



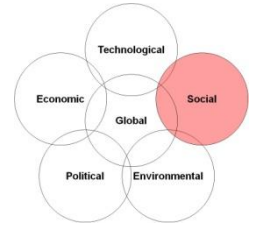
- § Middle class growth – 1 billion people by 2020.
- § Sustainability a key social value.
- § Consumer technological literacy increases.



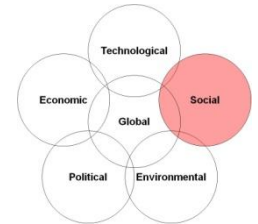
§ Increased demand for retirement communities, assisted living, healthcare, extended care, safety.



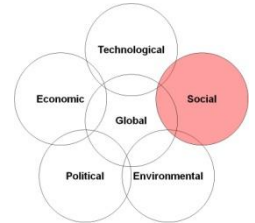
§ Urbanization drives investments in infrastructure, housing, and new work spaces.

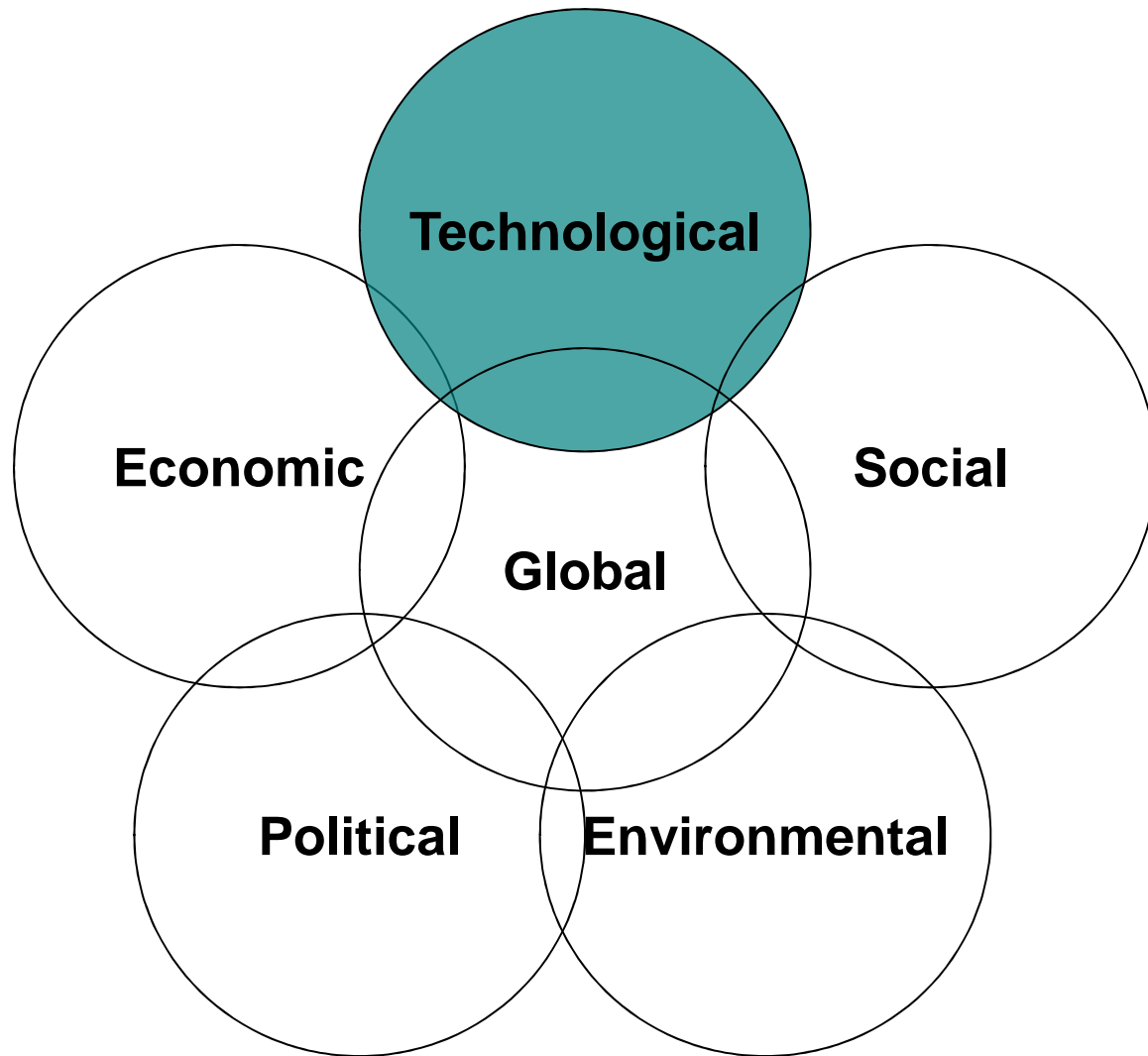


§ Sustainable and “environmentally beneficial” design will be fully mainstream.

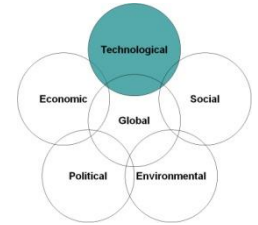


§ Mobile workforce will need new processes and skills to support distributed work.

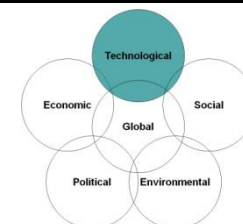




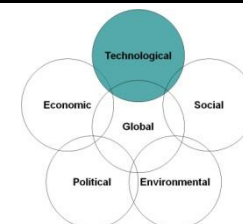
§ Continued productivity drivers: prefabrication, IPD, BIM, cost competition.



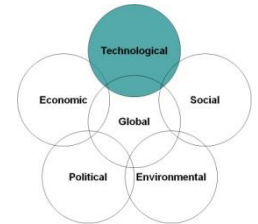
§ The big technological leap.



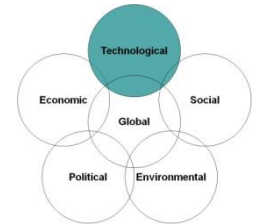
§ Instant access to information globally.



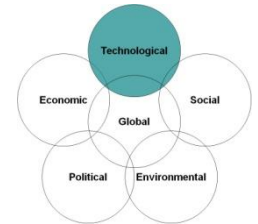
§ Technology advances sustainable and renewable initiatives.

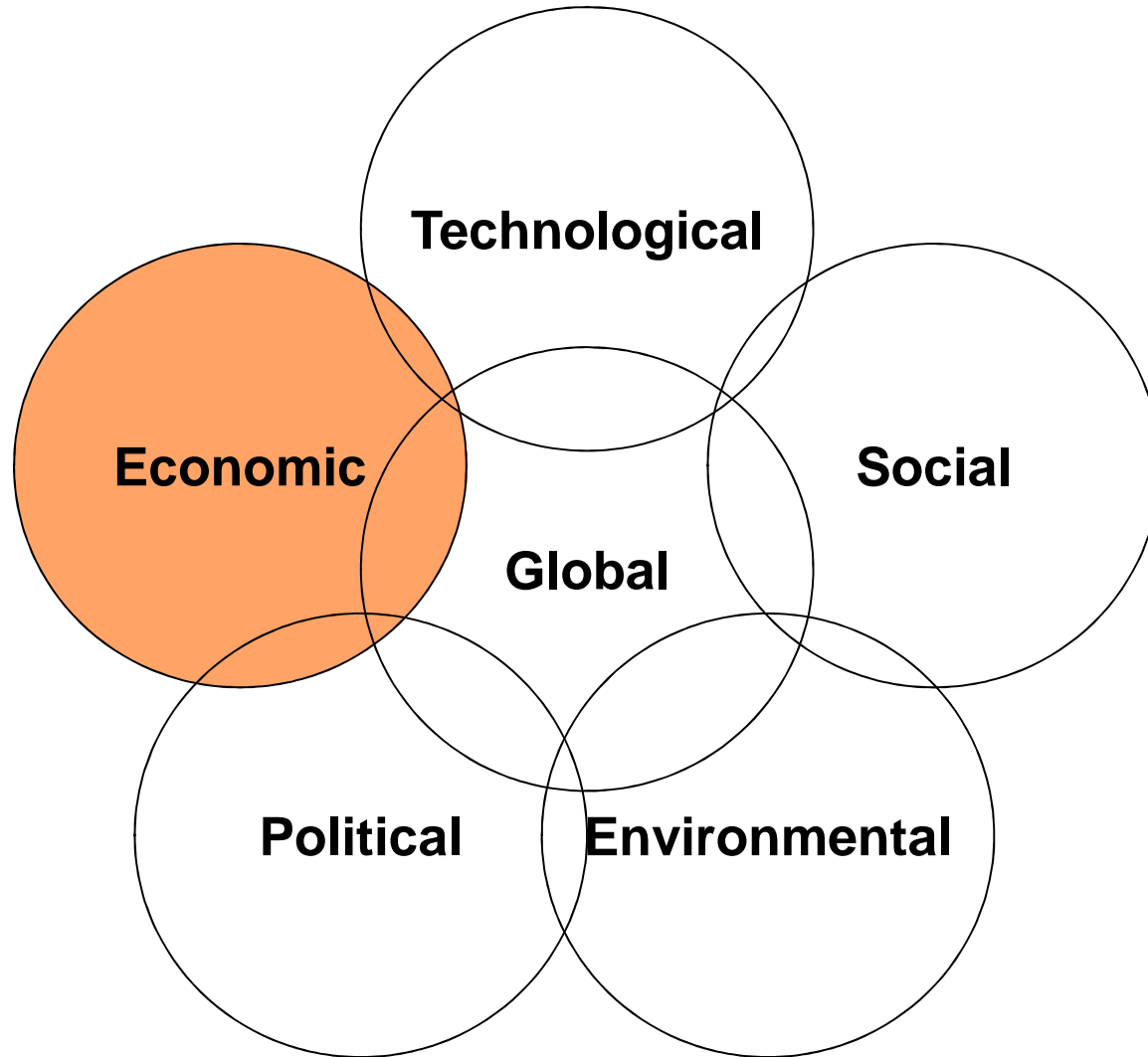


- § Melding of design and construction through increased automation.
- § Technology drives new collaborative delivery methods.

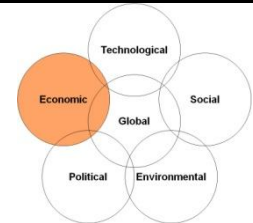


- § High competition for technically trained workforce.
- § New design technologies lead to new roles in designing and managing building information.

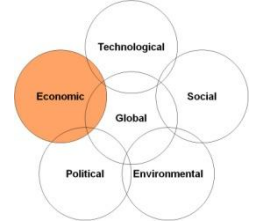
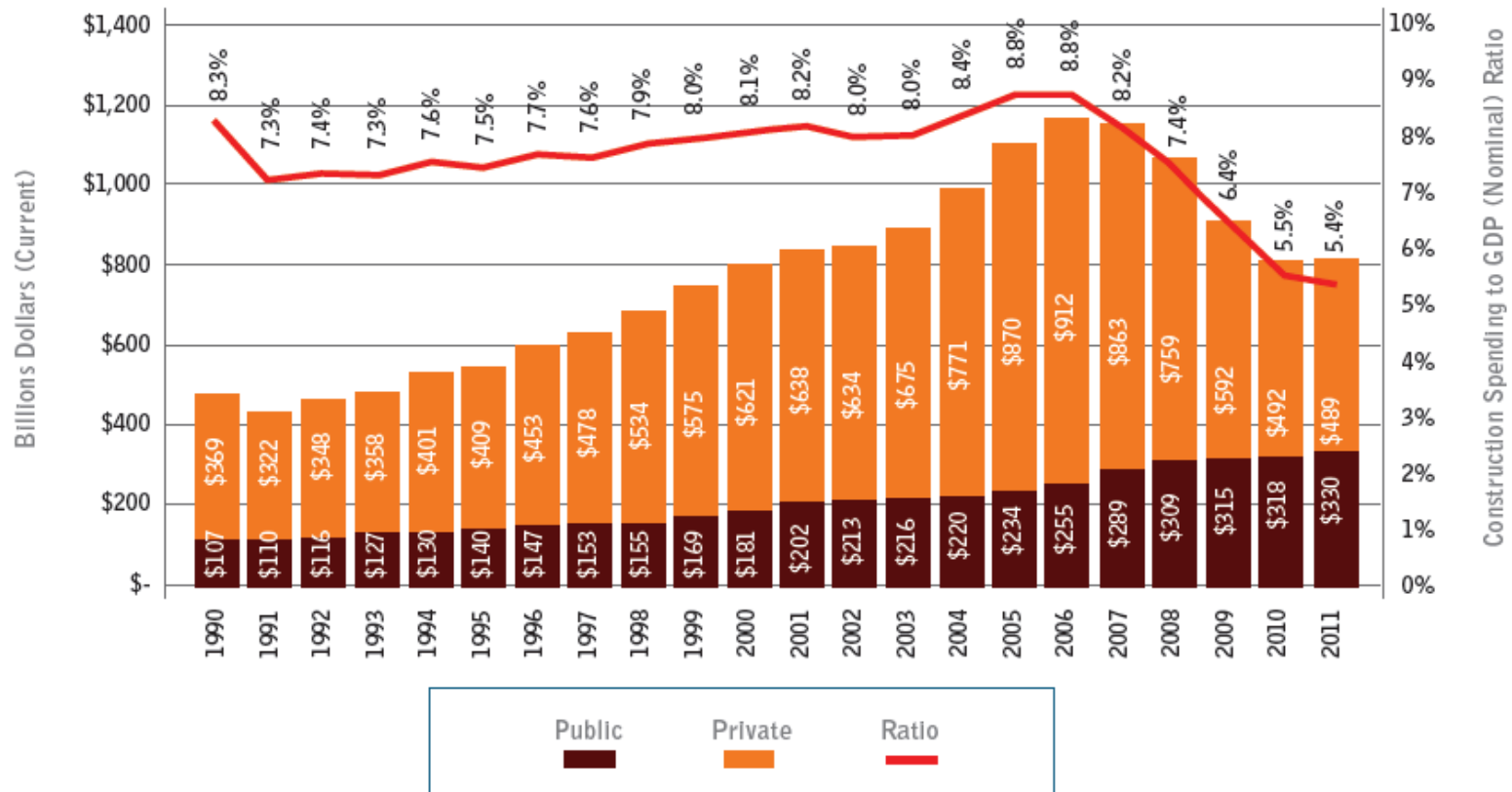


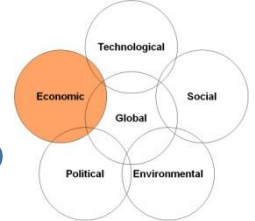


§ Continued volatility.

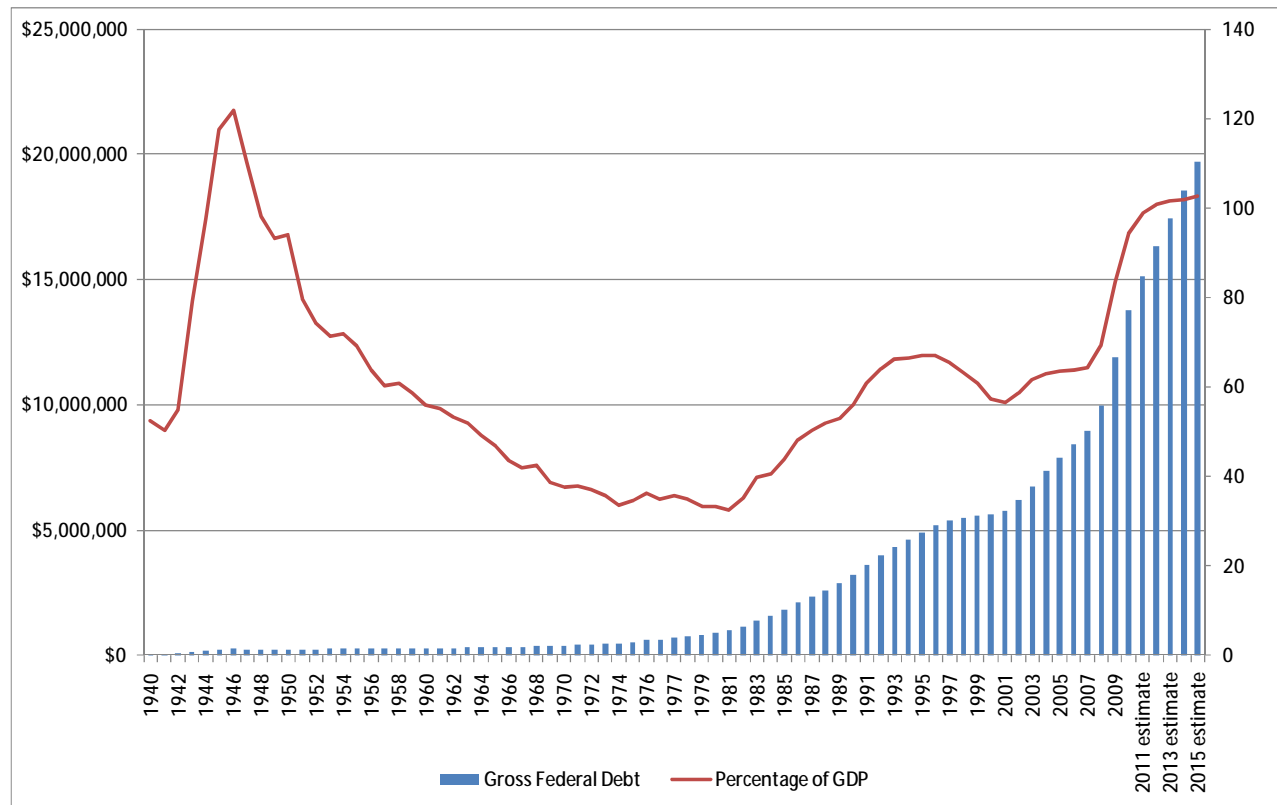


U.S. Total Construction Spending vs. GDP

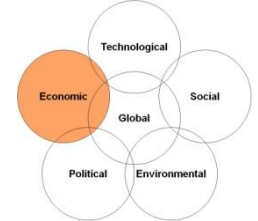




§ U.S. Federal Debt – in dollars and as a percentage of GDP



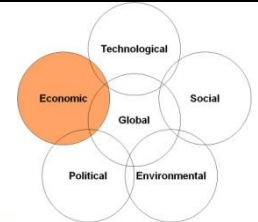
§ U.S. Construction Put In Place



Millions of Current Dollars
3rd Quarter 2011

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
RESIDENTIAL BUILDINGS																
Single Family	238,269	251,123	267,205	311,879	378,934	434,912	417,518	306,990	187,648	106,960	113,377	117,912	137,957	164,169	201,928	234,236
Multi Family	29,740	32,342	34,268	36,420	41,321	48,699	54,324	52,570	48,083	32,215	17,718	19,136	23,920	29,182	34,435	39,945
Improvements*	84,054	89,096	100,487	102,952	118,153	133,896	147,973	140,909	122,016	114,027	118,588	134,005	142,045	147,727	155,113	164,420
Total Residential	352,063	372,561	401,960	451,251	538,408	617,507	619,814	500,468	357,747	253,202	249,684	271,053	303,922	341,078	391,476	438,601
NONRESIDENTIAL BUILDINGS																
Lodging	16,850	15,486	10,869	10,712	12,363	12,840	18,139	28,706	35,806	25,422	11,948	10,037	10,438	11,064	11,950	12,786
Office	61,001	59,495	44,277	39,418	42,404	45,763	54,187	65,259	68,563	57,593	39,163	37,205	39,065	41,409	43,894	46,088
Commercial	67,873	68,506	62,520	61,529	67,057	70,242	76,713	89,684	85,200	54,528	40,896	43,759	45,509	48,695	53,077	57,323
Health Care	24,615	24,776	27,139	29,329	32,184	34,430	38,472	43,766	46,902	45,026	40,523	41,334	42,574	46,405	52,438	58,206
Educational	58,848	64,960	73,862	74,316	74,250	79,687	84,928	96,758	104,890	102,792	89,429	87,641	91,146	96,615	104,344	113,735
Religious	8,071	8,806	8,339	8,569	8,159	7,735	7,749	7,540	7,225	6,214	5,344	4,382	4,250	4,505	4,866	5,158
Public Safety	10,049	9,558	7,827	7,161	7,019	7,314	7,768	10,201	13,083	13,999	12,879	12,364	11,993	12,473	13,096	13,751
Amusement and Recreation	20,168	20,207	17,328	16,847	16,695	15,236	19,033	21,212	21,829	18,991	17,092	16,750	17,420	18,117	19,385	20,742
Transportation	22,887	24,409	25,781	24,710	25,059	25,052	27,964	31,877	34,746	36,831	38,304	37,155	38,269	40,183	42,594	45,575
Communication	18,958	20,173	18,457	14,550	15,546	18,906	22,219	27,580	26,487	19,865	18,276	19,007	19,957	21,155	22,424	23,770
Manufacturing	32,184	30,364	22,926	21,508	23,360	28,568	32,677	40,633	53,234	58,025	38,877	36,544	35,813	37,604	39,860	43,049
Total Nonresidential Buildings	341,503	346,739	319,325	308,649	324,096	345,773	389,849	463,216	497,965	439,286	352,731	346,177	356,436	378,225	407,928	440,184
NONBUILDING STRUCTURES																
Power	32,289	35,025	36,804	41,450	35,638	38,371	42,244	66,055	81,075	89,183	83,832	89,700	94,185	102,661	111,901	125,329
Highway and Street	54,002	60,554	57,484	57,139	58,623	64,139	72,040	76,682	81,361	82,175	82,996	80,506	82,117	86,222	90,534	94,155
Sewage and Waste Disposal	10,949	12,006	16,237	16,581	17,929	19,867	23,186	24,872	25,696	24,925	26,171	25,648	26,930	28,277	29,973	32,072
Water Supply	8,587	9,397	12,442	12,492	12,620	14,028	14,960	15,798	16,752	15,412	15,258	14,953	15,551	16,484	17,473	18,871
Conservation and Development	3,362	3,967	3,621	3,935	4,044	4,453	5,130	5,260	5,234	5,757	6,966	6,757	7,095	7,379	7,601	7,905
Total Nonbuilding Structures	109,190	120,949	126,588	131,597	128,854	140,858	157,560	188,667	210,118	217,451	215,223	217,564	225,878	241,024	257,481	278,331
Total Put in Place	802,756	840,249	847,873	891,497	991,358	1,104,138	1,167,223	1,152,351	1,065,830	909,939	817,638	834,793	886,236	960,327	1,056,885	1,157,116

§ U.S. Construction Put In Place

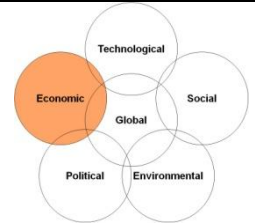


Change From Prior Year - Current Dollar Basis

3rd Quarter 2011

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
RESIDENTIAL BUILDINGS																
Single Family	6%	5%	6%	17%	22%	15%	-4%	-26%	-39%	-43%	6%	4%	17%	19%	23%	16%
Multi Family	2%	9%	6%	6%	13%	18%	12%	-3%	-9%	-33%	-45%	8%	25%	22%	18%	16%
Improvements*	<u>7%</u>	<u>6%</u>	<u>13%</u>	<u>2%</u>	<u>15%</u>	<u>13%</u>	<u>11%</u>	<u>-5%</u>	<u>-13%</u>	<u>-7%</u>	<u>4%</u>	<u>13%</u>	<u>6%</u>	<u>4%</u>	<u>5%</u>	<u>6%</u>
Total Residential	6%	6%	8%	12%	19%	15%	0%	-19%	-29%	-29%	-1%	9%	12%	12%	15%	12%
NONRESIDENTIAL BUILDINGS																
Lodging	2%	-8%	-30%	-1%	15%	4%	41%	58%	25%	-29%	-53%	-16%	4%	6%	8%	7%
Office	17%	-2%	-26%	-11%	8%	8%	18%	20%	5%	-16%	-32%	-5%	5%	6%	6%	5%
Commercial	7%	1%	-9%	-2%	9%	5%	9%	17%	-5%	-36%	-25%	7%	4%	7%	9%	8%
Health Care	8%	1%	10%	8%	10%	7%	12%	14%	7%	-4%	-10%	2%	3%	9%	13%	11%
Educational	12%	10%	14%	1%	0%	7%	7%	14%	8%	-2%	-13%	-2%	4%	6%	8%	9%
Religious	9%	9%	-5%	3%	-5%	-5%	0%	-3%	-4%	-14%	-14%	-18%	-3%	6%	8%	6%
Public Safety	3%	-5%	-18%	-9%	-2%	4%	6%	31%	28%	7%	-8%	-4%	-3%	4%	5%	5%
Amusement and Recreation	3%	0%	-14%	-3%	-1%	-9%	25%	11%	3%	-13%	-10%	-2%	4%	4%	7%	7%
Transportation	17%	7%	6%	-4%	1%	0%	12%	14%	9%	6%	4%	-3%	3%	5%	6%	7%
Communication	2%	6%	-9%	-21%	7%	22%	18%	24%	-4%	-25%	-8%	4%	5%	6%	6%	6%
Manufacturing	<u>-3%</u>	<u>-6%</u>	<u>-24%</u>	<u>-6%</u>	<u>9%</u>	<u>22%</u>	<u>14%</u>	<u>24%</u>	<u>31%</u>	<u>9%</u>	<u>-33%</u>	<u>-6%</u>	<u>-2%</u>	<u>5%</u>	<u>6%</u>	<u>8%</u>
Total Nonresidential Buildings	8%	2%	-8%	-3%	5%	7%	13%	19%	8%	-12%	-20%	-2%	3%	6%	8%	8%
NONBUILDING STRUCTURES																
Power	30%	8%	5%	13%	-14%	8%	10%	56%	23%	10%	-6%	7%	5%	9%	9%	12%
Highway and Street	7%	12%	-5%	-1%	3%	9%	12%	6%	6%	1%	1%	-3%	2%	5%	5%	4%
Sewage and Waste Disposal	9%	10%	35%	2%	8%	11%	17%	7%	3%	-3%	5%	-2%	5%	5%	6%	7%
Water Supply	13%	9%	32%	0%	1%	11%	7%	6%	6%	-8%	-1%	-2%	4%	6%	6%	8%
Conservation and Development	9%	18%	-9%	9%	3%	10%	15%	3%	0%	10%	21%	-3%	5%	4%	3%	4%
Total Nonbuilding Structures	<u>14%</u>	<u>11%</u>	<u>5%</u>	<u>4%</u>	<u>-2%</u>	<u>9%</u>	<u>12%</u>	<u>20%</u>	<u>11%</u>	<u>3%</u>	<u>-1%</u>	<u>1%</u>	<u>4%</u>	<u>7%</u>	<u>7%</u>	<u>8%</u>
Total Put in Place	8%	5%	1%	5%	11%	11%	6%	-1%	-8%	-15%	-10%	2%	6%	8%	10%	9%

- § New growth frontiers, emerging markets.
- § Increased global competition and pricing pressure.



The Big are Getting Bigger



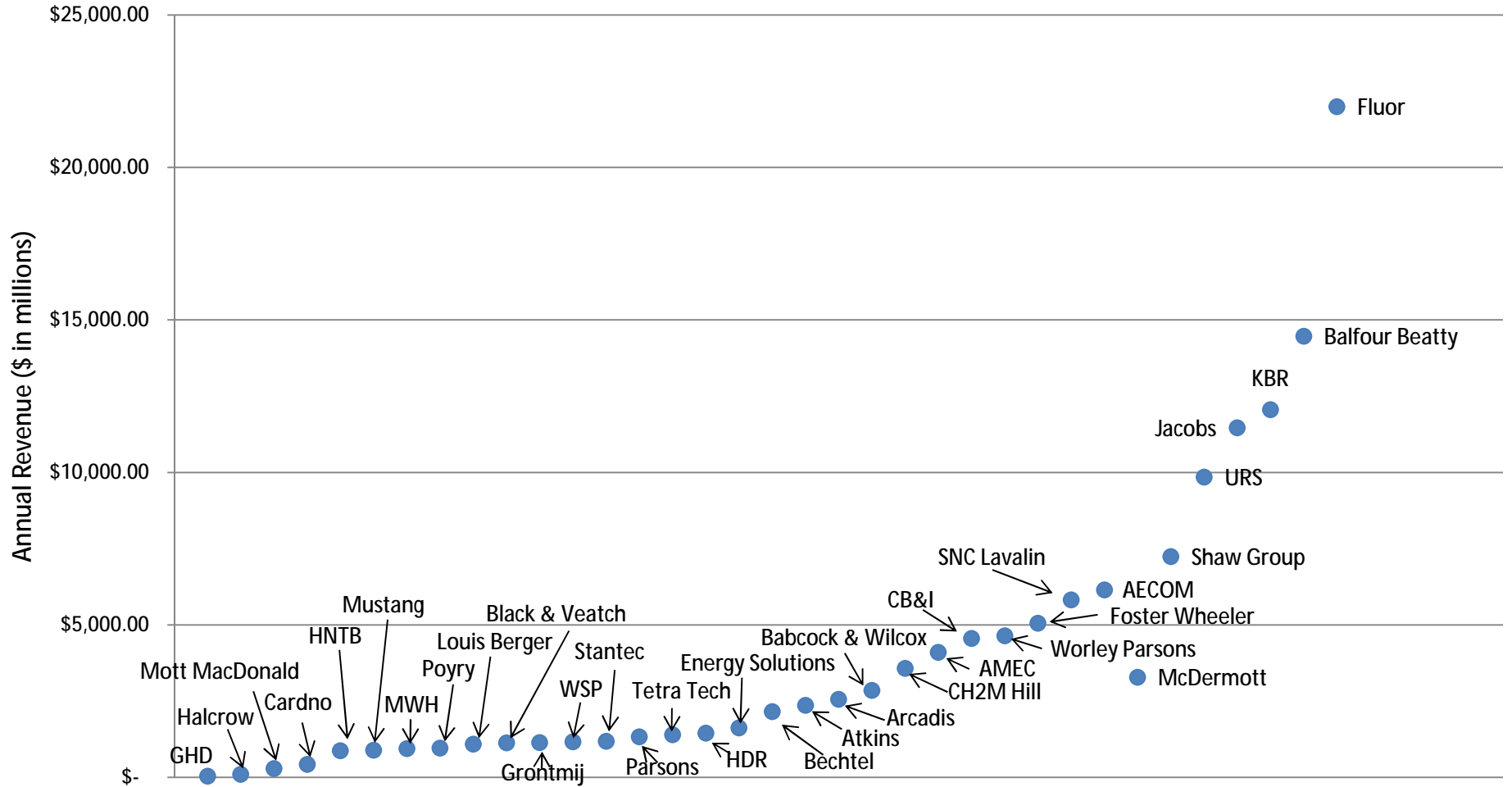
ENR Position	Year 2000 ENR 500 Avg Revenue	Year 2010 ENR 500 Avg Revenue	Revenue Growth Rate (CAGR)
Top 5	\$1562.2	\$4382.3	10.9%
Top 6 - 10	\$859.8	\$1990.3	8.8%
Top 11 - 15	\$600.4	\$1282.4	7.9%
Top 16 - 20	\$432.3	\$919.3	7.8%
Top 21 - 25	\$350.3	\$613.3	5.8%

Source: Engineering News Record (ENR) Top 500 Design Firms Sourcebook

Large Firm Growth is Outpacing Smaller Firms



2009 E&C Firm Revenue



Source: Engineering News Record (ENR) Top 500 Design Firms Sourcebook

A Lot Can Change in a Few Years

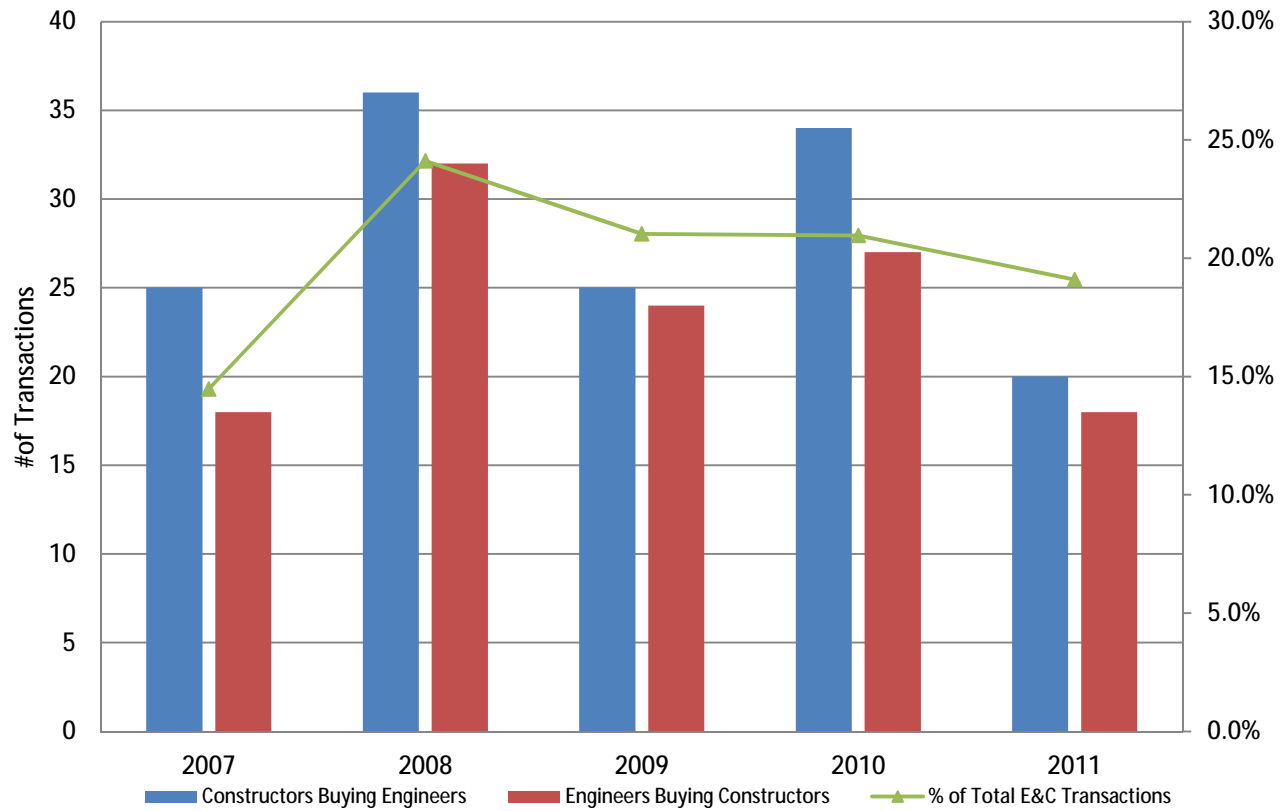


2000 ENR Design 500 - Top 25

1	Bechtel Group, San Francisco, CA	
2	URS, San Francisco, CA	
3	Fluor Daniel Inc., Aliso Viejo, CA	
4	Jacobs Engineering Group, Pasadena, CA	
5	Foster Wheeler Corp, Clinton, NJ	
6	CH2M Hill, Denver CO	
7	Parsons Brinckerhoff, New York, NY	← Acquired by Balfour Beatty in 2009
8	Parsons Corp., Pasadena CA	
9	Kellog Brown & Root, Houston, TX	← Acquired and subsequently divested by Halliburton
10	Earth Tech, Long Beach, CA	← Acquired by AECOM in 2008 from Tyco
11	ABB Lummus Global, Inc. Bloomfield, NJ	← Acquired by CB&I in 2007
12	Black & Veatch, Overland Park, KS	
13	Tetra Tech, Inc., Pasadena, CA	
14	Raytheon Engineers & Constructors, Cambridge, MA	← Acquired by Washington Group, then URS in 2007
15	Duke Engineering & Services, Charlotte, NC	← Acquired by Framatome ATP in 2002
16	The IT Group Inc., Pittsburgh, PA	← Acquired by Shaw in 2002
17	Stone & Webster, Boston, MA	← Acquired by Shaw in 2000
18	Montgomery Watson, Pasadena, CA	← Merged with Harza in 2001
19	Kaiser Group, Fairfax, VA	
20	Camp, Dresser & McKee, Cambridge, MA	
21	HNTB Corp, Kansas City, MO	
22	The Louis Berger Group, East Orange, NJ	
23	The Kvaerner Group, Tampa, FL	← Acquired by Skanska in 2000
24	BE&K Inc., Birmingham, AL	← Acquired by KBR in 2008
25	The ERM Group, Exton PA	

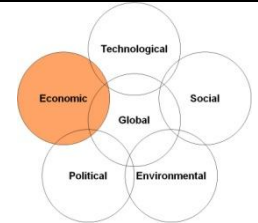
Source for Rankings: Engineering News Record (ENR) Top 500 Design Firms Sourcebook

Combination Transactions

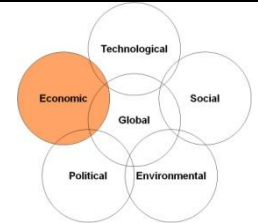


Source: Capital IQ

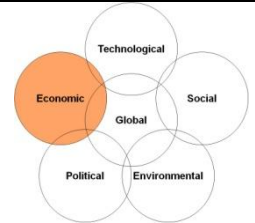
§ Inflation increases cost of resources and materials.

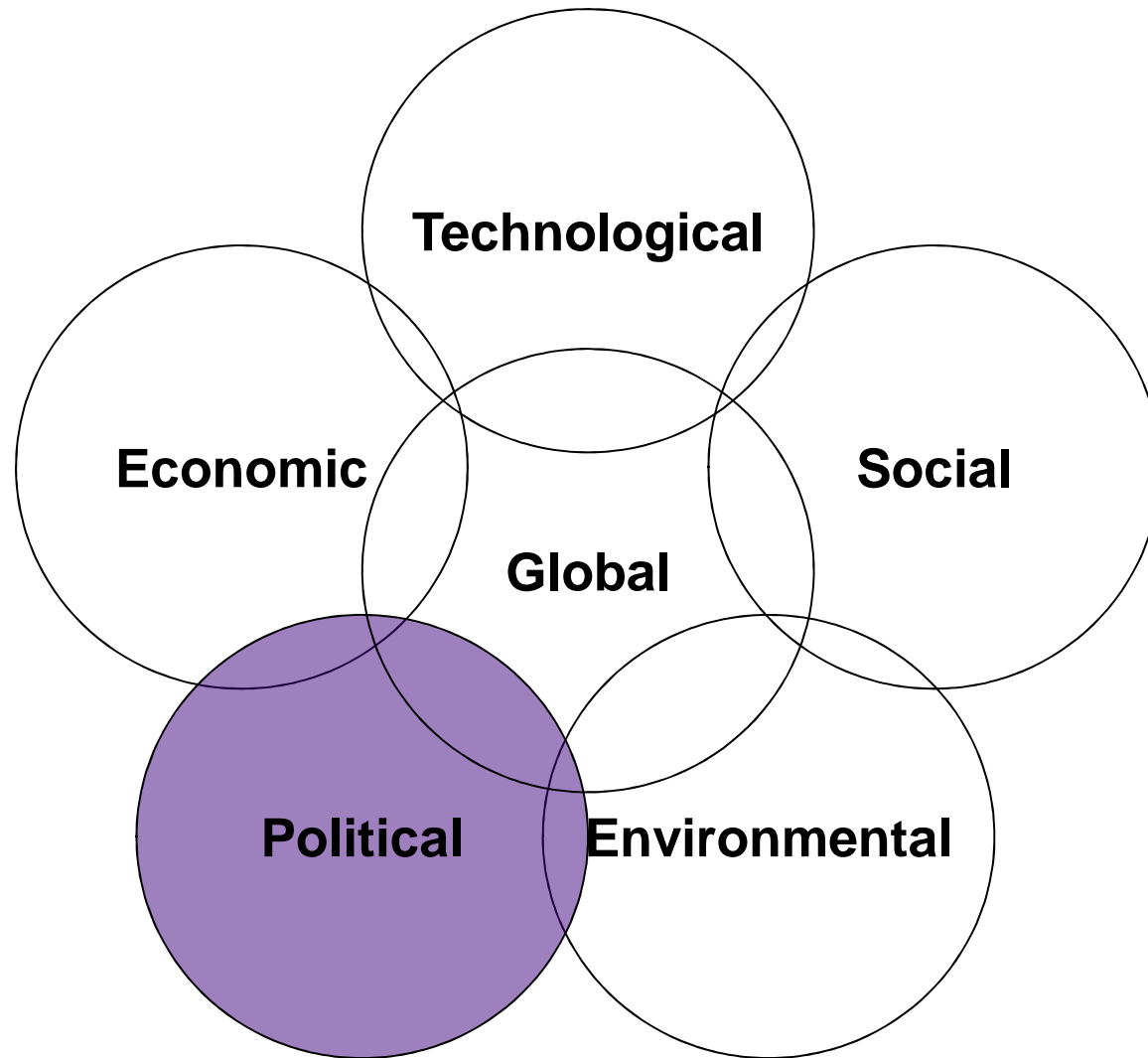


§ Worldwide infrastructure upgrades and investments.

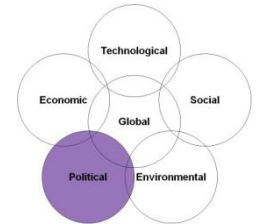


- § AEC industry continues to consolidate.
- § Increased need for business knowledge within the industry.

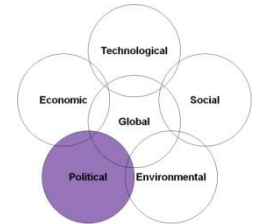




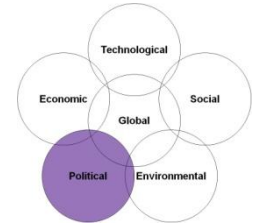
§ Governments struggle to achieve political solutions to long-term socio-economic challenges.

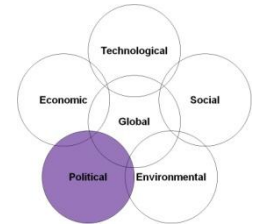


§ World leadership risks continue and geopolitical uncertainty increases.

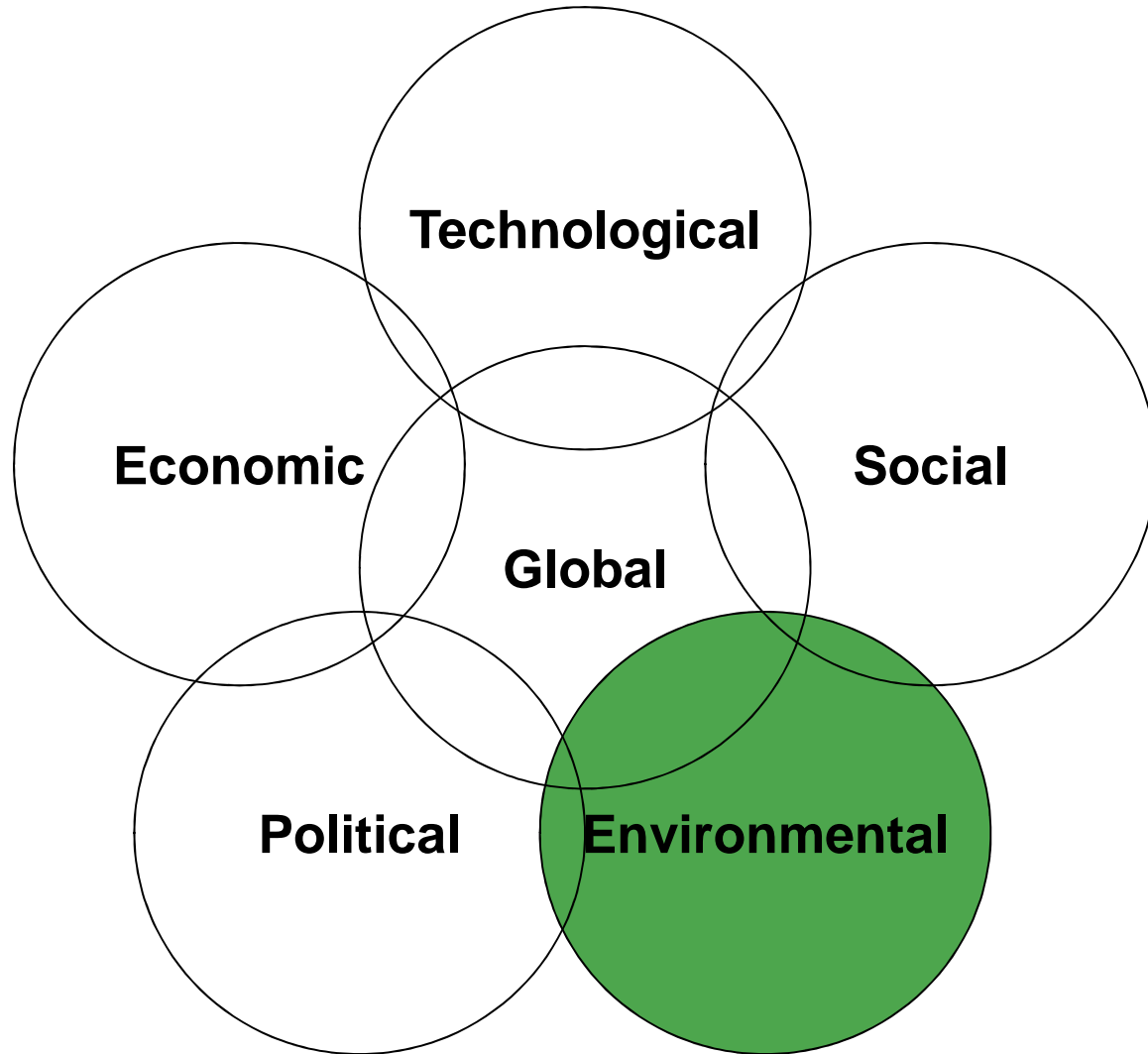


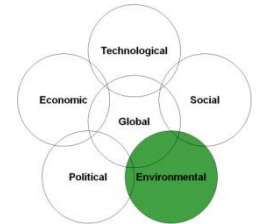
- § Worldwide scramble to secure access to resources in energy, water and brainpower.
- § International pressure to use resources sustainably.





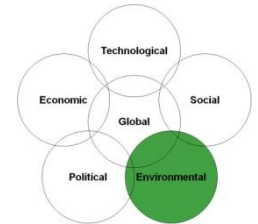
- § Emphasis on energy efficiency and less waste in design and construction.
- § Integration of new technologies and materials in existing and new infrastructure.
- § Increase in public-private-partnerships (P3s) to finance and deliver infrastructure projects.



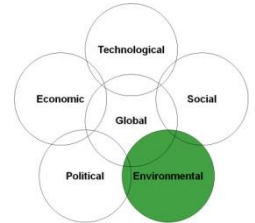


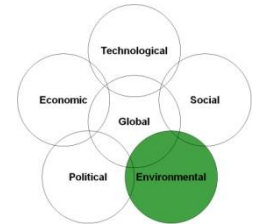
- § Rising competition for water and other natural resources.
- § Increased focus on sustainable resource management and allocation.
- § Continued growth in alternative energy sources.

- § Universal public pressure for stewardship/restoration of the natural environment continues to grow.
- § Increased regulations globally.



- § Continued growth in green construction and innovation.
- § Focus on energy efficiency and stringent building codes.
- § Sustainable design and construction requires sourcing and partnering with suppliers and local communities.





- § Research and development as well as innovation comes from non-traditional AEC firms.
- § Increased demand for highly specialized AEC firms.
- § More consulting assignments focused on scarce natural resources.

Forces of Change in the A/E/C Industry	Areas of Strategic Significance – Is Your Firm Prepared?
Global	<ul style="list-style-type: none"> - Infrastructure - Competition for resources - Interdependent global economies
Social	<ul style="list-style-type: none"> - Consumer technological literacy - Work force mobility - Aging population
Technological	<ul style="list-style-type: none"> - New technology - International standards - A/E/C industry technological advances
Economic	<ul style="list-style-type: none"> - Continued volatility in commodities and energy - Public/private partnerships - Erosion of U.S. economic dominance
Political	<ul style="list-style-type: none"> - Increased government control - Increased regulation - Limited restrictions on labor mobility
Environmental	<ul style="list-style-type: none"> - Sustainability - Increased regulation



Michael Landry
FMI Capital Advisors, Inc.
210 University Boulevard
Suite 800
Denver, CO 80206

303.398.7283
mlandry@fminet.com

Michael Landry, a Managing Director with FMI, is the sector leader for engineering and design firms within FMI's investment banking group. He advises leading firms on buying companies, merging with other companies, selling companies, and selling non-core operations. Michael also helps companies with capital structuring and sourcing, strategic planning and ownership transition issues.

Michael has significant domestic and international industry experience, having been Vice President of Finance for CH2M HILL, Vice President and Head of Mergers and Acquisitions for The Shaw Group and Director of Acquisitions and Divestitures for Duke Energy. Michael was also a development banker, focused on Asian infrastructure projects, for the Overseas Private Investment Corporation. Michael's experience base encompasses the water and wastewater, transportation, power, environmental, disaster recovery and response, general building, oil and gas, and chemicals sectors. In addition, he has experience with operations and maintenance, facilities management, program management, military housing and government contracting.

Michael received his Bachelor of Arts degree from Louisiana State University and a Master of International Management degree from the Thunderbird School of Global Management. He holds FINRA Series 79 and 63 licenses.

FMI is the largest provider of investment banking, management consulting and research to the engineering and construction industry. We work in all segments of the industry providing clients with value-added business solutions, including:

- § Mergers, Acquisitions and Financial Consulting
- § Strategy Development
- § Market Research and Business Development
- § Leadership and Talent Development
- § Project and Process Improvement

Founded by Dr. Emol A. Fails in 1953, FMI has professionals in offices across the U.S. FMI delivers innovative, customized solutions to contractors; construction materials producers; manufacturers and suppliers of building materials and equipment; owners and developers; engineers and architects; utilities; and construction industry trade associations. FMI is an advisor you can count on to build and maintain a successful business, from your leadership to your project and site managers.

Visit us at www.fminet.com