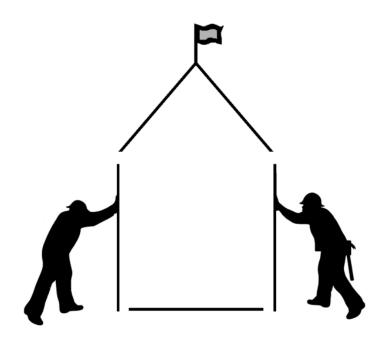
# Facility Needs and Costs in America's Great City Schools



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### Introduction

The nation's major city public school districts have substantial construction, renovation, modernization, and deferred maintenance needs because of the age and size of their school buildings, shifting populations, and the need to devote substantial resources to instructional personnel to meet their core academic mission. For instance, the average school is 61 years old in Richmond and 66 years old in Milwaukee, and the typical Great City School enrolls 120 more students than the national average.

The Council of the Great City Schools, the nation's primary coalition of large urban public school districts, surveyed its 65 member school systems to determine the scope and scale of that need. Fifty city school districts responded with data on their needs in dollars for new construction; repair, renovation, and modernization; and deferred maintenance. The cities were also asked to estimate what percentage of their total needs in each area could be started by the end of the first year if funds were available.

The 50 major city school systems responding to the survey (response rate of 77 percent) comprise some 8,561 elementary and secondary schools and enroll 5,258,404 students. The results of the survey indicate that the responding city school districts have approximately \$15.3 billion in new construction needs; \$46.7 billion in repair, renovation, and modernization needs; and \$14.4 billion in deferred maintenance needs. The total facilities needs in these 50 major city public school districts amount to about \$76.5 billion or approximately \$8.9 million per school, including new school construction.

The range of facilities needs is also substantial. Survey results show that the city school districts not only need to build new buildings to replace old, out-dated facilities, but also need annexes and additions to current buildings to accommodate such expanding needs as science and computer labs. Renovation and maintenance needs include HVAC upgrades; plumbing, roof, window, and door repairs; fire code and other safety upgrades; interior and exterior painting; sidewalk and parking lot repaving; electrical and lighting upgrades; locker and boiler replacements; kitchen upgrades; bus-depot repairs; masonry repairs; security systems; and updated technology.

If dollars were available, the responding city school districts estimate that, within one year of receipt of funds, they could begin meeting approximately 18 percent of their new construction needs (or \$2.7 billion); about 12 percent of their repair, renovation, and modernization needs (or \$5.6 billion); and some 29 percent of their deferred maintenance needs (or \$4.1 billion). In sum, the 50 districts could begin spending \$12.5 billion in facility projects or about 16 percent of total needs within one year of receipt of funds if they were available.

Because of the array of functions performed by school districts, this level of activity in the first year of aid would support over 165,000 construction jobs in a wider variety of occupations—masons, pavers, plumbers, electricians, HVAC specialists, painters, security experts, carpenters, roofers, and other trades—than investment in almost any other sector of the economy.

On the basis of enrollment and school-building data, the Council projects that its 65 member urban school systems need approximately \$20.1 billion in new construction, \$61.4 billion in repair, renovation, and modernization, and \$19.0 billion in deferred maintenance—or some \$100.5 billion in total facilities needs. The Council projects that its 65 member urban school districts could start some \$16.3 billion in projects in the first year if funds were available, supporting at least 215,000 construction and trade jobs and, in the process, upgrading the educational facilities and learning environment for approximately seven million inner city school students.

## **City-by-City Facility Needs**

City School System	Category	New Construction	Renovation, Repair, and Modernization	Deferred Maintenance	Description
	D 11	Φ 25 050 652	Ф 22 010 001	ΦC 100 000	
Albuquerque	Dollars % in	\$ 25,958,652	\$ 33,919,881	\$6,100,000	
	1st Year	100 %	70%	100 %	
Anchorage	Dollars	0	\$746,000,000	\$200,000,000	
	% in 1st Year	0	11%	10%	
Atlanta	Dollars	\$118,700,000	\$301,900,000	\$240,000,000	
Atlanta	% in 1st Year	40%	40%	70%	
Austin	Dollars	\$36,300,000	0	\$6,000,000	
	% in 1st Year	100%	0	100%	
Baltimore City	Dollars	\$1,200,000,000	\$1,600,000,000	\$900,000,000	
	% in 1st Year	10%	10%	75%	
					Darlana 5 and
Baton Rouge	Dollars	\$226,136,804			Replace 5 aged buildings and build 2 new schools
		\$4,800,000			3 six classroom additions
			\$48,388,049		Major renovation of 14 schools
			\$2,675,000		Lighting upgrades at 26 schools
			\$10,000,000		Exterior painting, pavement work, windows, doors, athletic fields
	Totals	\$230,936,804	\$61,063,049	\$611,200,147	\$903,200,000
	% in 1st Year	34%	37%	0	

City School System	Category	New Construction	Renovation, Repair, and Modernization	Deferred Maintenance	Description
Boston	Dollars	\$1,800,000,000	640,000,000	500,000,000	
	% in 1st Year	1%	7%	6%	
Broward County (Ft. Lauderdale)	Dollars	\$68,000,000	\$1,800,000,000	\$16,200,000	
	% in 1st Year	100%	8%	70%	
Buffalo	Dollars	0	\$150,000,000	\$50,000,000	
	% in 1st Year	0	10%	10%	
Charleston	Dollars	\$570,000,000	\$31,000,000	\$ 108,000,000	
	% in 1st Year	20.9 %	100%	4.6 %	
Charlotte- Mecklenburg	Dollars	\$70,963,200			4 new elementary schools
		\$71,100,000			3 elementary and 1 middle school
			\$108,366,521		12 renovation projects
				\$335,000	Ceilings
				\$2,866,000	Customer-driven renovations
				\$2,564,000	Electrical code compliance
				\$4,245,000	Electronic code compliance
				\$2,167,700	Floor covering
				\$42,838,699	HVAC
				\$930,000	Locker replacement
				\$2,446,300 \$32,083,000	Painting Paving, drainage,
					site improvement
				\$17,415,000 \$18,685,310	Plumbing
				\$18,685,310	Roofing Stage curtains
				\$4,767,500	Stage curtains  Structural
				\$1,365,000	Windows
	Totals	\$142,063,200	\$108,366,521	\$132,982,509	,, <u>11140</u>
	% in 1st Year	100%	100%	25%	

City School System	Category	New Construction	Renovation, Repair, and Modernization	Deferred Maintenance	Description
Chicago					15 annexes to
Cincago	Dollars	\$230,000,000			address
					overcrowding
		\$725,000,000			New construction of
					11 area schools
			\$000 0 c <b>r</b> coo		Building envelope,
			\$980,865,600		masonry, roofs,
					windows, etc.
					Replace/repair major
			\$1,915,806,750		building systems (mechanical,
					electrical, plumbing)
					Facility
			\$990,784,000		AC/dehumidification
			\$1,172,557,100		Interior renovations
			. , , ,		Exterior site and
			\$327,621,580		landscape
					ADA facility
			\$1,300,000,000		improvements
	Totals	\$955,000,000	\$6,687,635,030		\$7,642,635,0303
	% in				. , , , ,
	1st Year	19%	6%		
		_			
Cincinnati	Dollars	0	\$46,509,111	\$21,353,000	
	% in 1st Year	NA	10%	30%	
Clark County (Las Vegas)	Dollars	\$245,000,000			Full replacement of 9 aging schools
			\$400,000,000		Renovation of 18
			\$400,000,000		schools
					Replace major
					systems at 7 middle
			65,940,000		schools (e.g.,
					HVAC, electrical,
					and low voltage)
			12,950,000		Electrical upgrades
					at 14 schools
				\$3,795,000	Replace unsafe asphalt surfaces
				112.050.000	Deferred
				112,920,000	maintenance from
	TT 4 1	Φ <b>2.45</b> 000 000	¢470 000 000	¢116715000	assessment
	Totals	\$245,000,000	\$478,890,000	\$116,715,000	\$840,605,000
	% in 1st Year	50%	25%	25%	

City School System	Category	New Construction	Renovation, Repair, and Modernization	Deferred Maintenance	Description
Cleveland	Dollars	\$ 281,228,000	\$ 563,200,000	\$23,212,000	
	% in 1st Year	11%	0	22%	
Columbus	Dollars				
	% in 1st Year				
Dallas	Dollars	\$328,000,000	\$959,000,000	\$49,000,000	
	% in 1st Year	0	10%	10%	
Dayton	Dollars	NA	\$1,383,002	\$1,083,942	
	% in 1st Year	NA	2%	2.5%	
Denver	Dollars	\$4,000,000			Learning Landscape Middle School
		\$150,000,000			New schools
			\$360,000,000		New air conditioning in all schools
			\$50,000,000		Maintenance
			\$22,400,000		Planning maintenance
			\$50,000,000		HVAC systems
			\$10,000,000		ADA
			\$75,000,000		New schools
				\$15,000,000	Re-piping
				\$150,000,000 \$14,000,000	Maintenance Planning maintenance
				\$50,000,000	Security systems
				\$40,000,000	Building sustainability
				\$10,000,000	Fire suppression/ detection
	Totals	\$154,000,000	\$567,400,000	\$279,000,000	
	% in 1st Year	50%	75%	90%	
Duval County (Jacksonville)	Dollars	\$ 50,000,000	\$ 38,215,000	\$ 53,215,000	
	% in 1st Year	100 %	100%	50 %	

City School System	Category	New Construction	Renovation, Repair, and Modernization	Deferred Maintenance	Description
Fresno	Dollars	\$500,000,000	\$84,000,000	\$264,000,000	
	% in 1st Year	30%	46%	6%	
	-27 - 2711				
Guilford County (Greensboro)	Dollars	\$221,414,621	\$883,169,197		
	% in 1st Year	0	1%		
Hillsborough County (Tampa)	Dollars	\$45,000,000	\$185,000,000	\$218,716,105	
	% in 1st Year	40%	35%	25%	
Houston	Dollars	\$383,000,000	\$662,000,000	\$390,197,784	
Houston	% in 1st Year	42%	42%	90%	
T 11	D 11	Φ24.500.000	Φ20.270.00 <i>5</i>	Φ0.420.500	
Indianapolis	Dollars % in 1st Year	\$24,500,000	\$20,279,095 80%	\$8,430,500 40%	
Jackson (MS)	Dollars	\$40,000,000	\$176,230,000	\$74,770,000	
	% in 1st Year	0	25%	47%	
Kansas City (MO)	Dollars	0	\$65,000,000	\$30,000,000	HVAC and controls
			16,000,000	8,000,000	Roofing
			12,000,000		Classroom technology
			4,200,000	1,500,000	Electrical upgrades
			4,800,000		Plumbing upgrades Window and door
				3,800,000	replacement  Classroom
			8,600,000		renovations
		-		9,600,000	Lighting
				14,000,000	Building envelope
				3,700,000	Parking lots and sidewalks
	Totals	0	\$110,600,000	\$70,600,000	
	% in 1st Year	NA	60%	80%	

City School System	Category	New Construction	Renovation, Repair, and Modernization	Deferred Maintenance	Description
Los Angeles	Dollars	\$3,600,000,000	\$17,800,000,000	\$5,700,000,000	
	% in 1st Year	3-6%	6%	5%	
Louisville	Dollars % in	\$42,619,557	\$486,825,229	\$6,000,000	
	1st Year	20%	92%	100%	
Miami-Dade County	Dollars	\$257,000,000	\$1,461,000,000	\$264,000,000	
	% in 1st Year	50%	30%	50%	
Memphis	Dollars	\$105,000,000	\$94,000,000	\$335,000,000	
	% in 1st Year	66%	0%	10%	
Minneapolis	Dollars	\$355,000,000	\$404,000,000	\$693,000,000	
winneapons	% in 1st Year	8.7 %	4.6 %	7.3 %	
	1st Tear				
Nashville	Dollars	\$88,090,000	\$366,821,000	\$79,850,000	
	% in 1st Year	17%	7%	19%	
Newark	Dollars	\$2,000,000,000	\$1,600,000,000	\$200,000,000	
	% in 1st Year	25%	25%	40%	
Omaha	Dollars	\$65,000,000	\$209,000,000	\$110,000,000	
	% in 1st Year	3%	3%	75%	
Orange County (Orlando)	Dollars	\$35,869,089	\$169,590,260	\$13,245,180	
	% in 1st Year	100 %	100%	100 %	
Palm Beach County	Dollars	\$397,500,000	\$839,000,000	\$21,200,000	
	% in 1st Year	20%	20%	100%	

City School System	Category	New Construction	Renovation, Repair, and Modernization	Deferred Maintenance	Description
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Philadelphia	Dollars % in	\$49,337,269	\$1,510,876,654	\$11,683,700	
	1st Year	48.2%	4%	0%	
Pittsburgh	Dollars	0	\$100,637,054	\$58,575,000	
	% in 1st Year	0 %	15 %	0 %	
Portland	Dollars	0	\$548,000,000	\$1,333,953,307	
T OT VIIII	% in 1st Year	0%	3.6%	100%	
D:-1 1	Dollars	¢207.000.000	¢400,000,000	\$422.464.000	
Richmond	% in	\$207,000,000	\$408,000,000	\$423,464,000	
	1st Year	20%	35%	35%	
	- II	<b>\$2.10.000.000</b>	<b>* * * * * * * * * *</b>	<b>#</b> 100 000 000	
Rochester	Dollars % in	\$240,000,000	\$960,000,000	\$190,000,000	
	1st Year	18%	11%	8%	
San Diego	Dollars	\$275,000,000	\$7,700,000,000	\$250,000,000	
	% in 1st Year	20%	5%	6%	
San Francisco	Dollars	\$100,000,000	\$481,000,000	\$50,000,000	
Suittuielseo	% in	0%	3%	10%	
	1st Year	070	370	1070	
Seattle	Dollars	0	\$1,400,000		HVAC and playground at Old Van Asselt
			\$2,365,000		Exterior windows and HVAC at Boren
			\$2,200,000		Exterior windows and playground asphalt at Fairmount Park
			\$1,084,000		Exterior windows at Broadview Thompson
			\$1,774,000		Exterior windows at Aki Kurose
			\$1,516,000		Electrical upgrades at Montlake

City School System	Category	New Construction	Renovation, Repair, and Modernization	Deferred Maintenance	Description
Seattle (continued)			\$2,600,000		Roofing, exterior windows, and boiler at Meany
			\$2,300,000		Roofing and exterior windows at Salmon Bay
	Totals	0	\$15,239,000		
	% in 1st Year	0	100%		
St. Louis	Dollars	0	\$200,000,000	\$25,000,000	
	% in 1st Year	NA	40%	70%	
St. Paul	Dollars	\$33,000,000	\$340,000,000	\$80,000,000	
	% in 1st Year	3%	5%	10%	
Toledo	Dollars	\$5,000,000	\$3,700,000	\$1,000,000	
20000	% in 1st Year	100%	100%	100%	
Washington, DC	Dollars		\$2,242,000,000	\$150,000,000	
	% in 1st Year		12.9%	30%	
Wichita	Dollars	\$44,250,000	\$78,450,000	\$85,800,000	
	% in 1st Year	10%	10%	10%	
Grand Totals	Total Dollars	\$15,318,767,192	\$46,714,141,083	\$14,422,547,174	\$76,455,455,449
of 50 responding	% in 1st Year	18%	12%	29%	16%
GCS districts	Dollars in 1st Year	\$2,729,994,309	\$5,603,208,839	\$4,116,322,035	\$12,449,525,183
	Dollars	\$20,134,209,140	\$61,398,693,156	\$18,956,263,091	\$100,489,165,387
Projection of	% in 1st Year	18%	12%	29%	16%
all 65 GCS*	Dollars in 1st Year	\$3,588,165,790	\$7,364,572,958	\$5,410,284,502	\$16,363,023,250

<sup>\*</sup> Projections to all 65 Great City School districts based on total enrollments and numbers of buildings across the Council's member urban school systems.

#### **Notes and Comments**

Charleston: We are poised to do a lot of work in year one because our Board funded the advance design for these schools as projects in the last building program. We are at the DD stage now and are poised to go to bid after the Christmas holidays. All of these figures represent fully burdened program costs...not just hard construction costs. The program costs also include the costs for land, professional design, engineering and CM fees, admin costs, FFE, Information Technology infrastructure and equipment, contingency in addition to the hard construction costs for the site and building.

Chicago: (1) Currently funded new construction projects are included. The percent ready for start up in one year includes those projects currently in design or construction that will open in the Fall of 2012. (2) Deferred maintenance has not been broken out from the overall infrastructure need. A note has been added to state that the overall infrastructure need includes the deferred maintenance. (3) The percentage ready for start up in one year can reflects our estimate of how much work we can put in place in one year.

*Cincinnati:* Renovation and repair includes work planned for full modernization of three facilities. Within 12 months, designers could be under contract and schematic work completed. Deferred maintenance includes expected deferred maintenance over the next four years.

Clark County: Dollar amounts reflect currently unfunded and immediate school infrastructure needs. (Numbers do not reflect forecasted five-year needs or equipment costs.) Percentages available within one year of funding assume re-use of existing designs or design build procurement and some support from local entities to clear/approve projects. Renovation projects move somewhat more slowly, but we should be able to identify over \$125 million that would be executable in one year.

Cleveland: Column 1 is the total of approved Master Plan Segment 5 and 6 schools. Our assumption is that the percent ready for start up in one year means school opening. Column 2 is the total 2002 OSFC assessment cost adjusted for inflation, removal of school closings, and minus the dollar amount from column 1 (new construction). Column 3 is the current priority needs reported from facilities and technology. The percentage ready for start-up in year one with the percentage ready based on \$5 million of available capital dollars from sale of schools and remaining balance of unencumbered 2011 summer work.

Columbus: Columbus City Schools is not able to provide meaningful numbers on this request. We are currently in the middle of a major capital improvements program and can report the following: 34 completed new or renovated buildings at a final total project cost of \$542 million; 9 buildings in design or construction to be completed by 12/2013 at a total project budget cost of \$157 million; 1 building in design that is funded from ARRA QSCB backed bonds at \$8.9m; 118 schools remaining to be renovated or replaced but no current cost estimate for this work (assessed as each phase moves forward); and no current estimate on deferred maintenance costs. Our program is part of the Ohio School Facilities Commission program involving shared funding.

**Dayton:** Our new construction is currently in its final phase. All new completed at the end of this calendar year.

**Duval County**: The \$50 million in new construction has been approved in the District's Facilities 5-Year Capital Plan. Prototype facilities designs may be used to expedite construction if funded. The renovation, repair, and modernization program backlog has increased three-fold over the last few years and requires immediate attention to prevent further breakdown of systems that directly support student classroom environments.

*Guilford County*: Calculations based on Facilities Needs Report sent to North Carolina's Department of Public Instruction January 2011. Note that amounts include broadly stated estimates, and deferred maintenance figures are included in the numbers for major repair, renovation, and repair. Projects have not been approved by the Board of Education.

Hillsborough County: Best projections from our current capital plan.

Los Angeles: Based on changes in assumptions, interpretation of how we define "needs," any restricted use of possible Federal funds or more specific requirements, these estimated numbers are subject to change.

- (a) Our current efforts to set priorities will have a direct impact on our school infrastructure needs and percent of projects ready to execute in one year
- (b) Overall dollar amount based on:
  - Building system backlog
  - Universe of need identified in 2008 in conjunction with the district's Measure Q efforts -- at that time the district identified more than \$60 Billion of capital needs
  - Includes K-12 facilities needs ONLY. Does not include--
    - § Adult Education
    - § Early Education
    - § Information Technology
    - § Special Education
    - § Refinancing of COPS
    - § Sustainability projects -- i.e. if there was a push for green technology, we would need to come up with the universe of unfunded need
    - § Facilities infrastructure/building component needs that may be identified through master planning effort
  - The "New Construction" number is based on the potential goal identified in Measure Q to further reduce overcrowding by aligning the size of all LAUSD K-12 schools with the state average
    - § Based on the calculations in 2008, 51,600 seats would be needed districtwide (this assumed all NC unfunded projects would be built)
    - § Based on a quick review of bid trends, we used \$70,000 per seat at the multiplier to get to \$3.6 Billion (we used a higher number in 2008)

- (c) Percent ready for start assumes:
  - We have the capacity to execute the different workloads simultaneously
  - Took workload in place and construction start trends into account and assumed that our execution would be in-line with highest years of productivity
    - § Deferred Maintenance = \$500M these projects have a shorter pre-construction period, so if capacity increased so could the output
    - § Repair/Modernization = \$1B (highest is closer to \$500M)
    - § New Construction assumes:
      - · One unfunded project (Monroe K-8 Span) with a DSA stamp and land already acquired
      - · Use of design-build/design NTP used as "ready for start" milestone

*Miami-Dade County*: Column one is based on five-year projected needs. Column two—rounded. Column three—approximate.

*Milwaukee:* Work continues on Milwaukee Public Schools long-range Facilities Master Plan. The plan will provide a framework for decision-making regarding school facilities. MPS operates 175 schools in 141 buildings in school year 2011-2012. The average MPS school building is just under 70 years old, and planners anticipate that within the next ten years, those buildings will require an investment of \$991 million for maintenance, the addition of air conditioning, and modernization of mechanical, plumbing and electrical systems.

Phase I of the Facilities Master Plan was completed in June, as required by Wisconsin statute. Phase I provided an inventory of sites, their age, capacity and condition. It showed that most MPS facilities were built before 1930, and well before the introduction of technology and ADA (Americans with Disabilities Act) requirements. An example is the Dover Street School building, vacated this summer when the Dover school students and staff moved to space in the Fritsche campus. The Dover building was constructed in 1889, has a tiny cafeteria in the basement and an auditorium on the third floor that can be difficult for some visitors to access. While the Dover building will not be used as a school this year, the district will maintain it.

Minneapolis: The numbers are based on our current construction needs from January 2011 Strategic Assessment, updated to today for applicable use in response to your request. The New Construction and Major Renovation, Repair and Modernization columns represent the Educational Indices (Capital Improvement) we developed in our Strategic Facilities Assessment; while, the Deferred Maintenance column represents the Facility Code Indices (Capital Renewal). We could start construction, after planning, within 1-year of funding and approval at: New Construction: \$31.0M – Educational standards, per the assessment; Major Modernization: \$19.0M – Educational standards, per the assessment; and Deferred Maintenance: \$50.5M – Facilities Codes assessment and a 1<sup>st</sup> year project plan

*Orange County*: Project by project breakdown can be provided if needed.

*Pittsburgh*: Current fiscal constraints require annual capital expenditures to be limited to \$15 million/yr. The District has proposed a 7-year capital plan of \$100 million. Proposed capital

plan primarily consists of infrastructure upgrades and major maintenance projects. Deferred maintenance projects totaling \$58.5 million are not included in the 7-year capital plan.

**Portland:** Total work envisioned over 30 years is comprised of approximately \$600 million every 5 years. A Local Bond issue for \$548 Million was placed on ballot in May (failed passage). The shovel ready project associated with that request was a school rebuilding project costing up to \$20 Million. (\$20/\$548 = 3.6%.) As for maintenance and repair projects, the only constraints would be funding to manage the work.

**San Francisco**: We interpreted the start question as "ready to construct." If the question involves "start the design and construction document process" then we would have much higher percentage of work started.

St. Paul: Percentage of projects that could be started in one year is based on current bond funding levels.

*Toledo*: Toledo Public Schools transformed the district by converting all of our elementary schools to K-8 schools. This will require significant changes and updates to our buildings, including the maintenance costs above.

**Washington, DC**: The listed \$2,242,000,000 figure comes from the Master Facilities Plan and includes new construction. The \$150,000,000 figure comes from the Comprehensive Maintenance Plan.

### **About the Council of the Great City Schools**

The Council of the Great City Schools is a coalition of 65 of the nation's largest urban public school systems. The organization's Board of Directors is composed of the Superintendent, CEO or Chancellor of Schools, and one School Board member from each member city. An Executive Committee of 24 individuals, equally divided in number between Superintendents and School Board members, provides regular oversight of the 501(c)(3) organization. The composition of the organization makes it the only independent national group representing the governing and administrative leadership of urban education and the only association whose sole purpose revolves around urban schooling.

The mission of the Council is to advocate for urban public education and assist its members in their improvement and reform. The Council provides services to its members in the areas of legislation, research, communications, curriculum and instruction, and management. The group convenes two major conferences each year; conducts studies of urban school conditions and trends; and operates ongoing networks of senior school district managers with responsibilities for areas such as federal programs, operations, finance, personnel, communications, research, and technology. Finally, the organization informs the nation's policymakers, the media, and the public of the successes and challenges of schools in the nation's Great Cities. Urban school leaders from across the country use the organization as a source of information and an umbrella for their joint activities and concerns.

The Council was founded in 1956 and incorporated in 1961, and has its headquarters in Washington, D.C. Since the organization's founding in 1956, geographic, ethnic, language, and cultural diversity has typified the Council's membership and staff.



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