

Study Session Agenda Item 3

Memo

To: Board of Education

From: Lynn Ann Sheats

Date: August 22, 2024 for the August 28, 2024 Board Study Session

Re: 2024 Director District Reapportionment timeline and process.

Timeline:

Request for Proposal Distributed	August 6, 2024
Deadline for Submitting Questions	August 16, 2024
Proposal Due Date Deadline	August 21, 2024
Proposals Distributed to Board of Education	August 22, 2024
Notice to Proceed	August 28, 2024
Initial Consideration to Board of Education	October 23, 2024
Presentation to Board of Education	November 13, 2024
Board of Education Director District Resolution Approval	December 11, 2024

Summary Matrix:

Oblique View Consulting LLC

1251 Harrison Street

Denver, CO 80206

Matthew Schaefer

Proposal - \$5700

Western Demographics, Inc.

1750 30th Street #424

Boulder, CO 80301

Shannon Bingham

Proposal - \$6750



EXHIBIT A: PROPOSAL FORM WITH PRICING

Project Name:

Request for Proposal, Consulting Services Related to 2024

Director District Reapportionment

Name of Firm:

Oblique View Consulting LLC

Address:

1251 Harrison St

Denver, CO 80206

Telephone:

303-669-8417

Email:

obliqueviewconsulting@gmail.com

Contact Person:

Matthew Schaefer

(PRINT)

Consulting Services: \$ 5,700

Oblique View Consulting LLC

A more natural way of observing the world from the human point of view.

Oblique View Consulting LLC

Matt Schaefer, MPA, GISP 303-669-8417 obliqueviewconsulting@gmail.com

June 24, 2024

Kerrie Monti Planning Manager 27J Schools kmonti@sd27j.net

RE: Board of Education Redistricting Proposal

Dear Kerrie,

Thank you for the opportunity to provide a quote for services related to the development of redistricting scenarios for the 27J Schools Board of Education Director Districts. I have worked in the GIS field for over 25 years and as a K-12 educational facility and demographic planner for 20 years. During that time, I have led many successful efforts to revise school attendance area boundaries and four director district redistricting processes. An example of the last report that I created while employed for Adams 12 is included with this proposal.

For this project, I propose to begin with the development of 3-5 scenarios using geographic information systems (GIS) and the most current 3rd party population estimates at the smallest level of geography that is commercially available. If desired, I am available to present these scenarios to staff, board and/or community in public and private forums and can develop additional scenarios based on the feedback from these stakeholder groups.

While there are no specific guidelines for director district population differences, I strive to provide scenarios in which the population for each director district falls within 5% deviation from average or less. This threshold meets the guiding law and court case related to school board director districts. Colorado state law simply states, "Director districts shall be contiguous, compact, and as nearly equal in population as possible." CRS 22-31-109 According to a US Supreme Court case, 'A division of districts will be presumed compliant with the Equal Protection Clause if "the maximum population deviation between the largest and smallest districts is less than 10%" Evenwel v. Abbott, 578 U.S. 54, 59 (2016)

During a redistricting process I ensure that board of education member home addresses are kept confidential and that the scenarios do not result in a board member being unseated through redistricting. I will provide the district with a report that explains the process and contains maps of each of the scenarios as well as a recommended scenario.

Please find below a detailed list of project deliverables:

- 27J GIS data and folder structure
- 3-5 initial scenarios
- Private or public meeting participation
- Additional scenario creation if necessary (as many as necessary)
- Report with recommended scenario
- Recommended scenario presentation to staff or board
- Upon selection of the final scenario:
 - o GIS data for all 27J addresses with corresponding director district
 - Map of the entire district showing all 7 board of education districts
 - Individual maps of each director district
 - List of Schools by Director District
 - Confirmation of board candidate district assignments (for the entire four-year life of the adopted director districts)

Please find below an estimate of the project steps and estimate time of completion:

	Estimated Time (hours)	Per Hour	Total
Create 27J GIS to support project (acquire GIS data, build folder structure and projects)	3	\$200	\$600
Acquire 2024 population estimates at smallest geography available	1	\$200	\$200
ESRI population estimate data purchase	1	\$500	\$500
Develop initial scenarios	5	\$200	\$1,000
Private or public meeting presentation of initial scenarios	3	\$200	\$600
Additional scenario creation (if necessary)	3	\$200	\$600
Report creation	4	\$200	\$800
BOE and/or staff presentation	3	\$200	\$600
Provide supporting 27J GIS data, maps, and new legal descriptions to staff	4	\$200	\$800
Estimate Total	27		\$5,700

This estimate is based on many assumptions and I will only bill for my actual time spent on each portion of the project. Thank you again for the chance to provide you with this proposal. I wish 27J the best no matter which consultant is selected for the project!

Sincerely,

Matt Schaefer



1500 East 128th Avenue • Thornton, CO 80241 • Office: (720) 972-4206

Matt Schaefer

Senior Planning Manager

March 16, 2022

To:

Chris Gdowski, Superintendent of Schools

Board of Education

From: Matt Schaefer, Senior Planning Manager

Re:

Director District Population Review

In support of the Board of Education, staff has prepared information for the required review of the Adams 12 Five Star Schools Director District Boundaries.

State Law (C. R. S. § 22-31-110 included as an attachment) requires that no later than December 31, 1972, and not later than December 31 of every fourth year thereafter, the board of education shall determine the population in each of the director districts, and if each director district does not "contain substantially the same number of persons as each of the other director districts", it shall be the duty of the board, by resolution, to revise the director district boundaries.

State law (C. R. S. § 22-31-109 included as an attachment) requires that such director district boundaries "shall be contiguous, compact, and as nearly equal in population as possible."

The goal of this document is to review the current population estimates for each director district to determine if a revision to the boundaries is necessary.

The Board of Education Director Districts were last reviewed in May 2016. Decennial Census data may not accurately reflect recent growth or declining population in outlying years from the Census and therefore the district used the 2010-2014 American Community Survey 5-year estimate data (produced by the Census Bureau) to review the population in May 2016. It was determined that Adams 12 Five Star Schools director districts "contain[ed] substantially the same number of persons as each of the other director districts". Therefore, we did not make any changes to the Board of Education Director Districts at that time.

2020 Census Population Counts were released in the Fall of 2021 and will be used for this review process. The following table shows the population counts and deviation from average for the current director district boundaries using the 2010-2014 American Community Survey 5-year estimates that were used to validate the districts in 2016 and the 2020 Census count that will be used to determine if the districts still contain substantially the same number of people. A boundary map of these director districts is attached (Board of Education Director Districts Population Change 2010-2014 to 2020).

Table 1. Director District Population Change 2010-2014 to 2020

	2010-2	2014 ACS 5-Year	Estimate	2020 Census Population Count		
District	Population Estimate	Deviation from Average	Percent Deviation from Average	Population Count	Deviation from Average	Percent Deviation from Average
1	45,333	1,645	3.76%	49,197	1,049	2.18%
2	42,122	-1,566	-3.58%	43,872	-4,276	-8.88%
3	44,105	417	0.95%	57,613	9,465	19.66%
4	43,724	36	0.08%	43,829	-4,319	-8.97%
5	43,157	-531	-1.22%	46,228	-1,920	-3.99%
Total	218,441	(+/-2,050)		240,739		
Average	43,688			48,148		

The state statutes regarding director districts do not contain a specific percent deviation from average that should be used to determine if a revision to the boundaries is necessary. The statutes simply state if each director district does not "contain substantially the same number of persons as each of the other director districts", it shall be the duty of the board, by resolution, to revise the director district boundaries. For reference, Colorado state law requires a percent deviation from average under 5% when congressional districts are reapportioned.

For comparison purposes, a review of the population changes that prompted revisions in the past follows:

The previous director district boundaries were created in May 2012 using the 2010 Census Counts. In May 2016, the 2010-2014 American Community Survey 5-Year Estimates were used to determine if a revision to the boundaries was necessary. The board followed staff guidance and did not adjust director district boundaries at the time due to the populations staying relatively similar in the five director districts. Below is a comparison of the 2010 Census Count used to create the director districts and the 2010-2014 American Community Survey 5-Year Estimates used to validate the districts in 2016:

Table 2. Director District Population Change 2010 to 2010-2014

	2010 Census Count			2010-20	ır Estimate	
District	Population Count	Deviation from Average	Percent Deviation from Average	Population Estimate	Deviation from Average	Percent Deviation from Average
1	42,908	-780	-1.79%	45,333	1,645	3.76%
2	40,760	-2,928	-6.70%	42,122	-1,566	-3.58%
3	42,165	-1,523	-3.49%	44,105	417	0.95%
4	41,433	-2,255	-5.16%	43,724	36	0.08%
5	42,526	-1,162	-2.66%	43,157	-531	-1.22%
Total	209,792	n. 9		218,441	(+/-2,050)	
Average	41,958			43,688		

The director district boundaries before the 2012 changes were adopted in January of 2009. They were drawn using 2007 population estimates from DRCOG. In May 2012 the 2010 Census counts were used to determine if the change in population required a revision to the boundaries. Below is a comparison of

the 2007 DRCOG estimated population used to create the director districts and the 2010 Census count that was used to validate and determine that new district boundaries were necessary.

Table 3. Director District Population Change 2007 to 2010

	2	2007 DRCOG Esti	mate	2010 Census Count		
District	Population Count	Deviation from Average	Percent Deviation from Average	Population Estimate	Deviation from Average	Percent Deviation from Average
1	41,958	-552	-1.31%	42,908	950	2.26%
2	42,552	42	0.10%	45,405	3,447	8.21%
3	42,802	292	0.70%	40,707	-1,251	-2.98%
4	42,114	-396	-0.94%	45,165	3,207	7.64%
5	43,122	612	1.46%	35,607	-6,351	-15.14%
Total	212,548			209,792		
Average	42,510			41,958		

After reviewing the current boundaries using the 2020 Census Count (see table 1), the staff opinion indicates that the Adams 12 Five Star Schools current director districts "do not contain substantially the same number of persons as each of the other director districts".

The following tables present four alternative scenarios for director district realignment. Boundary maps of the four scenarios are attached. Each of these scenarios meet the intent of **State law (C. R. S. § 22-31-109)**, which requires director district boundaries "shall be contiguous, compact, and as nearly equal in population as possible." The tables below show the 2020 Census population count for each proposed district along with the percent deviation from the average.

Table 4. Director District Redistricting Scenario 1

	Population	Deviation from	Percent Deviation from
District	Count	Average	Average
1	47,996	-152	-0.32%
2	49,834	1,686	3.50%
3	47,513	-635	-1.32%
4	47,967	-181	-0.38%
5	47,429	-719	-1.49%
Total	240,739		
Average	48,148		

Table 5. Director District Redistricting Scenario 2

District	Population Count	Deviation from Average	Percent Deviation from Average
1	47,846	-302	-0.63%
2	48,315	167	0.35%
3	47,391	-757	-1.57%
4	47,637	-511	-1.06%
5	49,550	1,402	2.91%
Total	240,739		
Average	48,148		

Table 6. Director District Redistricting Scenario 3

District	Population Count	Deviation from Average	Percent Deviation from Average
1	47,888	-260	-0.54%
2	48,677	529	1.10%
3	48,251	103	0.21%
4	47,274	-874	-1.81%
5	48,649	501	1.04%
Total	240,739	_	
Average	48,148		

Table 7. Director District Redistricting Scenario 4

		Deviation	Percent
	Population	from	Deviation from
District	Count	Average	Average
1	47,888	-260	-0.54%
2	48,677	529	1.10%
3	49,553	1,405	2.92%
4	47,274	-874	-1.81%
5	47,347	-801	-1.66%
Total	240,739		
Average	48,148		

Staff recommends the adoption of Scenario 1 as shown in the attached map. This scenario is most closely aligned to the current boundaries and uses natural and obvious boundaries while bringing the population averages for the director districts into alignment.

Please note that the boundaries of director districts do not affect the vote for members of the board because all members are elected by an at-large vote. By law, a revision of the boundaries shall not operate to terminate the office of any school director holding office at the time of the adoption of the resolution to revise boundaries. The revision will be effective for filing of vacancies and the election of any school directors at any subsequent regular biennial school election.

Respectfully submitted by:

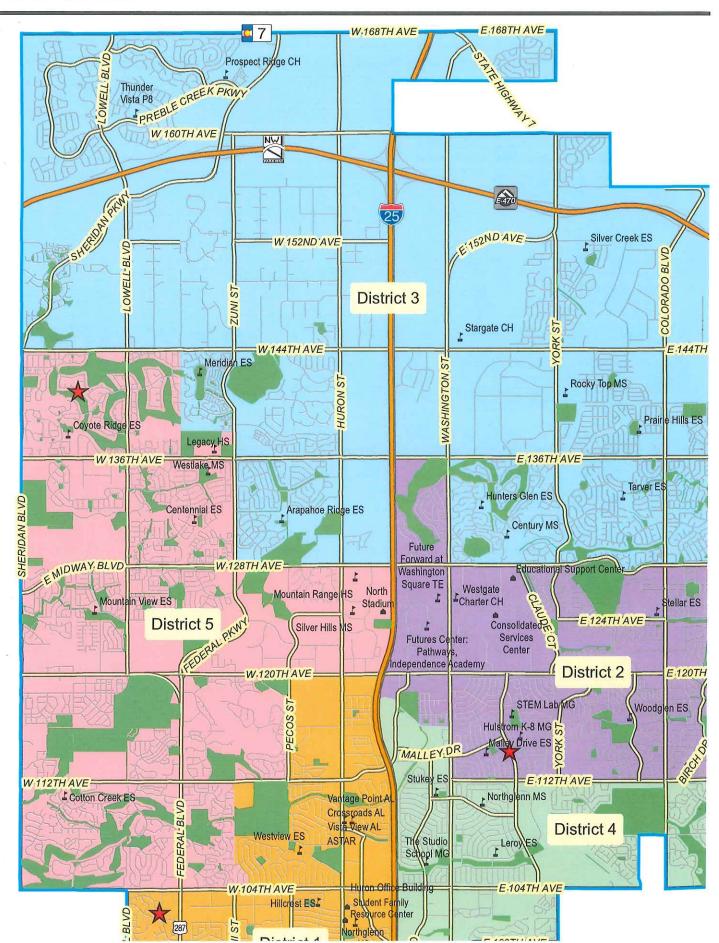
Martten & Schoolse

Matt Schaefer

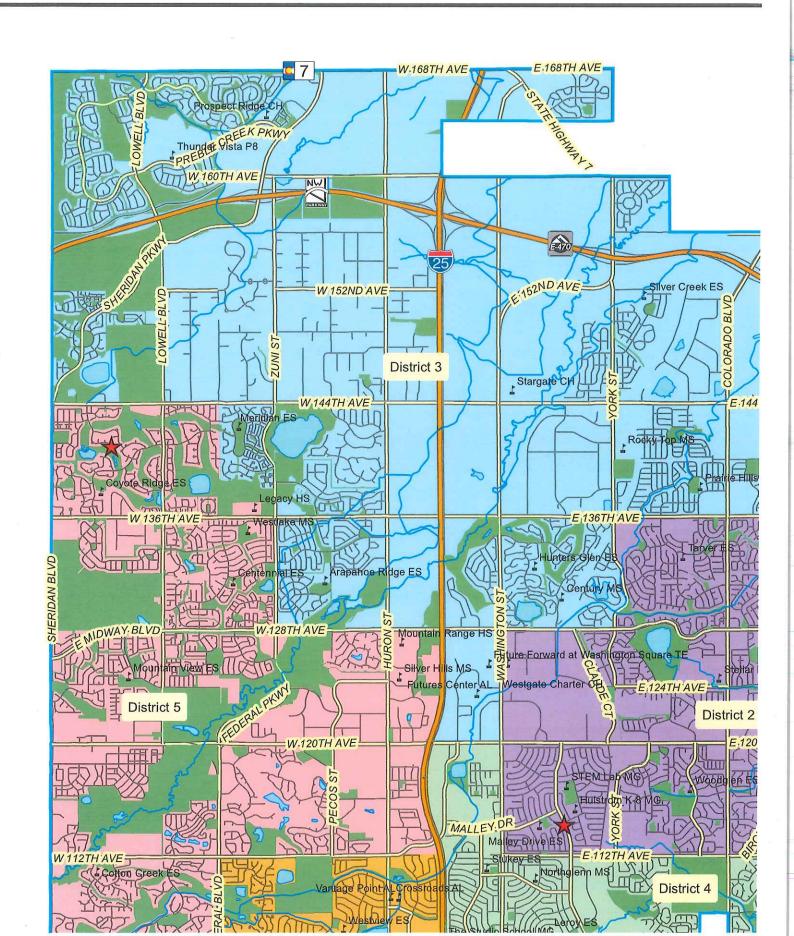
Senior Planning Manager



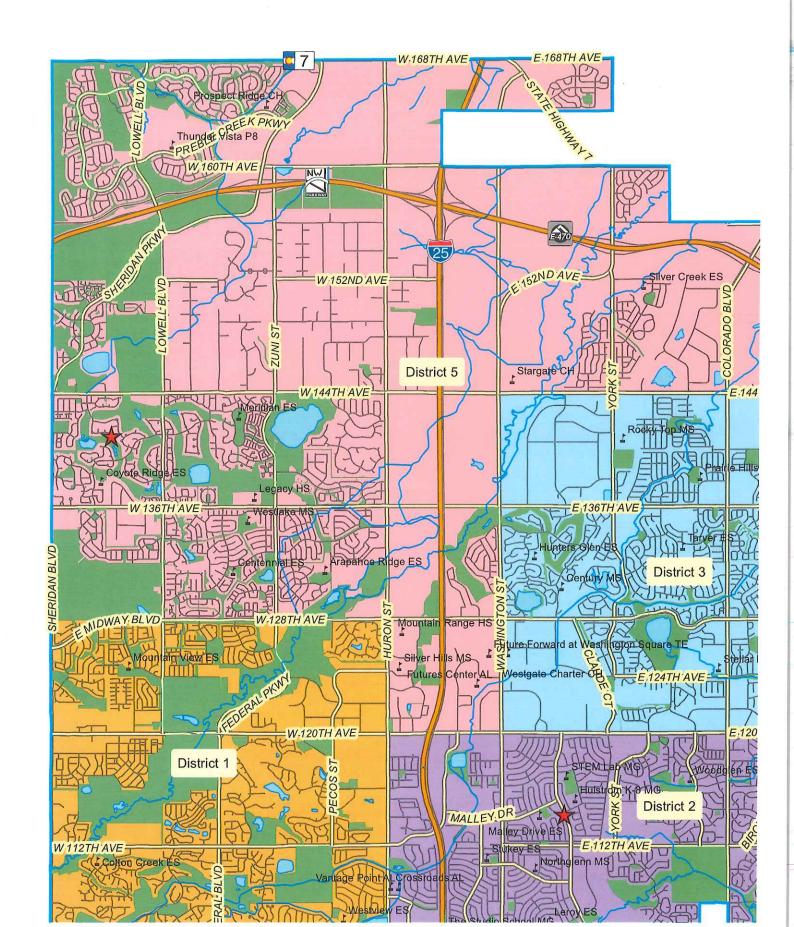
Board of Education Director Districts Population Cha 2010-2014 to 2020



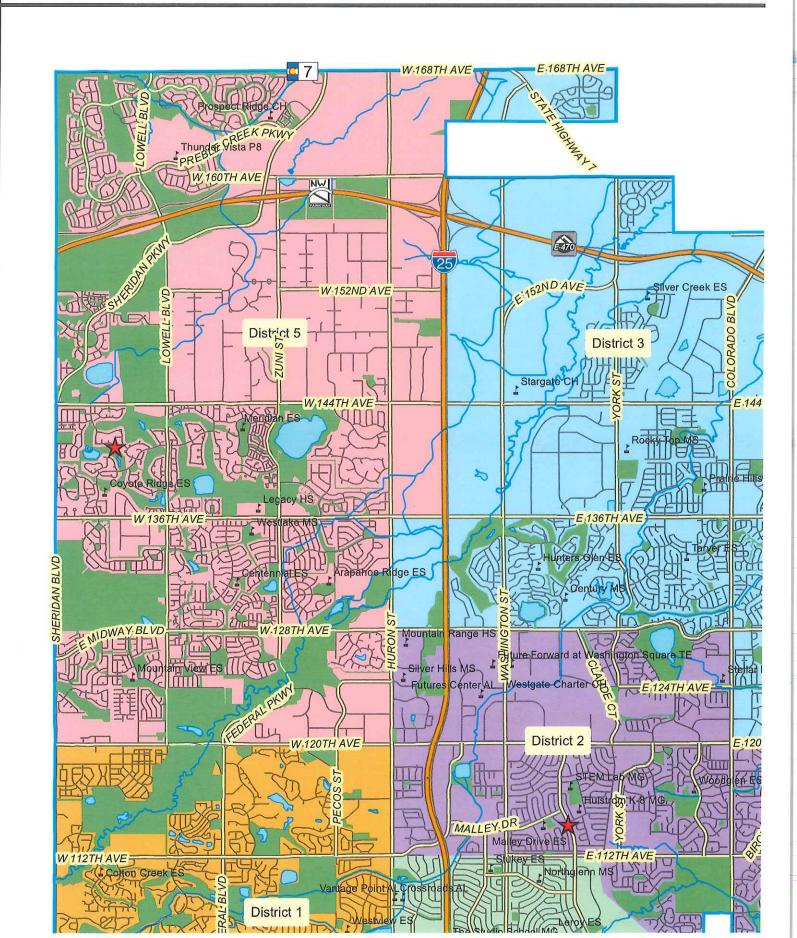




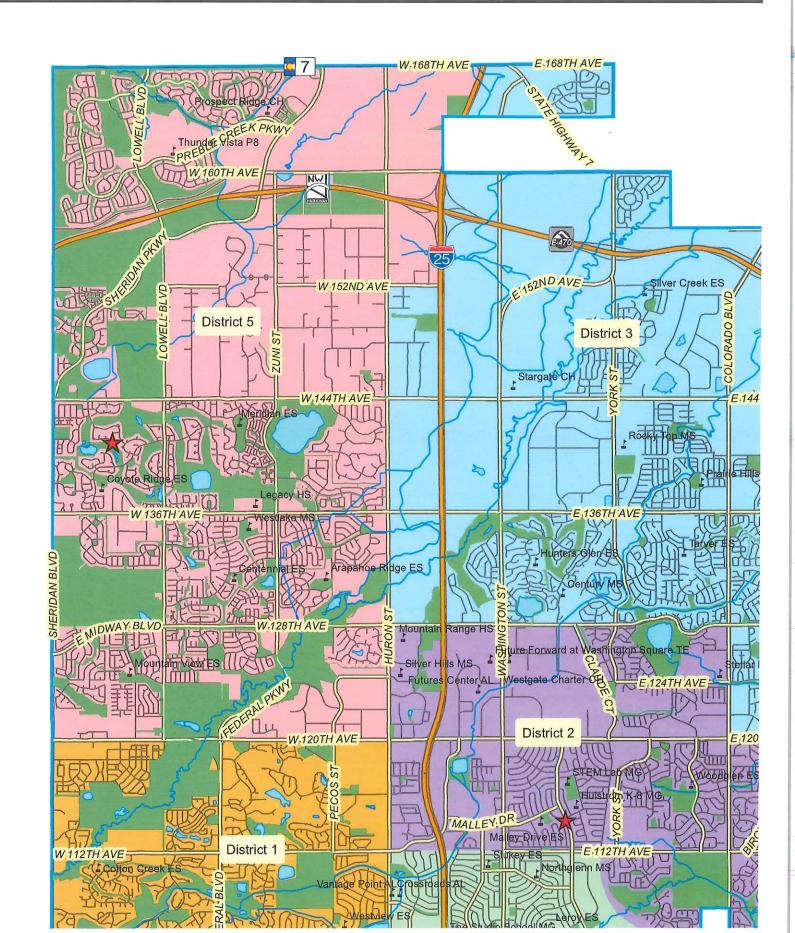


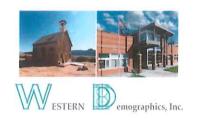












Thank you for the opportunity to submit a proposal to conduct your director district reapportionment. I have conducted approximately 140 school district reapportionments during the past 42 years including the past five or so for 27J School District. I am able to comply with the time and other requirements of your proposal and have a track record of providing quality service to your district. Please consider my firm for your project.

Sincerely,

Shannon Bingham

EXHIBIT A: PROPOSAL FORM WITH PRICING

Project Name:
Request for Proposal, Consulting Services Related to 2024
Director District Reapportionment

Name of Firm:
Western Demographics, Inc.

1750 30th St., #424

Boulder, CO 80301

Telephone:
Shannonlanebingham@gmail.com

Contact Person:
(PRINT)

Shannon Bingham

\$6,750.00

Consulting Services: \$ _

VENDOR ACKNOWLEDGEMENT

Purpose:

The purpose of this RFP is to provide School District 27J a proposal for services

described in the Scope of	Work and the Agreement.	
Date:	August 6, 2024	
Proposal title:	2024 Director I Reapportionme	
Proposals will be received until:	August 21, 202	4 @ 4:00 P.M. MST
For additional information please contact	Example 2. Lynn Ann Shea Board of Educa 303-655-2952 Isheats@sd27j	tion Secretary
Documents included in this package:	Vendor Acknow Instruction to P Scope of Work Exhibits: "A", '	roposers
The undersigned hereby affirms that (1) has read all terms and conditions, technic were made available in conjunction with (3) that the offer is being submitted on be conditions set forth in this document, and result of the offer submitted herein for a roof submission. VENDOR PRINT	al specifications and all other Conthis Solicitation and fully understachalf of the Vendor in accordance value (4) that the Vendor will accept an	tract Documents which nds and accepts them, with any terms and y awards made to it as a ays following the date
(Include the	his form in your proposal)	
Name of Company: Western Demographics In	c	Fax:
Address: 1750 30th St. #424	City/State: Boulder, CO 80301	Zip: 80301
Contact Person: Shannon L. Bingham	Title: President	Phone: 303-877-7557
Authorized Representative's Signature:	Tanor Lington	Phone: 303-877-7557
Printed Name: Shannon L. Bingham	Title: President	Date: 8/20/24
Email Add: shannonlanebingham@gmail.com	Approved by:	Date:

Date: _____

Project Capacity - Shannon Bingham will conduct all work associated with the prohect working from his Salida, CO office. Mr. Bingham has conducted over 140 reapportionments in the past 42 years and is the acknowledged leader in Colorado reapportionment. Shannon has continuously conducted 27J school district reapportionments since 1990 without errors or conflicts. Mr. Bingham vets Board candidate addresses by district ("is this candidate in district D?") free of charge for client districts indefinitely. Board members are never displaced, and Board member home addresses are kept confidential. Digital maps for websites, legal descriptions and GIS files are provided as part of the service.

Recent Reapportionment Work - Recent reapportionments have been conducted for: **Cherry Creek**, **Douglas County**, Lewis-Palmer, Mesa 51, Johnstown-Milliken (Weld Re-5), East Grand, Granada, **Keenesburg**, **Hudson Lochbuie** (Weld RE-3J), Pueblo 70, Wiggins, Ft. Lupton, Ft. Morgan, Eagle County (All in Colorado) and Bellevue 405 in Washington.

References:

Melissa deVita
Deputy Superintendent
Financial Services & Operations
Bellevue School District No. 405
Phone (425) 456-4025
devitam@bsd405.org

Richard D. Cosgrove, P.E. Chief Operations Officer Douglas County School District richard.cosgrove@dcsdk12.org 303-387-0418

Greg Rabenhorst Superintendent Keenesburg (Weld RE-3J) School District 303-536-2000 gregrabenhorst@re3j.com

Methodology – ESRI recently released 2024 population estimates that bridge the gap in PL-94 data from 2020 to 2024. Western will purchase and use this data as it has in prior reapportionments in 27J and elsewhere during the past 20 years. This data is used for reapportionments as the 2020 census is now four years old. When the data is not available, the analysis is conducting by accounting for certificates of occupancy issued between 2020 and 2024. Due to the availability of the ESRI data, that effort is not necessary.

Proposal Pricing: The Proposal Form (Exhibit A) along with additional details regarding Western's methodology is attached.

Methodology Details and Budget - 27J Reapportionment - 8/21/24

Num	Item	Budget
-1	Import new 2020 PL94 Census population data, update Geographic Information	\$450
	System to facilitate reapportionment	φ450
	Calculate 2024 population of current districts given estimates of new population	
2	added between 2020 and 2024 using PL-94 Census data and ESRI population	\$2,250
	estimates.	
3	Develop scenarios to reapportion the district and calculate the populations of the	\$900
3	resulting districts. Present to staff for evaluation	\$900
4	Map a final proposed scenario or set of scenarios	\$450
5	Develop presentation materials	\$900
6	BOE presentation of results in person or virtually	\$450
7	Update legal descriptions for scenarios and provide GIS material to Planning	\$1,350
1	Director	φ1,350
	Total (Travel is gratis)	\$6,750

I have conducted over 120 director district reapportionments in Colorado during the past 41 years. This is a "not to exceed" proposal. I only bill for time expended. I have a 41-year track record doing this work with ZERO problems. I safeguard Board Members home addresses. I store all analytic material and all district address list material on air-gapped computers and then discard it or return it to client districts. I respond to district requests for Board candidate district assignments or confirmations during campaigns gratis and indefinitely. I provide shapefiles of your new districts in GIS format along with population data and supporting material.

The prior 2020 analysis was conducted prior to the availability of PL94 data (2020 counts published in August 2022). The new populations will reflect ESRI 2024 data and will have some significant differences.

Western will purchase the ESRI 2024 population data as part of the project.

Western Demographics, Inc. - Firm Overview

Shannon Bingham has been engaged in planning, demographics analysis and management consulting for thirty-nine years. WDI was founded on direct service to school districts and it remains true to that mission. Mr. Bingham has been involved with approximately 200 clients in one capacity or another. Mr. Bingham has transitioned from being predominantly a master-planner and demographer to being an in-demand problem-solver and management consultant with a National reputation.

Mr. Bingham brings a broad range of skills to any project. In addition to being an expert demographer, he brings a variety of internal and public facilitation skills to bear in the consideration of complex school management issues. He has pioneered the use of focus groups and community open houses in school districts in lieu of traditional "lecture style" meetings. During his 42-year practice, Mr. Bingham has become an expert in the areas of stakeholder process, community survey development, program relocations, grade reconfiguration and school consolidation.

Although his public process has been the catalyst for the development of his reputation, Shannon's solid expertise in the analytical aspects of school planning have been the foundation of his success. Bingham pioneered the use of Geographic Information Systems in Colorado school districts. Shannon has trained and developed many of the school district planning directors in this technology along with stakeholder involvement techniques. Bingham is called upon to design interview processes and employee screening for planning staff as well.

Mr. Bingham's education is summarized as follows:

Master of Urban Planning - City and Regional Planning, Texas A&M University
Bachelor of Business Administration -Accounting, Texas A&M University
Post Graduate Work - Educational Administration, University of Colorado
Professional Development - Facilitation, Stanford University

Mr. Bingham is an alumnus of Education Northwest (The Northwest Regional Education Labora-tory) and was engaged in important educational research throughout the Pacific Northwest be-fore beginning his consulting practice. Mr. Bingham's current applied research efforts on behalf of school districts are well informed by this background.

Western has offices in Salida, Colorado and Ferndale, Wa. WDI has joint ventured with many architecture firms, owner's reps, investment bankers and university staff in order to form teams to accomplish various school district goals.

Recent / Current Project Experience

- Assisting Littleton School District (Colorado) with a successful school start time analysis, transportation analysis, capital facilities planning committee facilitation, school facilities needs assessment, boundary planning and extensive stakeholder involvement process.
- Assisting Cherry Creek Schools (Colorado) with new boundaries for new elementary and middle schools, student yield analysis, public process, open house meetings, community surveys, housing market analysis, capital planning committee process and Director District reapportionment.
- Assisting Douglas County School District as principal demographer and boundary planning consultant.
- Providing a demographic analysis to High Plains Library District as part of its master plan.
- Providing a demographic analysis to Campbell County Library District (Gillette, Wy) as part of its master plan.
- Providing a demographic analysis to Douglas County Library District.
- Assisting the Grand Junction (Colorado) Downtown Development Association with a Multifamily housing feasibility and market analysis of Downtown Grand Junction.
- Serving as the lead consultant and coordinator of the "Southwest Mat-Su Borough Futures Project". The SW Mat-Su Futures project is a 2060 simulation of communities that would result from the construction of a Knik Arm Crossing Bridge. The project includes all municipal utilities, roads and associated costs needed given a hypothetical future.
- Assisting the Matanuska-Susitna Borough (Alaska County Government) with a transportation function / economic growth potential analysis of highway intersections.
- Assisting Bellevue 405 School District (Bellevue, WA) with long-range facility planning and building renewal, specialized program location and classroom planning for Gifted Education, Early Childhood, Language Immersion, and Specialized Curriculums. Highrise apartment student generation analysis, housing price escalation relationship to student generation research and assistance with stakeholder process design.
- Conducting a School Efficiency / Utilization Study, School Start Time Analysis and Stakeholder Involvement Process in Anchorage School District. This analysis has included the potential for school replacements (rebuilding) vs. piecemeal renovation.
- Assisting Eagle County Schools (Colorado) with the demographic section of their recent master plan document and source material for their recent successful bond election.
- Assisting Mesa 51 School District (Colorado) with Growth Documentation for their recent successful bond election, on-going land development monitoring and projections.
- Assisting Moffat County Schools (Craig, CO) with a successful school closure effort

- Assisting 27J School District (Colorado) with Build-out Analysis, Projections, New School Boundaries, School Impact Fee Calculations, Director Districts and Staff Training.
- Assisting Sierra Grande Schools (Blanca, CO), Hayden School District, Montrose School District and Westminster Schools with Demographics, Projections and Restructuring.
- Assisting Aurora School District (Colorado) with committee process for new PK-8 school boundaries, year-round school feasibility stakeholder involvement process and academic calendar development.
- Assisting 27J School District (Colorado) with pre-bond Demographic and Community Needs Assessment balancing future school needs with community goals and available funding potential given the districts bonding capacity.
- Assisting Mesa 51 School District (Colorado) with Director District Reapportionment, a School Condition Stakeholder Awareness Campaign, School Efficiency Study and Enrollment Projections.
- Assisting Lewis-Palmer, Hayden and Pagosa Springs School Districts (Colorado) with Master Plan Demographic / Forecast sections.
- Assisting Montrose School District (Colorado) with enrollment projections.
- Assisting Adams 50 School District (Colorado) with enrollment projections, a strategic plan, boundary planning and NCLB-mandated school building closure.
- Assisting West Bloomfield School District (Michigan) in a school facilities and consolidation study resulting in the closure of an elementary school and potential relocation of administrative offices to a high school including a significant public involvement process featuring open houses and focus groups.
- Continuing a 15-year relationship with Detroit Public Schools including closing approximately 160 schools and developing the 2013 Strategic Plan.
- Assisting Rockford Illinois School District 205 complete a twenty-year journey through school desegregation by adopting a new student assignment plan and address budgetary shortfalls via closing six schools and conducting an extensive public involvement phase including open house and focus group meetings. Western initially assisted the District in securing a Federal grant (TASAP) to fund this work.
- Conducting a School Utilization Study in Colorado Springs District No. 11 resulting in the closure of nine schools.
- Dividing the largest school district in Utah (Jordan) in half providing community engagement, test score and demographic analysis to a larger team focused on fiscal impacts. (Divided the 80,000-student Jordan School District in to the reduced Jordan and "Canyons" School Districts).



Shannon L. Bingham - Western Demographics, Inc.

1750 30th St. #424, Boulder, CO 80301, (303) 877-7557

Education

Master of Urban Planning - City & Regional Planning - Texas A & M University - 1985 Bachelor of Business Administration - Accounting - Texas A & M University - 1984 Post Graduate Work - Educational Administration - University of Colorado - 1987 Professional Development - Facilitation Workshop - Stanford University - 2006

Professional Experience

Western Demographics, Inc. - President/Owner

1992-2024 Provided capital facilities consulting services to over 200 school districts and municipalities.

Planning Specialist

1994 - 1995 Education Northwest, Portland, OR

Conducted research and development activities as part of the Office of Planning and Service Coordination. Assisted with the lab's on-going assessment of educational needs in the five Northwest states. Evaluated educational technology grants in the State of Idaho. Evaluated school district use of instructional networking and the Internet by examining wide area networks in Alaska, Idaho, Montana, Oregon and Washington.

Instructional Technology Specialist

1991 - 1992Boulder Valley Schools, Boulder, CO

Encouraged and facilitated the integration of technology into district instructional programs. Developed University partnerships. Coordinated centralized technology purchases, training, hardware / software evaluation. Coordinated Internet program and assisted in writing a successful grant to the National Science Foundation. Coordinated library automation efforts.

Director of Facility Planning

1987 - 1991 Boulder Valley Schools, Boulder, CO

Coordinated all planning and research associated with school enrollment projections, school boundaries, school demographics and school attendance areas. Projected long-term need for school facilities and formulated capital facility needs and cost estimates to be funded by bond election. Administered design/programming of facilities. Conducted research on educational programs and their relationship to school buildings. Conducted all district real estate activities.

Supervisor of Long Range Planning

1986 - 1987 Academy School District #20, Colorado Springs, CO

<u>Awards</u>

President's Award For Exemplary Volunteer Service – Pikes Peak Council, Colo Sprgs, CO – Boy Scouts America C.M. Russell "Rustler" Award For Distinguished Community Service – Great Falls, MT Schools Golden Achievement Award – National School Public Relations Assoc. - Presented to Scottsdale Unified School District for "Total Community Process" Designed / Facilitated by Shannon Bingham, Scottsdale, AZ

Expert Witness Experience

Ute Mountain Tribe vs. Montezuma-Cortez School District – Expert Witness, 5th Circuit Federal Court Boulder Valley School District Impact Fee System, Expert Witness. Boulder, CO St. Vrain Valley School District Impact Fee System, Expert Witness. Longmont, CO

Publications

Educational Needs of the Pacific Northwest, Shannon L. Bingham, et. al., Education Northwest, Portland, Oregon. Sponsored by the Office of Educational Research and Improvement, U.S. Department of Education.