

TO: Commissioners
Citizens Redistricting Commission

FROM: Karin Mac Donald
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RE: Line Drawing Process

INTRODUCTION

During the April 16th “Regional Wrap Up,” the Citizen’s Redistricting Commission (CRC) held an extensive discussion on the line drawing process. This discussion was cut short before conclusions could be reached due to a noticing issue. In order to provide information and context for future discussion about the line drawing process, this memo will outline various challenges and options the Commission may face as it moves forward. In addition, it will detail ways in which Q² Data & Research LLC (Q²) can provide technical assistance to aid the CRC in its deliberations.

Unfortunately, the contract between the CRC and Q², as several Commissioners pointed out during the April 16 discussion, was not completed until the evening before the first public input hearing on April 9, 2011. This prohibited laying out these challenges and opportunities before the CRC began soliciting public input. It is our sincere hope that this memo will help facilitate moving forward in the process in a manner that promotes public confidence and maximizes chances for success. In structuring our technical assistance, our primary goals are: 1) To maximize opportunities for the CRC to provide direction to technical staff to ensure our work product reflects your desires; and, 2) To maximize opportunities for the public to provide input to the CRC to ensure you have adequate data available to make decisions that reflect public testimony.

CHALLENGES AND LIMITATIONS

As Commissioners are no doubt aware, Propositions 11 and 20 have created a profoundly difficult timeline. The CRC is a unique endeavor with no model to look to for guidance. As a result, the CRC had to spend many months organizing itself and was only able to begin the public input process in April. Nevertheless, the CRC must release its final maps by early August, leaving only a few months to solicit public input, direct line-drawing, consider draft maps, solicit further public input, direct revisions, and adopt final maps.

The public input process will be time consuming and pose a challenge to meeting deadlines. Unlike smaller jurisdictions like cities and counties, where all members of the public have ready

access to all meetings, in California providing true opportunities for public input requires the Commission to hold multiple meetings in multiple locations. This is reflected in the Voters First Act's requirement that all maps be displayed for 14 days. This is also reflected in the Commission's current schedule, which has it returning to each region after the release of draft maps.

In addition, the CRC has to determine how best to configure districts for multiple levels of government from the state Assembly to the Board of Equalization to US House of Representatives. Given population equity requirements, communities that may be easily preserved in the plan for one level of government may have to be split in the plan for another. Testimony during CRC public hearings thus far has already demonstrated this challenge.

Moreover, the plan for each level of government may present unique challenges that differ from each other. For example, Monterey County is covered by Section 5 of the Voting Rights Act (VRA) and is thus subject to strict requirements designed to protect minority voting rights. In each of the current Legislative plans, Monterey County is structured differently. In the Assembly plan it is split into two districts, both of which run into Santa Clara County; in the Senate plan it is split in two, with one district running along the coast and one running inland; and in the Congressional district it is kept whole. This demonstrates that the configuration of counties, even those covered by Section 5, may call for a variety of approaches, depending on the type of district at issue.

Finally, the requirement that districts be nested, if possible, after complying with all other criteria means that most plans cannot be considered independently of one another. For example, recent public testimony suggested that San Joaquin County could be kept whole in a Senate district made up of two nested Assembly seats. However, whether such a configuration would result in splitting another county depends on countless other potential decisions, including decisions about other jurisdictions hundreds of miles away.

Testimony thus far has provided a glimpse into the trade offs and decisions the CRC will ultimately have to make to direct how district lines are drawn. For example, in Bakersfield, we heard from some witnesses who wanted to keep the City of Bakersfield whole, and from others who presented community of interest testimony suggesting splitting part of Bakersfield to be combined with nearby farm worker communities in the same district. The CRC will have to decide how to act on this and myriad other conflicting requests and criteria as it moves forward. This includes deciding tradeoffs between different criteria, between different testimony, and between different communities.

Certainly future Commissions will be able to benefit from the process decisions made by this CRC, potential revisions to state law recommended by the Commission and adopted by the Legislature, and the ability to review past successes and failures. However, this is not a luxury the 2011 CRC enjoys.

While Q² can help identify and present these tradeoffs to the CRC, it should not dictate solutions. We have and will continue to prevent potential mapper bias from influencing your decision process by providing the CRC only with that information, data, and mapping which it requests.

To help the CRC, we present the following explanation of the duties, information, and products we can produce at CRC request. In addition, based on our past experience with drawing districts, we provide some information to help contextualize the CRC's decision-making process. That is, we want to make the CRC aware of logistical issues that may affect the timing of redistricting.

IN-HEARING MAPPING

As demonstrated during the hearings thus far, we can show the CRC and public different parts of the state using both Google Earth and Maptitude for Redistricting. The former is principally helpful in visualizing the state's topography. The latter is particularly helpful in visualizing the state's demographics. While not utilized in the first hearings, Commissioners do have the option of having racial and ethnic data displayed visually using a variety of map coding as well as data tables. We have already loaded population and voting age population data into our software. Per CRC direction, we are in the process of loading 2000 population data, 2010 citizen voting age population data and 2010 Latino and Asian registration data. Additional data can be added upon CRC request.

The available information will be displayed at the CRC's discretion. If you wish to have a review before a hearing or in response to a particular set of testimony, the CRC simply needs to direct your consultants.

While data for established areas, such as cities or counties, are already loaded into the software and relatively quick to display, we can also provide detailed population data for customized areas, such as a portion of a city or county, if so directed by the CRC. In some cases, for example, testimony may pertain to only half of a county or an unincorporated area. We can provide data for those areas by drafting a customized map. Please note that building these maps can take a few minutes depending on the complexity of the testimony and the difficulty of digitizing the desired geography, so such requests may take more time.

PUBLIC TESTIMONY DATABASE

Q² is capturing public input data for hearings live to the best of our ability. We do not develop a transcript, but do capture the key details of testimony in summary form. A list of all fields we capture was provided at the April 16, 2011 meeting. After each hearing, we perform a review of the data to correct typos and fill in any gaps in the database. If the CRC so desires, we can provide this raw report at any point in the process. However, we recommend providing data that have gone through this internal quality control review to ensure the CRC is being provided complete and accurate data. The internal review may take up to a few days, depending on competing demands on consultants' time, e.g., Q² consultants may not be able to complete a review of all data within 24 hours on days when we are capturing new testimony.

REGIONAL WRAP-UP EXECUTIVE SUMMARY

As there was confusion among both Commissioners and the public regarding the draft regional wrap-up document provided by Q², it is important to clarify the intent and the challenges, and to frame options for the Commission in directing future efforts by staff. The regional wrap-up executive summary intended to provide to the CRC information to inform its decisions in how to direct the consultants to draw lines. The summary documents included two main components: 1) a summary of public input received regarding the region or regions just visited; 2) a list of key choices for the CRC.

The summary of public input included both the oral testimony heard at public input hearings as well as any written testimony received about the region at issue up to that point. This summary of public comment intended to provide a public record summarizing the public testimony. As Commissioners recognize from early hearings, they will receive an extensive amount of raw data. The amount of information will likely increase as the Commission moves into more populated areas and begins considering input from statewide organizations. While archived video files of all hearings will be made available to the public, as will, we assume, a spreadsheet of our public testimony database, we believed a summary of public testimony would assist the CRC and the public. Q² will be happy to provide wrap up summaries in a format helpful to the CRC. To the extent such summaries may raise concerns that staff is interfering with the proper role of Commissioners directing the process, we are happy to omit summaries and present to the CRC only the raw input data, or some type of variation.

The list of key choices, however, is more complex. As noted above, the CRC will receive a voluminous amount of public input, ranging from information about small neighborhoods to complete statewide plans. The CRC will have to determine how to cope with potentially conflicting requests and proposals from the public. While some conflicts may be small and relatively easy to deal with through small changes to only a handful of districts, other public input will require changes that could impact numerous districts between all four plans. Q²'s role remains to provide to the CRC the information it will need to direct the process. This includes not only public input testimony, but also technical expertise about the challenges that different recommendations pose and areas where the CRC will have to provide direction as to how to resolve potential conflicts. The list of key choices section thus attempts to summarize key areas and tradeoffs for the CRC to consider and provide direction.

For example, in Region VI, there was contradictory public testimony from multiple jurisdictions. In each case, some members of the public advocated keeping individual jurisdictions whole while others advocated splitting them on socio-economic/racial lines. Based on technical expertise, Q² noted that VRA compliance was an important issue in this area that might require at least some of these jurisdictions to be split. Which jurisdictions should ideally be split is a decision that rightfully lies with Commissioners and thus we presented several options for consideration, all based on public input.

Similarly, also in Region VI, there was public testimony from every Central Valley County indicating they did not want to be combined with Southern California. Using our technical knowledge, we concluded that this would not be practical in some or all plans and that there would likely have to be at least one district that combined populations in both northern and

southern California. As such we presented various options for Commission consideration. All of these were a combination of public testimony indicating undesirable outcomes and our technical knowledge of potentially unavoidable outcomes based on federal and state law. The goal was to allow the CRC to determine for itself how to reconcile these conflicts.

The combination of the public input and this technical expertise is designed to maximize CRC flexibility. For example, several Commissioners suggested that there were only two viable options for configuring northern California: east-west and north-south. However, technical staff identified at least one additional option, configuring coastal counties north-south and interior counties east-west. Without this technical expertise and analysis, the Commission may mistakenly limit its options. Thus, tradeoffs were presented to the CRC to facilitate direction as to which options were most likely to be considered desirable. The Commission may benefit from technical staff presenting maps that show total population, ethnic breakdowns, etc. rather than specific scenario maps.

It is notable that in the last case, three of the four borders of the region are fixed. The western border of this region is the Pacific, the northern Oregon, and the western Nevada. As the Commission moves into other regions, the number of potential options will multiply exponentially. Similarly, the chances that decisions in seemingly distant districts may in fact impact other districts will increase significantly.

Thus the Commission needs to be careful to avoid the belief that most redistricting decisions are binary and can be limited to a few simple maps where the CRC can simply vote on Option A or Option B. In most parts of the state there will be multiple options, many of which will be mutually exclusive, some of which will work in some plans while being impossible in others. The CRC may have to sort through dozens of recommendations for what constitutes a given community of interest, with certain configurations limiting the ability to maintain other communities of interest hundreds of miles away. Thus Q² deliberately flagged potential choices that were likely to impact regions where a public input hearing had not yet been held as places where the Commission may want to wait before making recommendations.

Making things even more complicated, complying with a particular criterion like keeping a particular jurisdiction whole may be relatively easy in a Congressional plan but impossible in an Assembly plan. Solutions that may work in one plan may be impractical in another due to different ideal population goals.

Put simply, without at least some direction from the CRC as to which options are and are not desirable, it is impractical for technical staff to present the Commission with scenario maps for it to consider because even in the simplest cases there are often dozens or more different options.

TIMING OF FEEDBACK

There is a fundamental tradeoff that Commissioners must confront in deciding when to start providing Q2 with direction about drawing lines. *Earlier input allows for more opportunities for an iterative process and more opportunities for conflicts or tradeoffs to be reconciled by the*

CRC rather than staff. If we start the iterative process early, Commissioners can identify that outcomes X and Y are desirable, technical staff can identify whether these are mutually exclusive, and if they are, can return to Commissioners to provide another opportunity to prioritize outcomes. Such an iterative process also limits the impacts of bias created by mappers and of starting points in map drawing as it allows more opportunities to refine the plan.

It may be helpful to note that the creation of a single set of the four required statewide maps with 177 districts will require an estimated 240 hours, so it is not possible to produce an unlimited number of iterations of complete maps. Taking a regional approach allows the Commission to reconcile key choices in smaller areas before completing the statewide maps.

Providing direction later in the process allows the CRC to have the complete set of available data to consider, rendering a more complete initial input. However, this also limits the options to revise directions as tradeoffs are identified because it so constricts the time available for line drawing. *In other words, limiting input until later in the process means the CRC will have fewer opportunities to refine the plan through considering outcomes of their previous directions and providing additional direction to Q2.*

RECOMMENDED PROCESS

The following process is recommended to the Commission for its consideration:

- Before the next set of hearings Q² will again provide Commissioners with basic statistics on the cities and counties in the area the hearing is being held. Q² can also provide maps showing various racial and ethnic populations for all counties to allow Commissioners to orient themselves to areas where Voting Rights Act districts may exist. It is recommended that all such maps and data be made available to the public.
- We recommend not using time at the start of each hearing to review the basic demographic data. Presenting these data before hearings would require the public to wait before presenting their input, which is the primary purpose of these hearings. This is reflective of the previous Commission direction not to use these hearings for educational purposes.
- Further, we recommend a change in the current schedule to move “Regional Wrap Ups” from the end of each region’s last hearing to the beginning of the following region’s first hearing. Specifically, the wrap up for Region 4 should be moved to May 5th, the wrap up for Regions 1 and 2 to May 19th, and Regions 7, 8 and 9 to May 26th. These wrap ups could be scheduled before the currently set input hearings as it would not be as crucial for them to be set during evening/weekend hours.

Moving the wrap ups from the last day of the regions’ hearing would allow Q² to add the last hours of testimony, review the testimony database, integrate written testimony, create an executive summary and outline potential alternatives if the CRC requests them. It

would also allow Commissioners time to reflect on the received public testimony and request any supplemental data or maps they may require.

We suggest that the Technical Committee and full CRC consider the format of such reports during the input hearings in Los Angeles so Q² can provide them in whatever form is most helpful.

- We strongly recommend that at the wrap up hearings Commissioners be prepared to validate the choices presented by the public and provide feedback on which alternatives it would like to explore. This input would not preclude the Commission from changing its decisions at a later date. In fact, changes to directions are anticipated and the purpose of the early input. Each direction will enable Q² to begin to look at which preferred options are possible in which plans, which may conflict with one another, and which may influence key decision points in other regions.

If the CRC decides not to begin providing input until May 27th, it is unlikely that draft maps can be ready for approval by June 10th. As noted, CRC directions may be in conflict, and Q² may need to return to the Commission for additional input. If we cannot begin to identify these conflicts until late May/early June, we cannot guarantee the ability to complete this iterative feedback process in fewer than two weeks.

Thus, should the Commission wish to wait to consider decision points and provide input until the completion of the first round of input hearings, it is recommended that the Commission change its schedule for June and July to add more meetings for the Commission to direct the line drawers, and eliminate one of the two rounds of draft maps. Specifically, it is recommended that the CRC to use the bulk of June to discuss and debate public input, provide direction to consultants, allow Q² to analyze potential tradeoffs and return to the Commission for additional feedback. The Commission could then use late June and the first half of July to solicit public input on the draft maps, before returning to provide additional direction to staff in the latter half of the month in order to meet the deadline to release the final maps.

- We recommend that the Commission schedule time at its soonest available business meeting to provide clarification on how it wishes the redistricting criteria to be implemented. For example, Proposition 11 allows for greater population deviations for state legislative districts. However, the Commission needs to determine the degree to which it wishes to use such latitude. Similarly, the CRC needs to determine how to proceed in cases of conflicting testimony regarding communities of interest, neighborhoods, cities and counties. The degree to which it wishes to allow for population deviations or to prioritize various considerations in Criterion 4 will directly impact other criteria, such as the ability to keep cities and counties whole. Recommendations and options would be developed jointly between staff, legal consultants and technical consultants.

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Answering these questions early will also allow for more robust public input as individuals and groups planning on submitting maps to the Commission will be able to draw districts reflecting the same guidelines the Commission intends to use.

- We recommend that where necessary to visualize the primary alternatives proposed by the public, the Commission request that Q² produce a limited number of rough approximations *during* the wrap-up sessions using Maptitude or other software. These quick visualizations may help illustrate the feasibility of certain proposals or indicate where tradeoffs may have to be made, without committing the Commission to any decisions. Note that the production of detailed static maps conforming to the criteria in the Voters First Act must be done offline as they will likely require anywhere from 1-5 hours per district, plus formatting and printing time. However, the visualizations may be instrumental in helping the Commission to determine whether to invest the time in certain scenarios that may not actually address the public's concerns nor meet legal requirements.

For example, it may be possible to draw an elegant district boundary in a given area. However, as the process continues, it may become clear that drawing that district may disadvantage other communities in the state. Where directions conflict, Q² mappers can illustrate the tradeoff, either with static maps or in an interactive process, and enable the Commission to direct how it wants that conflict resolved in order to produce its first draft maps.

Finally, to improve communication between the CRC and Q², we would like to suggest that a few minutes at each hearing be set aside for commissioners to ask general questions of consultants, and for consultants to have the opportunity to clarify requests by commissioners.