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THE RULE OF FIVE

Gary W. Cox and Tim Tutt

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The County of Los Angeles was established on February 18, 1850, as one of the 27 original counties of California. In 1852, the Legislature created the office of Supervisor, and five Supervisors were elected to govern the County. Since 1887, the term of service has been 4 years. Table I exhibits the average number of terms served per Supervisor for various periods; the average is rising, suggesting that Supervisors have become more career-oriented (as have Congressmen) over the course of the ninteenth and twentieth centuries. (The evidence for this suggestion is not as clear as in the Congressional case, however, where the tenure evidence, besides being clearer,[1] can be mortised with data on the institutionalization of Congress.)[2]

If it cannot be proven that Supervisors have become more career-oriented, it is certainly clear that their job has become vastly more difficult and powerful. In 1913, the Board governed a County of 600,000 people, supervising a bureaucracy with 3,300 employees and a budget of $4,000,000. Since then, both the people and employees have increased more than an order of magnitude and the budget roughly three orders of magnitude. Unfortunately for the Supervisors, their salary has not quite kept pace with the budget and has increased only about an order of magnitude (in nominal dollars); it is presently at $51,624.

For this $51,624, the Supervisors are expected to govern Los Angeles County. The legal powers with which they are endowed to perform this task seem ample; they have the power to: appoint all agency and department heads except the Sheriff, District Attorney, and Assessor; approve an annual budget outlining the positions and expenditures of all departments; provide, publish and enforce a code of rules prescribing in detail the administrative duties of each department and institution in the County; set the salaries of all nonelected County personnel; determine County and special district policy; adopt ordinances to regulate public conduct in the unincorporated areas; act as an Appeals Board in zoning, licensing and assessment matters. In sum, the Board is the supreme executive and legislative authority in County affairs, and has important quasi-judicial powers as well.

When a Supervisor wishes to insure the implementation of a policy, his involvement can be quite determinative and detailed. "For example, one Superivsor has been involved in the writing of job classifications, after the passage of the Ordinance he sponsored created a new Department of Consumer Affairs. Another has set timetables for the Health Department to complete explicit steps in its reorganization, including dates for the provision of a new organization chart for the agency and for the regional organizations into which the Department is now divided."[3] In general, of course, policy oversight is much broader and less specific (a good deal of it being performed by the Chief Administrative Officer),[4] but this does not alter the Supervisors' de jure power.

TABLE 1

AVERAGE TENURE[1] OF BOARD OF SUPERVISORS, IN TERMS

Period[2]	Terms/Persons[3]	Average Tenure[4]
1852-1868	65/44	1.48
1869-1886	47/31	1.52
1887-1909	32/23	1.39
1911-1928	24/13	1.85
1930-1948	30/12	2.5
1950-1968	22/5	4.4
1970-Incomplete Period		

[1] The average tenure is figured on the basis of the following considerations: 1) Terms, rather than years, are counted. The length of the term is not taken into account. 2) A supervisor is counted at the year he was first elected. The results are even more striking when years are used. Terms increased in length from one year, 1852-53 to four years after 1887.

[2] The first three periods were constructed to coincide with changes in the formal provisions regarding elections and the length of Supervisors' terms. The last three approximate twenty-year periods. For purposes of comparability, the chart does not include information past 1968 as this current twenty-year period has not yet elapsed.

[3] The number of terms served divided by the number of men serving during that period of time. For example, from 1852 to 1868, there were 65 terms served altogether. This figure is divided by 44, the number of different men who served these terms.

[4] The average tenure. This figure results from the calculations in #3 above. Thus, for 1852 to 1868, 65/44 represents an average tenure of 1.48 terms per person.

Source: Public Commission on Los Angeles Government, The Central Executive Structure and Decision-Making Processes of the Los Angeles County Government, p. 58.

Recent newspaper accounts of the Board have emphasized this potency: "Nowhere else in the U.S. does any elected official have this much uncontrolled power."[5] Also noted have been the Board's invisibility to the general public,[6] the custom of allowing each Superivsor to determine matters localized in his district (reciprocity), and Supervisorial job security: there was no change in the membership of the Board from 1958 to 1972. This last observation underpins newspaper accounts of an incumbency advantage[7] and casts doubt on the analytic usefulness of the electoral connection assumption in the County context.[8]

In this paper we focus on a much-commented allocative rule in use by the Board: the so-called "rule of five". This is a formally voted-upon policy and directs that certain nonmandated funds be divided equally amongst the five Supervisorial Districts. Section I describes the operation of the rule in a few cases. Section II attempts a more abstract explanation. Section III concludes.
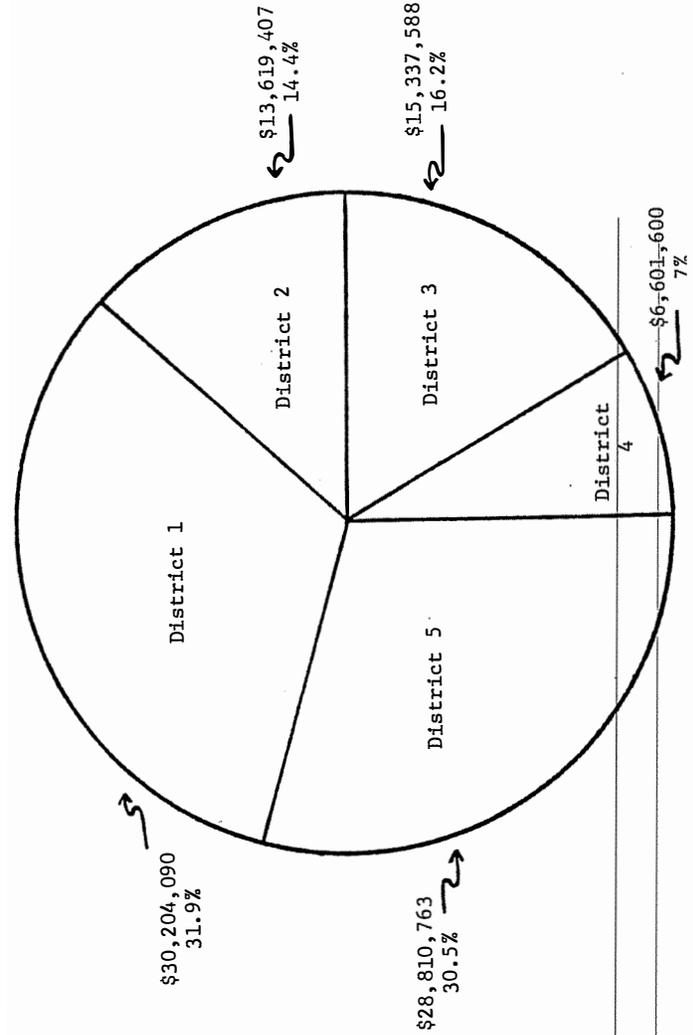
I.

Precisely when the rule of five got started is unclear. Kenny Hahn, Supervisor of the second District since 1952, has stated that "The County was formed in 1852 and since 1852 they've . . . . divided by five . . . . We've always divided by five, not three or ten, because there's only five of us."[9] Other old-time County employees have stated that the rule was in operation for a "long time" or as "long as they could remember."

But the question of the starting date of the rule of five is tied to its area of application. Perhaps by focusing on particular funds we can say something more definite about when the practice began. To this end and to illustrate the details of the rule, we consider the use of the divide-by-five principle in the Parks and Recreation Department and in the Road Department.

The operation of the rule of five in the Parks Department began following a vote by the Board in 1975 which "adopted in principle a policy for Park Capital Projects financing that park money be divided as equally as possible among the 5 Supervisorial Districts."[10] From at least the early 1950s until 1975, Parks capital projects had been handled through an informal universalistic process; there was no fixed formula as to how much went into each District, and in particular, there was no agreement in principle that funds be divided equally.[11] In fact, federal grant funds are categorical by nature, and "it is difficult, if not impossible, to distribute them evenly between Supervisorial Districts."[12] Chart I shows the percentage division of the pie for 1970-1975; these figures can be taken as roughly accurate for some time back into the 1960s. The 4th District got such a low percentage of funds because (1) capital projects expenditure by the Beaches Department was construed as compensation (indeed, until 1969, the beaches were administered by the Parks Department, and thus beach capital expenditures were included in the total Parks budget) and (2) the District has a relatively small, unconcentrated, and wealthy unincorporated population. Districts 1 and 5 received 69 percent of

CHART I

FIVE-YEAR DISTRIBUTION OF ALL PARKS AND RECREATION
CAPITAL PROJECT MONIES BETWEEN SUPERVISORIAL DISTRICTS*
1970-1975

$13,619,407
14.4%

$15,337,588
16.2%

$6,601,600
7%

District 2

District 3

District 4

District 1

District 5

$30,204,090
31.9%

$28,810,763
30.5%

*Percentages have been adjusted to reflect effect of carryover funds on yearly allocation.

Source: ACPAP, p. 21.

all grant monies in the period 1964-1975, illustrating the benefits to a District of having large open spaces at a time when federal grants favored regional parks. Land and Water grants, for example, favored (until 1976) large, water oriented parks such as Castaic in District 5.

While there was no formal or informal agreement upon equality in project funds, each Supervisor advocated the needs of his own District, and was actively concerned that his District receive a "fair share". The Parks Department prepared capital projects budgets by District and reviewed these budgets with each Supervisor. Supervisors showed interest not just in their own budget, but in their budget vis-à-vis the other Districts.[13] The Parks Department was sensitive to the demands of each Supervisor and would make special efforts to come up with suitable projects in the "short" Districts. At one point, for example, the Parks Department Head arranged for the transfer of a park from the City of Los Angeles to the County in order to satisfy the insistent demands of one Supervisor for a project.

In general then, we can view the Parks project funds allocation in the pre-1975 period as based on (1) the needs calculations of the Department and (2) the criteria attached to the various funds sources, as mitigated by (3) the political reality of geographically-based representatives going to bat for their Districts. Any pressure toward equality per se took place in the larger context of the total capital projects budget.

This state of affairs changed in 1975. On June 11, the Board voted 4 to 1 (Mr. Schabarum voting no) to adopt in principle the divide-by-five approach. On the same date, they directed the Parks

Department to prepare a report on the consequences and merits of various allocational methods (including the method then in use and the newly proposed division by five). Parks produced the Report to the Board of Supervisors on Alternative Capital Project Allocation Processes, which ranked the proposed policy fifth and last. The Board did not publicly consider the report and voted to adopt the rule of five in August.

The practical effects of this vote include a greater equality of project funds between Districts (as expected), and a change in Supervisorial-Department relations.

The change in Supervisorial-Department relationships is simply that the Supervisors are no longer as active in registering demands for projects with the Department; since their share of funds is fairly certain, there is no need. This does not mean that Supervisors no longer watch their budget. The Head Park Planner holds monthly meetings with Supervisor Schabarum, and close contact is maintained with deputies from the other Districts.

The allocational equality achieved by the vote is not precise since 95 percent of the Parks project budget in recent years has involved categorical funding, which, as noted above, is difficult to distribute equally amongst Districts; Districts do not have equal ability to provide projects which meet source criteria. Only 5 percent of the budget, then, is usable for balancing purposes. Once funding for projects has been lined up, the budget must still be approved by the Chief Administrative Office, which may delete a project by refusing matching county funds. Thus, in practice, the 20 percent target

may be missed by $\pm$ 5 percent.[14]

The practice of targeting 20 percent of Road capital project funds to each District began in fiscal year 1973-74, pursuant to a combination of Board order and informal agreement.[15] From the late 1940s til the early 1970s Road project funds had been distributed according to a fixed percentage formula, roughly 25 percent to the first District, with 20 percent, 15 percent, 20 percent, and 20 percent to the remaining Districts (in order).[16]

This formula was already accepted procedure in 1950. The former Roads Commissioner conjectures that the practice developed after the Second World War when the Roads project budget was first attaining a significant size. Faced with the problem of distributing a significant amount of funds, the planners simply looked at the last year's percentage breakdown and aimed to repeat it. The Board formally ratified this decision at some point before 1950, and the shares thus established were adhered to until the early 1970s. The Department was able to hit the allocational target precisely because a large part of its funds were discretionary (highway user's tax, gas tax).

Not all the Supervisors were happy with the shares allotted them. Ernest Debs, Supervisor of the 3rd District (getting the smallest share) was especially desirous of a change and Supervisor Hahn joined him in this desire. Supervisors Bonnelli, Chace and Dorn were content with the traditional formula, and since they constituted a majority, no change was effected.

This was the situation until sometime before the early fall of 1971, when Mr. Dorn changed his mind.[17] Mr. Debs' chief deputy

arranged a meeting of chief deputies at that time and the manner of switching to an equal division was agreed upon. The 1st District was to take about a 2 percent cut in the next fiscal year (July 1972-July 1973), the 2 percent going to the 3rd District. The following year (1973-1974), complete equality was to be established.[18] At some point, the Board (at least informally) ratified this plan, and it was implemented as agreed.

The present operation of the rule of five in the Road Department is fairly stable. A typical recent year might be described as follows (with the figures for any given year varying around the ones given): out of total departmental revenues of $70 million, $20 million for capital projects is left over after maintenance and operating expenses are covered. This $20 million and the $9 million from the federal Aid to Cities program are divided by five in the following fashion: the Aid to Cities funds are distributed to the cities by a federal formula based on population and maintained mileage, and the $20 million is then apportioned among the Supervisorial Districts so as to equalize the dollar amounts spent on capital projects.[19] Each Supervisor can keep a detailed eye on road projects in his district because (1) the Road Department's Program Development Division puts together a "proposed project budget", in consultation with the relevant Supervisor (for each district), and (2) the same division provides each Supervisor with comprehensive monthly project management reports.[20] In recent years then, each Supervisor could count on somewhat less than $6 million for road projects in his district.

As we have seen, the rule of five as a public policy of the

Board of Supervisors dates from the early 1970s in the Roads Department and from 1975 in the Parks Department. How can we reconcile this with the statement by Hahn at the beginning of this section? The probable answer is that "divide by five" may not refer to a recognized agreement (formal or informal) that certain funds be distributed equally but rather to the natural tendency of equal representatives to demand their "share". In the next section we examine the consequences of this natural tendency from an abstract perspective.

II.

Consider five individuals "representing" five distinct geographical regions in a decision-making body (dmb) which operates by majority-rule. The dmb is presented with a time-stream of dollars to be divided among the regions at successive meetings.[21] Influences on individual behavior -- legal, institutional, "expectational" -- may exist. In particular, we consider influences deriving from the relationship between representatives and regions and from the "other duties" of the dmb.

We begin with a game of divide the dollar. (Regions are suppressed; their relationship to individuals is as pocketbooks. The dmb has no other duties. We assume players maximize expected utility and that utility is a function solely of income from the division of the dollar.)[22] What will be the result? The core is empty, but the set of ten payoff vectors $K = \{(1/3,1/3,1/3,0,0),\ldots,(0,0,1/3,1/3,1/3)\}$ is both a main-simple V-set and a Strong Competitive Solution, so that

for a single play of the division game, we might expect a member of K as the majority rule outcome.[23]

Now suppose that before the first meeting a special vote is held on the question of establishing (or not) a "norm". A norm is simply a suggested division of the dollar with the property that, if subsequent meetings adhere to the norm, there are no costs, but if subsequent meetings deviate from the norm, there are costs. In the present context, costs may be considered a random loss of dollars associated with breaking tradition or repealing the law establishing the norm. By symmetry, we assume that the only norm to be voted on is $(1/5,1/5,1/5,1/5,1/5,)$.[24]

Will the players vote for this norm? Conditions sufficient to ensure that they will are given below. The basic requirement is that individuals' estimates of their probability of membership in winning coalitions are low enough relative to their risk premiums (or, equivalently, the individuals are risk-averse enough vis-à-vis their probability estimates).

Let g_i be the payoff to i, $0 \leq g_i \leq 1$

$p_i(g_i)$ be i's subjective probability of receiving the payoff g_i, given that there is no norm

u_i be i's utility function

EV_i be i's expected dollars if the norm is not adopted

π_i be i's risk premium

r_i be the number of meetings i expects to attend.

Proposition: Suppose that it costs nothing to vote on the norm and that players consider the costs of violating the norm to be effective in preventing violations. Then if $\pi_i > r_i[\int_0^1 p_i(g_i)g_i dg_i - 1/5]$ for at least three players i, the norm will be adopted.

Proof: Each player calculates

$$EV_i = r_i \int_0^1 p_i(g_i)g_i dg_i$$

π_i is defined by:

$$u_i(EV_i - \pi_i) = r_i \int_0^1 p_i(g_i)u_i(g_i)dg_i$$

The norm will be voted for by i if:

$$u_i(r_i/5) > r_i \int_0^1 p_i(g_i)u_i(g_i)dgi = u_i(EV_i - \pi_i)$$

and thus if:

$$\frac{r_i}{5} > EV_i - \pi_i \Leftrightarrow \pi_i > r_i[\int_0^1 p_i(g_i)g_i dg_i - 1/5]$$

This proposition shows that risk aversion in the context of a series of dollar divisions creates a rational desire to constrain future choices. Clearly, if the process of dividing the dollar costs something, the norm has another argument in its favor.

One cost might simply be time: it takes some to wrangle over the division. Perhaps the players ask themselves before the first meeting: What is the least time-costly method of division? The answer is clear: any method entailing no meeting. In the present model, we construe "no meeting" to mean that no communication occurs between players. They must simply submit a vector as their vote, knowing that if two or more others happen to submit the same division, then that will be the result. How would the reader vote? Symmetry

strongly suggests that the majority result, if any, would be the norm. Thus, the norm may be construed as the status quo going into the first meeting (before any tradition exists) in the sense that it would be the only plausible majority rule choice if the players minimized (set to zero) time costs of bargaining.

Considerations of the cost of dividing the dollar and the considerations raised by the proposition may have their empirical relevance in the votes taken by the Board in 1971 and 1975 to officially establish the policy that roads and parks funds be divided by five.

The details of the 1975 vote are a mixed bag as far as conforming to our expectations based on the proposition, however. The instigator of the divide by five policy was Baxter Ward, Supervisor of the fifth District. As Chart I shows, the fifth District got 30 percent of the capital projects funds in the years 1970-1975. Thus, if Ward believed in 1975 that the future was going to look like the recent past as far as parks went, he was either quite risk-averse or the proposition does not describe his behavior. (Note that none of the other Supervisors pose this problem.) Conjectures as to Ward's motivation include: (1) a desire to curb the aggressive and successful pursuit of funds by one or more other Supervisors; a desire to reduce competition for monies, (2) a desire to protect his future local parks funding: by the acres/population measure of need which was the accepted County criterion, the fifth District was the least needy in 1975 (see Table II). Both of these conjectures presume that Ward did not believe that the future would look as good as the past for his District, and they thus render the proposition more plausibly

applicable.[25] Ward's publicly-stated reason for pushing the rule of

five, however, is simply that he considers it equitable. The present

model of course admits of no considerations of fairness, and thus

fails to explain Ward's behavior to the extent that it was based on

such considerations.

The proposition could be confronted with the 1971 vote and

even (with a slight modification) with the late 1940s vote, if any

details were known. The 1940s vote does indicate that a desire to

stabilize and render predictable is probably the strongest argument

of the proposition, since John Anson Ford, the Supervisor of the third

District who accepted the 15 percent share, has stated that

considerations of need, another concept not comprehended by the

proposition, entered into his decisions.[26]

And yet, there is not a lot of unpredictability as to the

percentage breakdown of the County's total capital projects budget.

At least, there is not as much unpredictability in the County as there

is in the model. The model leads to a member of K if the norm is not

adopted. But we do not observe many 3-2 votes (see Table (III)), much

less members of K, in the County.

Why not? What factors might account for the absence of

members of K in the allocation of the County project budget? This is

essentially the question of "Why universalism?" The reader is

referred to Fiorina for an answer preserving economic assumptions.[27]

Going beyond economic assumptions, we note that the notion of

"fairness" is certainly a major feature of the rhetoric of distributional

politics in the County. As a summary without expatiation we might say

TABLE II

LISTING BY SUPERVISORAL DISTRICT OF
DIFFERENCES IN SOCIO-ECONOMIC AND LAND USE CHARACTERISTICS
OF UNINCORPORATED AREAS

UNINCORPORATED AREA FACTORS	SUPERVISORIAL DISTRICT				
	1	2	3	4	5
Population					
Total	320,562	197,691	137,207	38,210	275,611
Percent of Total District Population	33%	20%	14%	4%	29%
Median Age	23	28	34	33	28
Median Income	$13,722	$10,703	$8,930	$14,770	$12,574
Household Size	3.7	3.3	3.4	2.9	2.9
Land Use					
Dwelling Units/Acre (Density)	1.57	4.51	11.75	2.13	0.99
Total Unincorporated Acreage	76,126	15,933	6,362	51,650	1,689,698
Percent of Unincorporated Area In Open Space*	55%	7%	11%	83%	93%
Local Parks Deficiency in Acres	1,049	669	483	147	771.04
Existing Local Park Acreage/1000 Population	0.502	0.679	0.483	0.13	1.287

*Open-space includes all open land, agricultural land, vacant urban land, and vacant non-urban land.

Source: ACPAB, p. 11.

that certain economic considerations coupled with considerations of
fairness conduce to universalism.

But the existence of universalism in the County reminds us
of an interesting feature of the model. The particular form of
universalism known as the rule of five is less likely in a generally
universalistic dmb than in a dmb fraught with minimal winning coalitions.
This is simply because there is less uncertainty in a universalistic
dmb, and the rule of five serves largely to reduce uncertainty. We
conclude that in a universalistic dmb, and relative to a
non-universalistic dmb, considerations of cost in the division of the
dollar (and non-economic considerations such as fairness) may be more
potent in leading to a vote for the norm.

This is not to say that we believe that fairness was a more
important factor than uncertainty in the admittedly universalistic
Board of Supervisors. We have our doubts since (1) needs-based
formulae seem to us fairer[28] and (2) such formulae are clearly
inferior to the rule of five on the counts of uncertainty and cost of
division. Since needs-based formulae do seem to us fairer and are
generally universalistic, we wondered what reasons there might be
(besides uncertainty and cost of division) that the rule of five was
adopted over such formulae.

A fundamental reason seems to be the multiplicity of needs
formulae that are conceivable. No particular needs formula is clearly
superior to the rest and thus arguments for one over another may be
fairly subtle or intricate, while equal division has a simple and
prima facie reasonable explanation: equal populations and tax shares

TABLE III

BOARD OF SUPERVISORS ACTION ON APPROPRIATIONS,
April 15, 1975 - June 3, 1975

	Amount in Dollars	Percentage of Total Proposed
Total Proposed	140,010,000	100
Held for Discussion	34,877,000	25
Continued	45,417,000	32
Total Committed	94,593,000	68
Reject CAO Recommendation	0	-
Accept CAO Recommendation	94,593,000	68
Split Vote:	7,889,000	6
4-1	0	-
3-2	5,614,000	4
3-1	2,795,000	2
Passed en Masse	59,716,000	43 (63% of total committed)

Source: Public Commission on Los Angeles Government, The Central Executive Structure and Decision-Making Processes of the Los Angeles County Government, p. 36.

should induce equal projects expenditures. The multiplicity of needs

formulae also means that a "Schelling effect" is possible. Schelling

conducted a series of experiments as follows (no communication allowed

in any of them):

(1) Two-player divide the dollar; result-equal division.

(2) "A and B have incomes of $100 and $150 per year,

respectively. They are notified of each other's income

and told that they must begin paying taxes totaling $25

per year . . . each is to write down the share he proposes

to pay, and if the shares total $25 or more, each will pay

exactly as proposed. If the proposed shares fail to add

up to $25 . . . each will pay the full $25 . . .";[29] result-

division proportional to income.

(3) Same as (2), but additional information is given-on

spending habits, family size, etc.; result-equal division.

"Here the unique attraction of the income-proportionate

split apparently became so diluted that the preponderant

reply from both the high-income and the low-income

respondents was a simple 50-50 division of the tax. The

refined signal for the income proportionate split was

drowned out by 'noise', and the cruder signal for equality

was all that came through."[30]

An example of this type of effect in the County is provided

by the controversy over the Board's allocation of some juvenile

justice funds early in 1979. The funds had come from the state with

the proviso that a citizens' commission be allowed to review the

community groups applying for the grant funds, and recommend who

should get it. An advisory commission was formed and ranked the

community groups on the basis of 24 questions designed to reveal the

capability of the organization and the "design, impact and budget of

their proposals".[31]

The Board chose to ignore these rankings in favor of a

closer five-way split. But the defense of their move was not just that

the rule of five was reasonable in itself. Kenny Hahn objected

that the advisory commission's ranking might show only how well an

organization can write grants.[32] Hahn also wrote a letter to the Times

pointing out that the commission's allocation would not have served

the neediest Districts of the County well.[33] Thus, merit considerations

plus need considerations yielded the rule of five.

III.

The rule of five can be viewed as a special case of a fixed

percentage allocation. The County offers two examples of fixed

allocations, both from the Road Department. Such allocations have a

couple of things going for them from the perspective of this Paper:

(1) they reduce uncertainty to a practical minimum, and (2) they

reduce costs of dividing the pie to a minimum. The timing of the

1940s vote, just when funds were becoming significant, can be

tentatively chalked up to increasing relative risk aversion and

increasing competition over percentage points when the pie is getting

bigger.

In a larger context, where considerations of need and merit

are electorally important, the rule of five has the potent properties

of symmetry and simplicity. These advantages have been expressed by

Schelling in various ways, and are indicated in the discussion of time-

costs of bargaining and the discussion of "Schelling effects". Whenever

there is not an undeniable need-based formula, and large amounts of

money are involved, the rule of five may be expected to be at least

a contestant allocational method.[34]

APPENDIX 1

The Mayo-Breed Formula, first used in the late 1940s, directed that state gas tax funds be divided 55-45 between the southern and northern counties of California. The south felt that, since it had roughly 60 percent of population and vehicles, and thus generated about 60 percent of revenues, it should get 60 percent of the gas tax funds. The Board often went on record urging a 60-40 split.

In the excerpt below, Mr. Debs argues by analogy for an equal split between Supervisorial Districts:

LOS ANGELES, CALIFORNIA, THURSDAY, OCTOBER 19, 1971. 9:30 A.M.

MR. DEBS: I have one more. Now that the five Supervisorial Districts have been reapportioned on an equal population basis, with some losing and others gaining additional streets and highway mileage, and in keeping with the Board's often-supported policy on the gas tax funds on the Mayo-Breed Formula that funds should be equitably apportioned to the area from which they arise, I move that the Road Commissioner be requested to adjust the financing of the construction projects in the various Supervisorial Districts.

CHAIRMAN DORN: Based on population and mileage?

MR. HAHN: Yes; so that they are all equal --

CHAIRMAN DORN: So ordered.

MR. HAHN: -- in all five Districts; 20 percent of the funds for each District.

FOOTNOTES

1. The table below gives the number of "new" members in each two-year interval since 1920. A member is "new" if he was not elected nor appointed in the previous two-year interval. Cf. Fiorina, Rohde and Wissell, "Congressional Replacement: An Historical Examination," for comparable data on Congress.

Year	# New Members	Year	# New Member	Year	# New Members
1920	1	1940	0	1960	0
1922	0	1942	0	1962	0
1924	0	1944	2	1964	0
1926	2	1946	0	1966	0
1928	1	1948	0	1968	0
1930	3	1950	1	1970	0
1932	2	1952	2	1972	3
1934	3	1954	0	1974	1
1936	1	1956	1	1976	0
1938	2	1958	2	1978	1

2. Polsby considers such variables as years served in Congress before first selection as speaker, average percentage of Committees on which seniority was violated, and number of contested elections in his study of the institutionalization of Congress. None of these have compelling analogues for the Board. Cf. Nelson Polsby, "The Institutionalization of the U.S. House of Representatives," APSR 62 (1968):144-168.

3. Public Commission on Los Angeles County Government, <u>The Central Executive Structure and Decision-Making Processes of the Los Angeles County Government</u> (1975) p. 45.

4. The position of Chief Administrative Officer was created in 1938 by the Board (which retains the power to disestablish it at any time). The office is designed to provide central administrative guidance without constituting a separate and equal executive with powers independent of the Board; all Chief Administrative Officer powers are received by delegation from the Board and can be revoked by a majority vote of three. The position is nonetheless a quite powerful and influential one. See <u>ibid</u>., p. 72.

5. The quote in the text is the statement of a "public gadfly" to the authors of the article. Bob Abernathy and A. White, "The Invisible Growth Machine," <u>Los Angeles Times</u>, May 28, 1972, West, p. 7.

6. Supervisor Kenny Hahn recalls that even though he had studied and taught government and was serving as a L.A. City Councilman, he did not know what a Supervisor did. That was in 1952, when Hahn was asked if he would like to run for a seat on the Board. "They told me," Hahn said, "that if I got elected I would only have to work one day a week instead of five, and would get paid twice as much as a councilman. I looked into it and said to

myself, 'My God, what a sleeper this is. So I decided to run'". <u>ibid</u>.

7. The factors accounting for Supervisorial longevity according to one article (<u>ibid</u>.) were: (1) the name recognition advantage of an incumbent in the large Supervisorial districts, (2) the costs of running a campaign ($200-500,000) and (3) masterful credit-claiming. A name recognition advantage might stem from the placing of incumbent Supervisors' names on most County buildings, pamphlets and public information sheets, as well as regular newspaper coverage of Board events. Credit-claiming is engaged in daily simply by providing casework services competently and courteously.

Another factor perhaps worth mentioning is the informational advantage of incumbents. For example, if the Supervisors are doing their job, they are in frequent contact with city politicians and problems (e.g., Supervisor Schabarum has daily breakfasts with city officials in his district, rotating through the cities as the week progresses); a press clipping service is employed by some Supervisors (at County expense); a large staff serves to keep the Supervisor advised of constituent feelings ("The deputies sort of act as funnels of information from the public to the Supervisor . . . . We try to keep him very well-informed about all the calls and all the mail we get from the public in support of this project or against that one," explained one of Supervisor Hayes' deputies.)

An interesting further question about the incumbency advantage is: has it been growing? The table in footnote 8 provides some indication that it has: in the period 1936-56, incumbents won 86 percent of the elections they contested, while for the period 1958-78, this figure is 96 percent (only one incumbent has been defeated since 1958 -- Warren Dorn in 1972). If the incumbency advantage has been increasing, the way in which we account for this increase may shed light on the recent debate over the decline of competition in Congressional elections. See Gary Cox, "The Increasing Incumbency Advantage of Los Angeles County Supervisors."

8. Congressional scholars in the 1970s, influenced by "rational" models of economic behavior, sought to construct similar models of political behavior. Thus, in the methodological spirit of a firm seeking to maximize profits, the various hypotheses have been made that Congressmen seek to maximize the probability that they will be reelected, the size of their plurality, or the total of their votes. These hypotheses are judged both by their realism and by their predictive power. As to realism, it is asked: does this sound reasonable as something a person might actually do? As to predictive power, it is asked: does this hypothesis yield falsifiable predictions, which are, nonetheless, not falsified? From the latter viewpoint, the hypothesis that

(A) Congressmen are single-minded seekers of reelection (This

is Mayhew's wording. See David R. Mayhew, Congress: The Electoral Connection, 5. Note that we have taken a step away from rigor, in the sense that the hypothesis (A) is not embedded in a complete formal model of official behavior, whereas the hypotheses mentioned in the second sentence -- which can be construed as particular efforts at making (A) rigorous -- are) is justified if enough observed behavior is explainable in terms of the hypothesis, even if the hypothesis is not considered realistic as a description of the consciously-held goals of particular Congressmen. (See Milton Friedman, Essays in Positive Economics, Chicago: University of Chicago Press, 1953.) Mayhew, one of the first to use the hypothesis (A), considered it both passably realistic and predictively powerful.

Congressmen and Supervisors differ in many respects. They share a behaviorally important experience: both must periodically seek election from single-member districts. Is this enough of a similarity so that a rephrasing of (A) with "Supervisors" replacing "Congressmen" is analytically useful in understanding Supervisorial behavior?

We feel that (A) is less realistic when applied to Supervisors than when applied to Congressmen. A glance at the table below, inspired by Prewitt's discussion in "Political Ambitions, Volunteerism, and Electoral Accountability," (APSR 64, (1970), p. 5) indicates why. District 4 especially seems to meet Prewitt's criteria of volunteerism: six of the seven post-1930 Supervisors reached office originally by appointment, three left by voluntary

retirement, and incumbents were successful in 93 percent of the elections they contested. The unrealism of (A) notwithstanding, predictions based on it, e.g., that Supervisors will engage in credit-claiming, advertising, and casework, are not clearly gainsaid by the evidence. Most Supervisors engage in traditional credit-claiming: posting signs proclaiming "another highway improvement" with their name on them; and attending the opening ceremonies at new parks. News releases put out by the Supervisors almost invariably state the Supervisor's name several times on the first page. One staff estimated that 40-50 percent of its time was spent on casework. Another put the figure at less than 25 percent for the central office staff and 85-90 percent for the field staff.

9. "Supervisors Ignore Advice, Split up Grant," Los Angeles Times, January 24, 1979.

10. Minutes of the Board of Supervisors for June 11, 1975, p. 38.

11. The description in this and the next paragraph is based on conversations with Norman S. Johnson, Director of the Department of Parks and Recreation from the 1950s til 1974.

12. Parks Department, Report to the Board of Supervisors on Alternative Capital Project Allocation Processes, pp. 25-26.

SUPERVISORIAL DISTRICT	1			2			3			4			5			Σ		
PERIOD	1930 to 1978	1936 to 1956	1958 to 1978	1930 to 1978	1936 to 1956	1958 to 1978	1930 to 1978	1936 to 1956	1958 to 1978	1930 to 1978	1936 to 1956	1958 to 1978	1930 to 1978	1936 to 1956	1958 to 1978	1930 to 1978	1936 to 1956	1958 to 1978
# Elections[1]	14	5	7	14	7	5	14	5	6	13	7	5	12	6	5	67	30	2
# Incumbent Wins	10	3	7	13	6	5	10	5	4	12	6	5	9	5	4	54	25	2
# Incumbent Losses	2	1	0	1	1	0	2	0	0	1	1	0	3	1	1	9	4	–
# Deaths in Office	2	0	2	0	0	0	1	0	0	2	1	1	0	0	0	5	1	–
# 'Late' Retirements[2]	0	0	0	1	1	0	2	0	2	0	0	0	0	0	0	3	1	–
# 'Early' Retirements[2]	2	1	0	1	0	0	0	0	0	3	2	1	0	0	0	6	3	–
# Appointments	2	0	2	2	1	0	0	0	0	6	3	2	0	0	0	11	4	–
# Primary Only	10	3	7	12	6	5	9	5	4	11	6	4	9	5	4	51	25	2
# Uncontested	2	0	2	2	2	0	2	2	0	3	1	2	1	1	0	10	6	–
# Supervisors[3]	6	2	2	4	3	1	5	1	2	7	4	3	3	2	2	25	12	1
Incumbent Win %[4]	83	75	100	93	86	100	83	100	100	92	86	100	75	83	80	86	83	9
Primary Only %[5]	71	60	100	86	86	100	64	100	100	85	86	80	75	83	80	76	83	8
Uncontested %[6]	14	0	29	14	29	0	14	40	0	23	14	46	8	17	0	15	20	1
Appointment %[7]	33	0	29	50	33	0	20	0	0	86	75	67	0	0	0	44	33	4

(1) May differ between Districts due to deaths/resignations and ensuing special elections; (2) retirement after 8 or more years of service is "late", other retirements are "early"; (3) a Supervisor is counted in the period if he was elected or appointed in it; (4) 2nd row ÷ (2nd and 3rd rows); (5) 8th row ÷ 1st row; (6) 9th row ÷ 1st row; (7) 7th row ÷ 10th row.

13. Mr. Johnson recalls that after reviewing the District budget with a chief deputy, inquiry was often made into the status of the other Districts.

14. The description in the last four paragraphs is based in part on conversations with Chris Jarvi, presently Head Park Planner.

15. See Appendix 1 for the minutes of a meeting at which an order was made to equalize road construction funds between the 5 Supervisorial Districts.

16. Description in this and the next two paragraphs is based on conversations with I. L. Morhar, former Road Commissioner, and Hugh Dynes, chief deputy of the first District from 1950 til 1976.

17. Conversation with Hugh Dynes.

18. Conversation with Cecil Bugh of the Road Department.

19. Conversation with John Beke of the Road Department.

20. Public Commission of Los Angeles County Government, The Los Angeles County Road Department, October 1975, p. 20.

21. We describe a meeting as follows: a definite time period (the discussion) during which the individuals may transmit a fixed number of messages, the messages not to exceed a certain length

and to go to whomever the sender wishes. The number and size of the messages should be ample for communication, yet not usable as a weapon to capture time from other individuals. If a majority reach agreement during the discussion on a division of the dollar, they submit that division as their vote to an impartial chairman, who then terminates the discussion, declares the winner and distributes the money. If the discussion ends with no agreement, the dollar disappears.

22. The game as presently conceived satisfies conditions a – d proposed by Fiorina and Plott, "Committee Decisions Under Majority Rule: An Experimental Study," APSR 72 (1978):576.

23. This is if we are thinking game theory. If we adopt a voting-theoretic standpoint, we see that no voting equilibrium exists and that the min-max set is $\{x \in R^5 : x_i \leq 1 \text{ and } \sum_i x_i = 1\}$, hardly illuminating. Coalition theory suggests K again, since it contains all minimum winning coalitions. Schelling's obvious point perspective and the "fair" point perspective suggest $(1/5,\ldots,1/5)$. Cf. ibid., pp. 580-83.

24. Note that condition a in ibid. has been violated.

25. The first conjecture is perhaps better seen as emphasizing that the old method of division costs something. A Supervisor had to hustle for his funds.

26. Mr. Ford made the reference to need in relation to parks and not to roads. He recalled no vote on road funds.

27. Morris P. Fiorina, "Legislative Facilitation of Government Growth: Universalism and Reciprocity Practices in Majority Rule Institutions," Social Science Working Paper 226, California Institute of Technology: Pasadena, California, 1978.

28. We do not think highly of the rule of five as applied to parks. The first point to make is that the County provides local parks only to the unincorporated population, the cities taking care of their citizens. Thus, ceteris paribus, the first District, with 320,562 unincorporated population, has greater need than the fourth, with 38,210 unincorporated population. Other factors, such as income, mobility, and amount of existing park acreage, should also be considered. The second point is that professional park planners consider regional parks to be of County-wide significance, and prefer to view them in this context. Thus, Parks Department planners opine that neither local nor regional parks are allocated well by the divide-by-five policy. As the Head Parks Planner complained: "From a planning standpoint, it really didn't make any sense; you should be putting the money where the greatest needs are."

29. Thomas C. Schelling, The Strategy of Conflict, p. 62.

30. Ibid., p. 65.

31. "Merit Issue Raised," Los Angeles Times, January 8, 1979, Part II, p. 3.

32. Ibid.

33. Letters to the Editor, Los Angeles Times, January 30, 1979.

34. Thus, Supervisor Schabarum has proposed the rule of five in various other areas, including Health Services.