ADMISSIONS POLICY

FOR THE

UNDERGRADUATE SCHOOLS

OF THE

UNIVERSITY OF PENNSYLVANIA

Dan M. McGill, Chairman
E. Digby Baltzell          Nancy R. Leach
Sidney Bludman            A. Leo Levin
Douglas R. Dickson        John W. McCoubrey
Robert D. Eilers          Jacob Nachmais
John E. Free              William G. Owen
Peter J. Freyd            Richard F. Schwartz
David R. Goddard          Douglas Vickers
David E. Levin

August 1, 1967

CONFIDENTIAL
# ADMISSION POLICY FOR THE UNDERGRADUATE SCHOOLS
of the
UNIVERSITY OF PENNSYLVANIA

## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Broad Objectives of Admission Policy</td>
<td>3</td>
</tr>
<tr>
<td>II. Characteristics of a Student Body that Would Promote These Objectives</td>
<td>5</td>
</tr>
<tr>
<td>III. Criteria for Selecting Entering Class</td>
<td>6</td>
</tr>
<tr>
<td>1. Factors to be Considered</td>
<td>6</td>
</tr>
<tr>
<td>A. Objective Evidence of Academic Potential</td>
<td>7</td>
</tr>
<tr>
<td>B. Subjective Evidence of Academic and Long-Range Potential</td>
<td>9</td>
</tr>
<tr>
<td>C. Factors Extrinsic to the Personal Qualifications of the Applicant</td>
<td>12</td>
</tr>
<tr>
<td>2. Minimum Standards of Admission</td>
<td>16</td>
</tr>
<tr>
<td>3. Procedures to be Followed</td>
<td>19</td>
</tr>
<tr>
<td>A. Regular Procedure</td>
<td>20</td>
</tr>
<tr>
<td>B. Special Procedure</td>
<td>26</td>
</tr>
<tr>
<td>C. Early Decision Procedure</td>
<td>29</td>
</tr>
<tr>
<td>IV. Validating Admission Procedures</td>
<td>32</td>
</tr>
<tr>
<td>V. Recruitment of Applicants</td>
<td>34</td>
</tr>
<tr>
<td>VI. Other Issues</td>
<td>37</td>
</tr>
<tr>
<td>1. Size of Class</td>
<td>37</td>
</tr>
<tr>
<td>2. Impact of School Quotas on Admission Standards</td>
<td>37</td>
</tr>
<tr>
<td>3. Financial Need of the Applicant</td>
<td>39</td>
</tr>
<tr>
<td>4. Transfer Students</td>
<td>39</td>
</tr>
<tr>
<td>5. School Prerequisites</td>
<td>39</td>
</tr>
<tr>
<td>6. School Admission Committees</td>
<td>40</td>
</tr>
<tr>
<td>Appendix A - Summary of Proposed Admission Procedures and Criteria</td>
<td>42</td>
</tr>
<tr>
<td>Appendix B - Proposed Procedure for Weighting Objective, Subjective, and Extrinsic Factors</td>
<td>45</td>
</tr>
<tr>
<td>Appendix C - Predictive Index Currently Used in Admissions Process</td>
<td>46</td>
</tr>
</tbody>
</table>
ADMISSION POLICY FOR THE UNDERGRADUATE SCHOOLS
of the
UNIVERSITY OF PENNSYLVANIA

The need for highly-refined policies and techniques for the selection
of students to be enrolled in institutions of higher learning is basically a
phenomenon of the last quarter-century. The historical approach to admissions
among American colleges and universities has been for the institution to es-

tain minimum standards of academic qualification, usually in terms of
secondary school preparation, and then to accept all applicants of good char-
acter who could satisfy the minimum requirements. This approach was feasible
and entirely logical in a period when, with few exceptions, the number of
applicants did not exceed the capacity of the institutions.

About twenty-five years ago, however, a combination of factors conspired
to produce an environment in which the number of persons seeking admission to
the leading private and public institutions, and meeting the prerequisites for
admission, began to exceed the number of places available in the entering
classes. The factors contributing to this situation included a growing aware-
ness of the value of a college education; the expansion in technology; Federal
subsidies to higher education, especially assistance to veterans of the mili-
tary service; the burgeoning population; and a heightened sensitivity to the
differences in the quality of the education obtainable at various institutions,
not to mention the social prestige attaching to certain campuses. The imbal-
ance between admission seekers and available spaces has become increasingly
acute during the last five to ten years and with each passing year. This has
meant that the institutions confronted with this situation have had to move
beyond minimum, passive standards of admissions and develop positive procedures
for selecting from a pool of applicants, the great majority of whom can fulfill the minimum requirements for admission.

Pennsylvania is among those institutions that has far more qualified applicants than can be accommodated within the personal, physical, and financial resources of the school. For the academic year 1967 - 68, there were roughly five applicants for every space available. This has compelled the school to adopt policies and procedures designed to select those persons whose talents and interests can best be served at Pennsylvania and who, in turn, will enhance the reputation and advance the welfare of the University. This Committee, established in the fall of 1965, has reviewed the policies and procedures currently in use and is highly gratified at the substantial improvement in the quality of the undergraduate student body that has taken place within the last few years. This is not regarded as grounds for complacency, however, and the Committee has recommended a number of changes intended not only to improve selection procedures but also to strengthen the competitive position of the University in attracting the type of student that it wants.

This report has been prepared in a format that will permit it to serve as a comprehensive statement of admission policy at the University of Pennsylvania. It deals with every facet of admission policy, without indicating whether the recommended course of action represents a modification of existing practice. The Committee recognizes that admission policy must be dynamic, fluid, and responsive to the challenges of its time. The recommendations set forth herein are believed to be appropriate for the immediate future and conceivably for an indefinite period of time. Nevertheless, the Committee urges that the admission policy of the University be kept under continual review by a body composed primarily of faculty members, in order to adapt the policy to changing circumstances and goals.
I. Broad Objectives of Admission Policy

In the broadest and most abstract terms, the admission policy of the University should be designed to bring to Pennsylvania those students whose intellectual ability, interests, and motivation are most closely attuned to the academic and cultural environment which the University is seeking to create. Somewhat more concrete objectives would call for the selection of persons whose capabilities can best be nourished in this environment and who can be expected to make a significant and continuing contribution to one or more of the following: (a) society in general, (b) the communities in which they reside, (c) the broad range of professions and occupations that they may follow, and (d) the University itself.

These objectives are self-evident and need no elaboration nor defense. Yet the Committee feels constrained to call attention to the fact that the present and future vitality of an educational institution is highly dependent upon the characteristics of the students who pass through its portals. Not only does the current generation of students exert a powerful influence on the intellectual climate of a university, reaching into every aspect of educational policy, but as alumni these same persons can be a tremendous source of strength - or weakness - to the institution. They can reflect credit on their alma mater through their public achievements; assist in recruiting the calibre of students the institution is seeking; serve on advisory boards and committees; provide personal, corporate, and governmental financial support; and promote in many less obvious ways the well-being of the institution. This point is emphasized here because of its relevance to the qualities to be sought in the student population.
Within these broad objectives of admission policy, more specific goals must be articulated. The various goals that the Committee endorses will become apparent from the discussion of the many issues and pressures impinging on admission policy. At this juncture, however, it is useful to establish for the record the Committee's conclusion that the minimum academic goal of our admission policy must be to select students who have the potential of meeting all the requirements for graduation within the normal time span. Any lesser standard would be inhumane and unconscionable. It is difficult, if not impossible, to articulate in specific terms academic goals beyond the minimum. Certainly every student can not be expected to graduate with honors. Regardless of the quality of the student body, some students will perform better than others and the grading system will presumably attempt to differentiate among the students, with some inevitably falling within the middle and lower ranges of the spectrum. The Committee could postulate as a goal the admission of only those students who would fall within the upper stratum of excellence by whatever tests one might apply. Apart from the question of whether the University, now or within the foreseeable future, could attract a sufficient number of matriculants of this calibre to meet its needs, this goal, in a sense, avoids the issue of the qualities we would like to see in our successful candidates for admission. One is almost forced to settle for the loose generalization that the University should seek the type of student who can make the most effective use of its educational facilities and, in doing so, will best serve the long-run interests of the University, broadly conceived.

As a corollary to the foregoing, the Committee has concluded that the
admission goal of the University should not be so narrowly defined as to per-
mit the acceptance of only those applicants who appear destined to become the
intellectual leaders of the country. While Pennsylvania should strive to turn
out an increasing proportion of the truly brilliant members of American soci-
ety, it should be willing—and even proud—to produce a flow of literate,
intelligent, well-adjusted, and morally responsible graduates capable of evalu-
ating the ideas of the intellectual elite and committed to the advancement
of the loftiest aspirations of mankind.

II. Characteristics of a Student Body that Would
Promote these Objectives

The Committee rejects the concept of a student population composed ex-
clusively or even predominantly of "well-rounded" individuals. Furthermore,
it has no preconceived notions as to the characteristics of an "ideal" class.
It does subscribe to the notion that a major part of the total educational
experience of a university student is found in the interchange of ideas with
other students and the mingling of cultures represented within the student
body. Thus, it believes that diversity of student background is a positive
educational value and should be actively pursued, even at the expense of other
desirable attributes. The admission policy of the University should be de-
dsigned to produce a student population having the highest possible diversifi-
cation as to (1) intellectual interests, (2) special talents, (3) social and
economic background, and (4) cultural characteristics. The social, economic,
and cultural homogeneity of the present student body is a source of some con-
cern to the Committee, and some of the subsequent recommendations of this
Report reflect this concern.
While the Committee is committed to the goal of diversity, it rejects as an instrument of policy, discrimination against any applicant purely on the basis of race, religion, national origin, geographical location, political persuasion, or other similar characteristic. However, it sees no inconsistency between this position and the according of positive preference to applicant characteristics that are thought to enrich the total academic environment.

Finally, the Committee registers its firm conviction that, in combination with integrity, the quality that should be sought above all others in a student body is intellectual power. A university exists to nurture the intellect and all other goals must be subservient to this fundamental purpose. This is not to say that in individual cases greater weight can not be given to a quality other than sheer intellectual capacity, provided minimum standards of academic potential are met. Nevertheless, in the assembling of an entire class, the dominant considerations must be intellectual promise, however that be measured.

III. Criteria for Selecting Entering Class

In formulating its admission policy, an institution of higher learning must decide what variables may properly be taken into account as a general proposition, identify the groups that may require special consideration, and develop procedures for combining the various factors in such a manner as to do justice to the individual applicants and promote the basic goals of the institution. This is no easy task and the Committee makes no claim to omniscience in advancing its ideas as to how these objectives may be achieved.

1. Factors to be Considered

Some of the variables which the Committee feels may properly influence
the individual admission decision take the form of objective evidence of the applicant's academic potential, others provide subjective evidence of the applicant's academic and long-range potential, while others are largely extrinsic to the personal qualifications of the applicant and reflect broad University concerns.

A. Objective Evidence of Academic Potential. The principal forms of objective evidence of academic capacity are (1) the results of scholastic aptitude and achievement tests administered by the College Entrance Examination Board (CEEB) and (2) relative standing in secondary school graduating class. The scholastic aptitude test (SAT) is a multiple-choice type of examination made up of two components, the verbal and mathematical, the score for each of which is reported on a scale that runs from 200 to 800. The theoretical mean score for each component of the test for the standard reference group is 500, with a standard deviation of 100 (two-thirds of the scores falling between 400 and 600). The real meaning of any candidate's score depends upon the test (V or M) and the group with which he (or she) is being compared. A male with a score of 500 on the SAT-Verbal test falls at the 85th percentile compared with all male seniors; the 69th percentile compared with all male seniors who later enter a two- or four-year college; and the 60th percentile compared with all male seniors who later completed the first year of college "in good standing."

An SAT-Verbal score for a woman would place her at the 84th, 58th, and 55th percentiles for the corresponding women's groups. Thus, the present mean SAT-Verbal score for entering college freshmen is about 450 for men and somewhat higher for women. For the SAT-Mathematical test the corresponding present mean scores are somewhat above 500 for men and below 500 for women.
A student who receives a score of 500 on both the verbal and mathematical sections of the SAT would be above average for entering college groups. By comparison, the class that will enter Pennsylvania in the fall of 1967 registered a mean SAT-Verbal score of 640 for men in the College, 658 for women in the College for Women, and a mean SAT-Mathematical score of 675 for men and 644 for women. The percentile ranking of these scores is 94th and 93rd for SAT-V and 92nd and 93rd for SAT-M, respectively, compared with entering college freshmen.

CEEB achievement tests may be taken in various academic subjects. The average of the scores on the various achievement tests taken by an applicant (usually English and two others) serves as a measure of scholastic performance for admission purposes. The results of these tests are also reported on a scale of 200 to 800, with a mean score varying according to the subject, the number of years studied, and the year tested (junior or senior). The scores on the several achievement tests for candidates applying to Pennsylvania are of the same order of magnitude as the SAT scores of these students.

It is standard procedure for secondary schools to determine each graduating senior's rank in class and to report such information, usually in terms of quintile ranking, for those seeking college admission. Within that segment of the Pennsylvania class of 1971 coming from public schools, comprising two-thirds of the total class, 95 per cent ranked in the first quintile and virtually all the remainder were in the second quintile of their classes. Among those who come from independent schools, most of them highly selective, 57 per cent were in the first quintile, 26 per cent were in the second quintile, and the great majority of the remainder were in the third.

In assessing the weight to be assigned to rank in class, one must consider the quality of the secondary school from which a particular application
comes. A surprisingly large percentage of the students at Pennsylvania come from a relatively small number of secondary schools, and over the years the admissions staff has gained some firm impressions of the quality of instruction and the degree of scholastic competition at the various schools. Moreover, in recent years, the University has undertaken research into the predictive value of secondary school grades. The Committee commends these efforts and urges the research staff to extend the range of their activities to include separate studies of specific schools, with a view toward standardizing the recorded performances at the secondary school level.

CEEB test scores and rank in class, taken together, are unquestionably the most reliable indicator of intellectual capacity, especially if the secondary school is of high quality. Thus, considerable weight should be attached to these measures in making individual admission decisions. Nevertheless, the correlation between predicted and actual performance, based on these indices of success, is not high enough to justify sole reliance on them, except possibly for those applicants whose records are exceptionally impressive. There are clearly other more subjective factors that have a strong bearing on scholastic performance and in some cases may outweigh scholastic aptitude as commonly measured.

B. Subjective Evidence of Academic and Long-Range Potential. Subjective evidence of an applicant's qualifications is concerned with such factors as (1) character, (2) emotional stability, (3) creativity and special talents, (4) motivation and commitment, (5) leadership and activities, and (6) general personality.

The relevance of these factors to the over-all decision process should be apparent and their inclusion in the list of evidence to be considered needs
little defense. Nevertheless, a brief explanation of each item would not be amiss.

All applicants would be expected to possess good character and emotional stability, and these factors would be taken into account only if there were reason to believe that a problem exists with respect to them. It should be noted, however, that mental and emotional disorders appear to be rising—or at least are being more frequently recognized—among college students and increasing attention will have to be given to this problem in the years ahead. Already more than one-third of the medical services provided by the Student Health Service of the University, as measured by hours of consultation, take the form of psychiatric counselling and treatment. University medical and counselling authorities feel that even this demand for treatment understates the need.

Creativity is a universally admired characteristic but is difficult to define, identify, and measure in the context of admission policy. Under the general admission procedures proposed later in this document, creativity would have to be evidenced by tangible achievement of an innovative nature. The Committee regards exceptional artistic, literary, dramatic, musical, or scientific talents as a form of creativity for which weight should be given.

Motivation and commitment are also characteristics to be sought among the applicant group. Like creativity, these characteristics may be difficult to measure but the Committee feels that their importance justifies the effort. There is no question that a highly motivated individual will outperform a more indolent person of equal or even greater ability. Commitment to Pennsylvania, apart from any other evidence of motivation, is worthy of some recognition in the weighing of relevant considerations.
Leadership ability may manifest itself in many ways but generally speaking it is related to the capacity to inspire confidence in others and to influence their thinking and behavior. The Committee believes that leadership ability, in whatever form it may appear, should be rewarded.

"General personality" represents the residuum of personal traits not otherwise specifically recognized. It may be positive or negative in the generic sense, but the weighting system proposed herein does not contemplate "debits" for an unfavorable personality. It does contemplate some positive weight for such desirable characteristics as warmth of manner, sense of humor, politeness, poise, maturity, and sensitivity to the feelings of others.

Information concerning personal characteristics of an applicant is gleaned from various sources. An important one is the applicant's high school counselor, who submits a written evaluation. This person is in a position to reveal unusual traits of character or personality, information that can be very useful in evaluating the formal record of accomplishment. The validity of this information is dependent upon the counselor's perceptiveness, sources of information, and candor. Secondary school officials take great pride in getting their graduates admitted to the better colleges and universities and the determination with which they pursue this goal may sometimes warp their judgment. However, the University admissions staff is well acquainted with the counselors of the secondary schools from which the bulk of the applications come and has acquired considerable expertise in interpreting the recommendations of the counselors.

The admission interview is another source of subjective evidence of a candidate's fitness for the Pennsylvania student body. While the interview is not likely to uncover intellectual strengths not reflected in the objective
indices, nor reveal deep psychological or emotional maladjustments, it can be
useful in appraising a candidate's general personality, physical vigor,
motivation, special interests, sense of values, and commitment to Pennsylvania.
It may identify reasons for overachievement or underachievement which could be
taken into account in evaluating the objective data. Under present admission
policy an interview is not required, but about half of the applicants seek
interviews. These interviews are conducted by the admissions staff, faculty
members, graduate students, and alumni.

Information concerning an applicant's special interests, talents, and
accomplishments is provided in a statement of activities required by the
Office of Admissions. Manuscripts or other items may be submitted by an appli-
cant as proof of some unusual interest or talent.

C. Factors Extrinsic to the Personal Qualifications of the Applicant.
The extrinsic factors that the Committee feels may appropriately be reflected
in individual admission decisions are those intended to serve the institu-
tional needs of the University. Basically, they do not attempt to measure
differences in the personal qualifications of the applicants, except as to
unusual athletic ability.

Primary among the extrinsic factors is the University's desire to have
a student body that is widely diversified as to all the factors, previously
identified, that are believed to enrich an educational environment. This
suggests that the applicant's "background," broadly defined, should be given
some weight in the admission decision.

Another extrinsic factor of broad import is associated with the inter-
collegiate athletic program. Varsity sports competition at the University is
conducted in accordance with the Ivy Group Agreement, the terms of which
restrict participation to individuals who meet all the academic standards of
the institution in which they are enrolled and are, in fact, representative
of the student body in general. The Agreement, intended to ensure the con-
duct of intercollegiate athletics on an amateur basis, also envisions evenly-
matched competition. Because of their prestige, physical setting, loyalty of
their alumni, or athletic facilities, several Ivy League schools appear to
have an advantage over Pennsylvania in attracting "scholar athletes." In
recent years Pennsylvania has been hard-pressed to compete on an equal basis,
especially in some sports.

Athletes who can meet the academic standards of the Ivy League schools
are relatively scarce and are aggressively recruited by these schools, as well
as by other first-class institutions. Harvard, Princeton, and Dartmouth - to
mention only three members of the Ivy Group - have been notably aggressive
and successful in attracting outstanding athletes with good academic creden-
tials. Most, if not all, Ivy League schools give preference in the admission
process to outstanding athletes, although no concessions are needed in many
cases.

At Pennsylvania high school students with exceptional athletic prowess
are actively recruited by the coaching staffs and alumni groups. These
individuals are classified by the coaching staffs into two groups: (1) pre-
ferred and (2) recommended. Athletes in the "preferred" group are thought
to have the ability to compete with the best of the athletes at rival insti-
tutions, while those who are merely on the "recommended" list would help to
round out the squad but as a group could not produce a creditable record.
The Athletic Department estimates that the University needs about 150 athletes
of the "preferred" calibre in each entering class in order to compete favorably
in the fourteen varsity sports. For the academic year 1967-68, the Athletic
Department supported the applications of 830 athletically talented individuals,
many of them academically talented as well. The Admissions Office approved
434 applications in this group, yielding 230 matriculants. The margin between
these two figures demonstrates the force of the competition for scholar-
athletes. The matriculant group contained 169 athletes on the coaches
"preferred" list, about 53 per cent of those accepted for admission. About 43
per cent of the athletes who were admitted would have been approved strictly
on the basis of their other qualifications, without any special recognition of
their athletic talents.

A third extrinsic factor is concerned with alumni relations. It is
obviously important to an educational institution to be on good terms with
its alumni. For the last several years the University has made a concerted -
and long over-due - effort to forge closer ties to its extensive body of
alumni, now numbering about 100,000. One tangible approach to this goal is
to grant some preference in the admission process to the children of alumni.
Unfortunately this tactic is not as simple as it appears and various issues
present themselves. Should preference be given to the offspring of all alumni
of the University or only to those of alumni of the undergraduate schools?
Should alumni affiliation alone be sufficient or should preference be bestowed
only on children of alumni who have maintained more than nominal ties with
the University, contributing in some manner (not necessarily financially) to
the welfare of the University? What should be the nature and extent of the
preference? For example, should alumni children be assured of admission if
they meet minimum standards or should they merely be given some "points" for
their status? Should the preference be limited to those who designate
Pennsylvania as their first choice and possibly apply under the Early Decision Program (discussed later)? The dimensions of the overall problem can be grasped by consideration of the fact that for the current year 564 alumni children applied for admission, of whom 316 were admitted and 236 matriculated. Of this number 263 applied under the Early Decision Program, resulting in 166 approvals and 157 matriculants.

A similar facet of admission policy is presented by the children of University faculty, administrative staff, and other employees. Somewhat different considerations are involved here and the Committee's recommendations (set forth in the next section) reflect these differences. For the academic year 1967-68, 76 children of faculty and staff applied for admission, of whom 46 were approved and 34 matriculated.

The University's welfare is heavily dependent upon harmonious relationships with the Federal government, the Commonwealth of Pennsylvania, and the City of Philadelphia. A substantial percentage of the University's funds for physical plant construction, research, and operating costs is derived from governmental sources. The partnership between the University and the Redevelopment Authority of Philadelphia in reclaiming blighted areas for campus expansion is a notable example of the benefits of cooperation. Thus, the University must take a realistic attitude toward the interest of key politicians in particular applicants. From all available evidence, it would appear that this has not been a major problem. This year only about ten matriculants received special consideration because of the interest of a public figure.

Finally, and this is not wholly extrinsic in nature, special consideration should be given to candidates from socially and economically deprived backgrounds, including those from rural areas. These applicants suffer a
disadvantage in that (1) the primary and secondary schools which they attend
frequently provide only a limited preparation for college and (2) the total
environment in which they find themselves does little to improve the basic
skills needed to perform satisfactorily in a rigorous academic program.
Consequently, these applicants usually do not show up well on standardized
tests even when they are endowed with above-average intelligence. The plight
of the Negro student is receiving the attention of many organized groups,
national and local, and it seems likely that in the years ahead the quality of
this applicant group will improve to the point where a substantial number can
be admitted with reasonable prospects for academic survival. Experience with
students from rural areas has been very encouraging. Equipped with a combi-
nation of good native ability, common sense, and intense drive, these indi-
viduals usually perform at a relatively high level. The Committee recommends
that applicants from this segment of the high school population be vigorously
recruited, with special emphasis being given to attracting promising candidates
from the rural areas of Pennsylvania.

2. Minimum Standards of Admission. It should be, and is, a fundamental tenet
of admission policy that no applicant be admitted to the University unless he
shows promise of performing at an acceptable level of academic proficiency.
There should be no exceptions to this guiding principle, however attractive
the non-intellective qualities of the applicant and however strong the ex-
ternal pressures brought to bear.

In establishing the lower limits of acceptability, which for all practi-
cal purposes are operative only in connection with the academic risks admitted
under the special procedures described below, the Office of Admissions is
guided primarily by the indications of failure (or success) developed by the
Counseling Service. This list was drawn up after careful analysis of the files of students who were dropped by the University during recent years for reasons of academic deficiency. These indications of failure range over the whole gamut of information in the hands of the admissions staff, including secondary school performance, CEEB test results, recommendations of the high school principal or counselor, extracurricular activities, and personality or emotional problems. Some of the quantifiable indications of failure are:

**Secondary School Performance**

A. Coded Rank in Class is lower than 58 (1st quintile. See Appendix C)

B. The grade average in major subjects is less than 80, or B.

**CEEB Test Data**

A. Average of all Achievement Test scores reported is less than 575

B. Sum of the average SAT-Verbal and average SAT-Math scores is less than 1100

**Discrepancies In Performance**

A. \((1)(V + M)/2\) is less than 650 and

\((2)(V + M)/2\) minus Average Achievement score is 75 points or more

B. The grade average in major subjects is 80 or above and the Average Achievement score is less than 550

(An indication of failure is not recorded for both this category and grade average in Secondary School Performance)

C. (1) The sum of the average SAT-Verbal and average SAT-Math scores is 1300 or more and the Coded Rank in Class is lower than 63 (1st decile),

or

(2) The sum of the average SAT-Verbal and average SAT-Math scores is 1200-1299, and the Coded Rank in Class is less than 58 (1st quintile).
D. (1) Either the average SAT-Verbal or SAT-Math score is less than 600, and

(2) There is a difference between the Verbal and Math scores in either direction (V - M or M - V) of more than 150 points.

Indications of a nonquantitative nature include a principal's recommendation that can be characterized as no more than "fairly strong"; or two or more of the following:

(1) Absence of school and community activities involving group interaction, unless financial situation required part-time employment;

(2) Pattern of personality ratings in the "average" or lower range, especially those relating to integrity and emotional stability;

(3) Chronic health, emotional, or home conditions which are uncorrected.

These indications of failure have been validated by random sampling of the successful contemporaries of those students who failed to make the grade. Thus, it would appear that a minimum standard of acceptability should involve the absence of most of the validated indications of failure. In practice, the Office of Admissions regards an applicant with three or more indications of failure as marginal or a "risk" case.

From the indications of failure already identified and others that might be revealed by further research, it should be possible for the Office of Admissions to develop a "failure index" that would suggest the probability of failure of a given applicant. Such an index would show the failure potentials in various combinations of quantitative and nonquantitative trouble signs. If the indicated probability of failure should exceed a stipulated percentage, such as 25 per cent, the candidate would be denied admission.

With a simple statistical adjustment (1 - the percentage probability of failure) the failure index could be converted into a success index which has
a more positive connotation. If this conversion were made, the minimum standard of admission would be couched in terms of a specified probability of success, such as 75 per cent.

3. Procedures To Be Followed

The development of procedures for the actual selection of a class involves knotty questions of judgment and statistical techniques. The central problem, of course, is to develop a formula that will permit the various factors that have a bearing on an applicant's acceptability to be considered simultaneously with proper weight being assigned to the various factors. The formula, which should lend itself to easy explanation to all interested parties, should operate in such a manner as to fulfill the fundamental objectives of the University.

One of the policy questions with which the Committee has grappled is whether a particular non-intellectual factor, such as unusual athletic ability or exceptional drive, should be given effect only at the margin of acceptability or whether it should be taken into account along the entire spectrum of academic potential. Another question is whether some factors should be given so much weight that they transcend all other considerations, always assuming the potential of performing at a satisfactory level. In other words, should the presence of some quality or status be so compelling that it will ensure admission? Running through many of the questions is the fundamental issue of how high a price - in the currency of intellectual ability - is the University willing to pay to obtain geographical spread, cultural diversity, athletic ability, alumni goodwill, and other goals. This issue had to be faced in a milieu of increasing uncertainty as to what applicant characteristics are the most reliable predictors of academic success and, more important, of significant accomplishments in the years following the college experience.
The recommendations that follow reflect the pragmatic necessity of reconciling conflicting forces and philosophies involved in the admissions process.

A. **Regular Procedure.** The manner in which the bulk of each year's entering class is to be selected is designated herein as the regular procedure. The goal of the admission policy should be to select 90 per cent of the matriculants by this process. In this connection, it is necessary to distinguish among applications received, candidates approved, and matriculants.

The University was prepared to matriculate 1700 persons in the freshman class entering in the fall of 1967. To accomplish this objective the Admissions Office approved 3,103 applications from among the 7,702 received. The number of applications that must be approved to yield a desired number of applicants is a matter of judgment based on past experience, as modified by current trends and anticipated developments. In recent years the "yield," i.e., the percentage of approved candidates who actually matriculate, has been running around 55 per cent. Of the 3,103 candidates accepted for the class of 1971, 1,678 have indicated their intentions of matriculating. While the articulated goal is to bring 90 per cent of the matriculants to the University by way of the regular admission procedure, the actual percentage may vary slightly because the matriculation rate for the various categories of applicants differed from the estimated rate.

The Committee recommends that the regular admission procedure be designed to select a matriculant group composed of three elements or components. The first component would be selected exclusively on the basis of objective evidence of academic potential; the second component would be selected with primary regard to subjective and certain extrinsic factors; and the third - and largest - component would be selected on the basis of a combination of objective, subjective, and extrinsic factors.
The Committee recommends that 25 per cent of the matriculants for each undergraduate school of the University be admitted solely on the basis of objective evidence of intellectual ability. This evidence would consist of the results of CEEB aptitude and achievement tests and relative standing in secondary school graduating class, combined into a predictive index constructed on the basis of the best data and statistical techniques available. The predictive index would indicate the level of academic performance, measured in terms of the grade point average, that might be expected from a particular combination (weighted in the most effective manner) of aptitude test scores, achievement test scores, and standardized rank in class. Separate indices have been prepared for the College of Arts and Sciences, the College for Women, the Wharton School, and the Engineering schools, since experience has shown that the optimum combination of weights (i.e., the combination that produces the highest coefficient of correlation) differs from school to school. The predictive indices now available (shown in Appendix C) reflect performance data for only the freshman year, but plans are underway to extend the examination of academic performance beyond the freshman year. The correlation between freshman year performance and the three factors entering into the multiple regression analysis (with optimum weighting) ranges from .54 to .59 among the four undergraduate schools. These correlations compare favorably with those reported from college prediction research over the last fifty years. Under the proposed procedure, all applicants would be arranged in accordance with their predictive index values and a sufficient number would be approved in the order of their rank to yield an estimated matriculant group equal to 25 per cent of the entering class of each school.

At its discretion, the admissions staff could adjust the predictive index value upward in the face of evidence of underscience arising out of
temporary handicaps (such as financial problems; or emotional or health problems of the applicant's parents), or downward on evidence of overachievement, which might suggest that other aspects of the applicant's development have been neglected. Upward and downward adjustments could also be made to reflect the quality of the secondary school attended by the applicant. These adjustments would be made a matter of record and the Admissions Office would be expected to evaluate their validity and to report the results to the Admissions Committee. The Admissions Office would also have the authority, subject to review by the Admissions Committee, to reject any applicants who appear to be unacceptable because of character defects, emotional maladjustment, incapacitating psychiatric disorders, or other such disqualifying factors.

This recommendation is based upon the Committee's conviction that CEEB test scores and rank in class, taken together, represent the most reliable indicator of intellectual capacity, despite the relatively low correlation between these factors and freshman grade performance. It also reflects the Committee's feeling that more emphasis should be placed on intellectual qualities over the next several years until the intellectual level of the student body approaches that of the top Ivy League institutions. The significance of the recommendation can be appreciated more readily when one considers the fact that most schools whose academic standards are similar to those of Pennsylvania admit only about 80 per cent of the applicants falling within the top quartile of intellectual ability as measured by objective indices.

In recognition of the relevance of subjective factors and the need for cultural and other types of diversity within the student body, the Committee recommends that the Admissions Office be permitted to select up to 5 per cent
of the matriculating class for the undergraduate schools as a group purely on the basis of subjective and diversity factors. It is contemplated that this allotment of spaces would be used primarily for applicants having outstanding personal attributes such as creativity, motivation, and leadership ability. It could also be used to admit candidates from a background that would enrich the social and cultural environment of the campus. None of the candidates selected by this route should constitute academic risks (i.e., have three or more indications of failure). While some of the persons might fall within the category of applicants for whom the special admission procedure (discussed below) has been established, the intent of this provision is not to enlarge the number of matriculants of the type that would be accommodated by the special procedure.

The Committee recommends that the remaining component of the matriculant group to be selected under the regular procedure, numbering 60 per cent of the entering class, be selected on the basis of a combination of objective, subjective, and extrinsic factors, weighted in such a manner as to optimize the effect of subjective and extrinsic factors while elevating to some degree the existing level of scholastic potential as measured by objective standards. The statistical technique by which this balancing of factors would be accomplished is described in Appendix B. The enhancement of the intellectual quality of each successive class could be achieved by a higher matriculation rate among the abler candidates than that assumed in the formula or by the introduction of an explicit improvement factor in the formula. The feasibility of continually improving the matriculant group depends to a large extent, of course, on the number and quality of the applicant group. The decision of the Committee to optimize the effect of subjective and extrinsic factors rests upon several considerations, the most important of which is the
belief that such emphasis will produce a more exciting, stimulating student body than one selected with more stress on strictly scholastic evidence. There was also a feeling that beyond a certain level of intellectual competence, in which area most of the Pennsylvania applicants fall, non-intellectual personal qualities may be a more significant determinant of long-run potential than test scores and high school grades.

The Committee recommends that in combining the various factors in the manner described, the following subjective and extrinsic factors be recognized with the effective weights indicated.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Effective Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective:</td>
<td></td>
</tr>
<tr>
<td>(1) Special talents and creativity</td>
<td>30</td>
</tr>
<tr>
<td>(2) Motivation and Commitment</td>
<td>15</td>
</tr>
<tr>
<td>(3) Leadership and Activities</td>
<td>15</td>
</tr>
<tr>
<td>(4) General Personality</td>
<td>10 70</td>
</tr>
<tr>
<td>Extrinsic:</td>
<td></td>
</tr>
<tr>
<td>(1) Background (Diversity)</td>
<td>20</td>
</tr>
<tr>
<td>(2) Institutional Considerations</td>
<td>10 30</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
</tr>
</tbody>
</table>

The weights assigned to the various factors are arbitrary in a sense but they reflect the Committee's rough appraisal of their relative importance. Effective weights were specified in recognition of the fact that with respect to the subjective factors there will be a tendency for most applicants to receive some points, possibly clustering around the median. If effective weights were not used, one or two factors might exert a disproportionate influence on the over-all result. (See Appendix B).

An applicant should receive maximum credit for special talents and creativity, motivation and commitment, and leadership only on the basis of
"hard" evidence. Outstanding athletic ability should be recognized under "leadership." Applicants on the "preferred" list of the coaching staff should receive five specific points under leadership, while those on the "recommended" list should receive three specific points. Other activities and special talents should be awarded extra points if the degree of skill or talent is certified by an "expert witness" such as the University band director or the director of the Glee Club. The background factor should be broadly interpreted to facilitate the admission of any type of student whose presence would add flavor to the campus and strengthen the overall educational experience of the total student body. The Admissions Office could use this factor to favor a rural applicant over an urban candidate, a negro over a caucasian, a person from a low income group over one from a higher economic stratum, a native of a distant state or foreign country over a resident of an adjoining state, and so on. The "points" for institutional considerations are designed to give a modest boost to an applicant whose admission would promote the general welfare of the University. This factor supplements within the regular admission procedure the provision made for alumni children and other "special interest" applicants in the special admission procedure described in the next section.

Notwithstanding the foregoing provisions, the child of a fully-affiliated faculty member or other employee of the University should be assured of admission in the regular competition if his file discloses no indications of failure. The waiving of tuition and fees for the children of faculty and staff is a valuable and highly prized fringe benefit and should be accorded all possible protection consistent with sound educational policy. Moreover,
the children of faculty members in particular should be encouraged to explore opportunities at other institutions, secure in the knowledge that they can enroll at Pennsylvania if this proves to be the wisest course of action. This recommendation is to be contrasted to one that would assure admission (in the absence of indications of failure) only if the faculty or staff child applied under the early admission procedure.

The Committee believes that the child of an alumnus of an undergraduate school of the University should be assured of admission, in the absence of any indications of failure, if he applies under the early decision program but not otherwise. The considerations that argue for extending the "guarantee" throughout the regular admission period for faculty and staff children do not apply here. If Pennsylvania is not the first choice of the alumni child, he should be given no preference other than some points under "institutional considerations."

B. Special Procedure. The Committee recognizes that many applicants whose admission would serve the institutional needs of the University would not be able to qualify under the regular admission procedure just described. It proposes, therefore, that a special mechanism be established for the admission of a limited number of applicants falling within clearly defined categories. These categories would be (1) applicants certified by the Department of Intercollegiate Athletics as outstanding athletes, (2) applicants from economically and culturally deprived backgrounds, (3) children of faculty, staff, or alumni, and (4) applicants endorsed by trustees, political figures, important alumni, and other persons closely identified with the welfare of the University.

A careful analysis of the University's needs and obligations in the years
ahead suggests that 10 per cent of each entering class could justifiably be admitted on the basis of special provisions. As a matter of fact, there is considerable doubt in the minds of the Committee members that this percentage will accommodate the special needs of the University but the Committee strongly urges that the line be drawn at this point for the time being. No more than half of the persons admitted by this route, except those from economically and culturally deprived backgrounds, should be academic risks in the sense that they have three or more indications of failure. The other persons would be expected to offer academic credentials that are creditable but not sufficiently impressive to earn a place in the class through the regular competition. The predictive index values and other quantifiable information relating to the candidates admitted under this special procedure would not enter into the calculations to determine admissibility under the regular procedure.

Up to 5 per cent of the aggregate places in an entering class, or one-half of the spaces available under this procedure, should be allocated to the intercollegiate athletics program with the understanding that these spaces could be used only for athletes on the "preferred" list of the coaching staffs. In terms of a freshman class of 1700, this would mean that 85 athletes could be matriculated by this process. This compares to the 155 athletes of the "preferred" calibre that the athletic officials would like to see admitted each year. If the stated needs of the athletic department are to be met, seventy outstanding athletes would have to gain admission in the regular competition.

For the class entering September, 1967, sixty-six athletes on the preferred list made it "on their own." No more than half of the applicants admitted under this provision can be academic risks. This will provide for fewer than the fifty-five academically marginal athletes that the coaches feel must be admitted
each year. (The athletic department specifies the number of academically
marginal applicants that it would like to have admitted each year because
(1) candidates of this variety tend to be the better athletes in the
Pennsylvania applicant group and (2) the matriculation rate is higher.) In
making this concession to the apparent needs of the athletic department, the
Committee has stipulated that the Admissions Office determine at periodic
intervals (1) the academic performance of the persons admitted under this dis-
pensation, (2) the number of these individuals who actually participate in
varsity sport competition, and (3) the impact on the regular admission pro-
cedure of allocating points under "leadership" for applicants endorsed by
the coaching staffs.

The Committee suggests that up to 3 per cent of the spaces in each year's
entering class (i.e., 30 per cent of the spaces available under the special
admission procedure) be reserved for applicants from economically and cul-
turally deprived backgrounds. At the present time the number of applicants
in this category, principally negroes, who can meet the minimum standards of
acceptability is much smaller than this allotment would accommodate. However,
the University is committed to a policy of actively recruiting negroes and to
admitting all those minimally qualified. Thus, these—and perhaps more—spaces
may eventually be needed for this group. In the meantime, it would not seem
advisable— or consistent with expressed University policy— to place any
restrictions on the number of risk cases that could be approved within this
general allotment of spaces. In assessing the treatment of economically and
culturally deprived applicants in the over-all admission process, one should
note that they will be credited with 20 points for "background" in the regular
admission procedure.
The remaining spaces under the special admission procedure should be made available to the children of faculty, staff, and alumni and to applicants within the so-called special interest group. The minimum spaces should equal 2 per cent of the entering class with any spaces not used by applicants from deprived groups being added to the minimum. This group is expanding and thirty-four spaces (based on a class of 1700) is clearly inadequate to meet the University's commitment to its faculty, staff, and alumni and to accommodate the special interest cases that seem to require affirmative action. For the group entering in September, 1967 there were thirty-one special interest cases and 10 children of faculty, staff and alumni who were admitted outside the regular admission procedure. For the next several years it is likely that 3 to 4 per cent of the aggregate places will be available to this group because of the paucity of qualified applicants from the deprived groups.

It should be remembered that children of faculty and staff will be admitted in the regular competition if they have no indications of failure, and the children of undergraduate alumni are entitled to the same preference during the early decision program. Thus, applicants from these groups seeking admission under the special procedures will have at least one indication of failure. For this category as a whole, no more than half of the approved candidates can represent academic risks.

C. Early Decision Procedure. The early decision concept was introduced about ten years ago and has been in effect at Pennsylvania for the last three entering classes. It consists essentially of a promise by the institution to take early action on an application in exchange for the applicant's commitment to matriculate at the institution if his application is approved. It
was introduced for the dual purpose of (1) shortening the period of tension and uncertainty over the admission decision for the applicant and (2) reducing the uncertainty of the institution concerning the percentage of approved applicants who will matriculate. It presumably results in more students matriculating at the institution which was their first choice, with advantages to both the applicant and the institution. It also provides a mechanism by which the institution can offer preferential treatment to certain classes of applicants, such as children of faculty, staff, and alumni, for a limited period of time.

The chief disadvantage of the program is that decisions must be made on a substantial percentage of the total applicant group before the institution can gauge the quality of the applicants to be screened in the regular competition. The danger lies in the early approval of candidates who are inferior to those who took their chances in the regular competition. This contingency can be guarded against by setting the standards for early admission at a level high enough to screen out those not clearly falling within the top brackets.

To minimize the possibility of displacing superior applicants, the Committee recommends that for regular admission purposes favorable action on early decision applicants be limited to those who, on the basis of all available evidence, would appear to fall within one of the following three categories:

(1) top 25 per cent of the prospective matriculants measured by objective indices of ability;

(2) top 5 per cent of the prospective matriculants measured by subjective and diversity factors; and

(3) top quarter of the applicants to be selected on a combination of objective, subjective, and extrinsic factors.
The basis for selecting within the third category represents a tentative judgment and may have to be adjusted as experience is developed under the overall admission process proposed herein.

Early decision applicants falling within the categories encompassed by the special admission procedure would be evaluated in accordance with the criteria and constraints applicable to those groups. Children of faculty, staff, and undergraduate alumni would be admitted in the absence of any indications of failure. Children of alumni of professional and graduate schools would be expected to meet the same standards as other early decision applicants, although their cause would be helped by points under "institutional considerations."

Early decision applications not approved under that program would be merged with all other applications for consideration in the regular competition. All such persons would be credited with ten points under institutional considerations by virtue of their having designated Pennsylvania as their first choice.

The predictive index values and other quantifiable information pertaining to persons admitted under the early decision procedure should be reflected in the data governing the regular admission decisions. For example, in selecting the segment of the entering class that is to be based on objective indices, the admissions staff would take into account persons already admitted under the early decision program. Likewise, individuals admitted under the early decision procedure who could not qualify in the regular competition would be charged against the applicable quotas established under the special admission procedure. If it turns out that the early decision process as herein described exhausts—er more than fills—the number of spaces allotted to the special
admission procedure, the former, and possibly the latter, procedure will have
to be re-examined.

A summary of the proposed regular, special, and early decision procedures
is presented in Appendix A.

IV. Validating Admission Procedures

The admission procedures proposed herein should be kept under continual
review by the Admissions Committee to make sure that they are producing the
results intended. This surveillance can be made far more meaningful if it
is accompanied by an imaginative research program by the appropriate offices
of the University.

Current research efforts are seriously handicapped by lack of personnel
and the sparseness of relevant data in a form that can be processed by mecha-
nized methods. Prior to this year the Admissions Office has had to rely on
the Office of Institutional Research (which must respond to the operational
needs of other University agencies with a higher priority) and half of the
time of a Counseling Service staff member. The Office of Admissions now has
a full-time research and data processing associate and a full-time statistical
assistant to give attention to this important area. Next year's budget
includes provision for a half-time research assistant.

Related to the appointment of a qualified statistician to full-time
responsibility for research into admission procedures is the recording of all
relevant admission data on punch cards or magnetic tape. At present only a
limited amount of information is in a form that can be machine processed.
The research statistician should be given the responsibility of determining
what information is relevant to the admission process and then should see to
it that the information is gathered, recorded, and analyzed. Information
would be gathered systematically not only on applicants but also on alumni in
an effort to isolate those factors that make for success in the broadest
sense.

The opportunities — and need — for research in this area are almost
boundless. The most obvious need is continually to test and refine the pre-
dictive indices. As a minimum, the objective indicators of academic success
should be tested against the grade point average for the entire four years
rather than just the freshman year. Hopefully, the analysis could be extended
to the more significant measures of success after graduation. Then, in due
course, the grade point average and other measures of success could be corre-
lated through multiple regression analysis with every variable taken into
account in the admission process. The failure index could be refined in the
light of the findings from the more sophisticated analysis of the admission
variables.

The same type of analysis applied to the matriculant group could, at
somewhat more expense, be extended to a scientifically selected sample of
applicants who were denied admission. This would provide a useful, but not
conclusive, check on the over-all functioning of the admission process. Con-
tinuing studies might also be made of those applicants who were offered admis-
sion at Pennsylvania but matriculated elsewhere. Information on this group is
now available and should be utilized. Not only would properly designed re-
search projects tell us whether we are, in fact, losing superior applicants to
other institutions but it would identify the characteristics of the applicant
group who choose other schools. The latter information would be useful in
predicting which applicants would not matriculate at Pennsylvania even if
accepted and, hence, would improve the predictability of matriculation rates, especially among particular groups that might be of special significance to the University.

This sketch of potential research projects was not meant to be exhaustive but it should suggest the enormous benefits that could be derived from the allocation of adequate human and financial resources to the research effort.

V. Recruitment of Applicants

The quality of a matriculant group can be no higher than that of the applicant group from which it was selected. Moreover, other things being equal, the larger the pool of applicants, the more selective the admission procedures can be. Furthermore, the higher the level of sheer intellectual power within an applicant group, the greater the weight that can be given to the non-intellectual characteristics that add flavor to a class and may offer a more hopeful augury of truly exceptional achievement than intellectual capacity. Thus, Pennsylvania should strive to increase the number and improve the quality of those young people that want to cast their academic lot here.

There are many things that the University can do to attract the type of applicants whom we would like to see populate our classes. Possibly the most important is to make sure that high school principals and counselors throughout the country are aware of the manifold educational opportunities at Pennsylvania and are also aware of the student characteristics in which we are interested. Brochures describing the outstanding programs at the University should be distributed to counselors and alumni clubs. A concise and up-to-date statement of the University's admission policy and entrance requirements should be in the hands of all high school officials to whom we
look for referrals. Care should be taken to avoid the impression that we are primarily interested in the well-rounded student, with secondary importance being attached to intellectual capacity. Admission officials should visit as many good high schools as possible and groups of counselors should be brought to the University periodically to "sample" the intellectual climate and to gain a sense of the vigor of the University on many fronts.

Our distinguished faculty members should be asked to speak before alumni clubs and high school groups, somewhat in the same manner that they have been used to further the capital funds campaign. Care would have to be taken to limit the demands on the faculty, and especially to avoid overuse of the most popular and distinguished members. The faculty should be asked to speak to visiting groups of applicants and to confer privately with applicants having a special interest in their field. The current accomplishments and activities of the faculty should be publicized in every appropriate way by the Public Relations Office of the University.

The present student body should be used in various ways to create interest in Pennsylvania. The performing organizations such as the Glee Club, the Band, Penn Players, and Mask and Wig should be given the greatest possible exposure to the public and prospective students, possibly under the auspices of the local alumni clubs. Aggressive, interesting, and winning athletic teams would be a positive force if professionalism is avoided. When home during vacation periods, students could be asked to accompany faculty members on visits to nearby high schools and alumni clubs.

Applicants should be encouraged to visit the campus. Groups of key applicants could be invited to visit the campus, with a planned program that would contemplate greetings from the President, tours of research facilities
and specific departments, attendance at an athletic event, attendance of model
classes, visits with faculty members with common interests, and talks by
leaders of student organizations.

In this connection, it might be said that thousands of prospective stu-
dents and their parents visit the Office of Admissions each year. The physi-
cal facilities which they find there are not wholly conducive to a favorable
impression of the school. It is recommended that the facilities of the Office
of Admissions be refurbished in such a manner as to provide a pleasant, cheer-
ful (but not luxurious) atmosphere for the discussion of matters that bulk
very large in the minds of the applicants and their parents. In many cases,
the impression of the Admissions Office will be the impression of the entire
University carried away by the visitors.

Finally, the alumni of the University must be kept informed of the
University's admission policies and over-all educational program. If properly
oriented and motivated, the local alumni clubs can play an invaluable role in
steering outstanding young men and women to the University. Active partici-
pation in the admission process can provide a tie with their Alma Mater that
many alumni will cherish and pursue with vigor, if encouraged.

In summary, the attracting of outstanding students to Pennsylvania is not
a job for the admissions staff alone, however vital their contribution. It is
a team effort, involving the participation of the administrative staff, the
faculty, the existing student body, and the alumni. All these parties have a
stake in the outcome, and the rewards of success can be very satisfying.
VI. Other Issues

1. Size of Class

The quality of an entering class is greatly influenced by the ratio between the number of applicants and the size of the matriculant group. Thus, it is of some concern to this Committee that the Integrated Development Plan of the University envisions a 4 per cent annual increase in class size rising to an interim maximum of 1920 by 1970. Continued expansion at this rate will not only place a heavy, if not intolerable, strain on residence and classroom facilities, but in the opinion of the Committee will create a serious barrier to the continued upgrading of the student body. Many schools with which the University is directly competing for outstanding students have frozen their entering classes at present levels. In the light of all these circumstances, the Committee recommends that the projected size of future entering classes be fixed at the approximate level of the 1966 freshman class until such time as the physical facilities, financial resources, and applicant pool will justify an increase.

2. Impact of School Quotas on Admission Standards

Related to the foregoing is the question of whether school quotas are producing a significant disparity in the quality of students being admitted to the various undergraduate schools. It is a matter of record that the cut-off point on the predictive index spectrum is somewhat lower for the undergraduate professional schools than for the College for Women and the College of Arts and Sciences. Moreover, it seems clear that subjective and extrinsic factors play only a minor role in the selection of students for the professional schools, which means that the primary burden of achieving a desirable degree of geographical and cultural diversity among the total student body is borne
by the two liberal arts colleges. The problem of obtaining a well-diversified
student body is aggravated by the fact that a high proportion of Wharton School
students come from urban backgrounds, with a substantial degree of cultural
homogeneity.

If the predictive index cut-off point were to be made uniform for all
undergraduate schools, it would be necessary to eliminate the last 300 ap-
provals for the two professional undergraduate schools and accept 300 ad-
ditional applicants in the College (no more women applicants could be accepted
because of housing limitations). This would ultimately reduce the student
bodies of the professional schools by about 40 per cent. The gain in the
predicted grade performance of the marginal applicants involved would be a
half grade point in the C to B range. On the basis of the latest data avail-
able, it would appear that the predictive index values of the 300 Wharton and
engineering applicants who would be denied admission by this change in policy
would fall within the 2.0 to 2.4 range, while the additional approvals for the
College would come within the 2.5 to 2.9 range. The disparity would obviously
be greater if the shift in approvals were limited to a smaller figure, such as
100. The gain in objective manifestations of academic promise that would
be wrought by such a change would have to be weighed against the sacrifice of
career motivation and other positive values associated with the professional
schools.

In principle, the Committee would like to see reasonably uniform standards
of admission applied throughout the undergraduate schools of the University,
with differences in curricular requirements being accommodated through subject
matter prerequisites. The Committee recognizes, however, that the University
must be responsive to the needs of the society which it serves. If certain
programs of the University that support a significant public interest attract
students somewhat less intellectually inclined than those in other programs,
the Committee is reconciled to a modest disparity in admission standards.

3. Financial Need of the Applicant

It is a stated goal of the University that no qualified applicant be
denied admission because of lack of financial resources. In accordance with
this goal, the University attempts to provide outright grants, loans, or work
opportunities to all successful applicants to the extent that their needs
exceed their resources, as determined by a national organization specializing
in this service. It is obvious that the burden of this commitment could be
minimized if the admission policy should favor those applicants with the
smallest need for financial assistance. If differences in academic potential
were ignored, it is conceivable that the entire freshman class quota could be
filled each year by students able to meet their academic and living expenses
in full. It is the sentiment of this Committee that in making individual
admission decisions, the admissions staff should ignore differences in the
need for financial assistance. This means that the University would neither
favor nor discriminate against the applicant who needs financial assistance.
This is the policy currently being followed by the University.

4. Transfer Students

A very limited number of students are admitted on transfer from other
colleges in September essentially as replacements for students in the current
freshman and sophomore classes who will not return the following year. No
advanced credit is allowed for less than a full year of attendance elsewhere.
Admission is on a competitive basis, and it is expected that approximately 90
men and women will be admitted from an applicant group of 900 in 1967.
Consideration is given only to candidates who have better than average grades, whose records are clear of conditions and failures, who are in good standing in their present colleges, and who have particularly valid reasons for a transfer. This is construed broadly to mean that only students who have compiled a generally B or better record in a recognized college will be realistic candidates in the competition. The secondary school record and College Board results are expected to be of about the same caliber as those for recent freshman classes. A candidate may not disregard his college record and seek admission to the freshman class. A minimum of two years in residence is required for the Pennsylvania degree.

The Committee endorses the present policy of dealing with transfer students and recommends that it be continued.

5. School Prerequisites

The Committee considered the relationship between the general admission policy of the University and the prerequisites for admission established by the faculties of the various schools. The prerequisites are generally stated in terms of the number and type of secondary school units, but they may include achievement tests in certain areas. The Committee recognizes the need for flexibility in establishing school prerequisites, and it feels that the faculties of the various schools are probably in the best position to evaluate the prerequisites. It is clear, however, that these prerequisites should be consistent with University admission policy. It is recommended that the necessary coordination be undertaken through the school admission committees.

6. School Admission Committees

In the course of its deliberations, the Committee had to give thought to the respective roles of the University Admissions Committee and the Admission
Committees of the undergraduate schools. It was concluded that the University Committee had the authority and responsibility to develop an admission policy that would be applicable to all the undergraduate schools. The admission policy need not -- and should not -- be uniform in the sense that equal weight be given to the various objective, subjective, and extrinsic factors that enter into the admission decision, but the guiding principles and general procedures should apply throughout the University.

If this judgment is valid, the school admission committees would devote their attention to the formal prerequisites for admission to the respective schools and to the functioning of the University admission procedures as they affect their schools. All undergraduate schools should be represented on the University Admission Committee, and it might be wise to make the chairman of each school admission committee an ex officio member of the University Committee to facilitate interchange of ideas.
Appendix A

Summary of Proposed Admission Procedures and Criteria

I. Regular Procedure

A. Scope: process by which 90 percent of each year's freshman class is to be selected.

B. Basis of Selection

1. objective evidence of academic potential, as measured by results of aptitude and achievement tests and relative standing in secondary school graduating class: 25 percent of each undergraduate school class.

2. subjective evidence of academic and long-range potential and diversity factor: 5 percent of aggregate freshman class.

3. combination of objective, subjective, and extrinsic factors, weighted in such manner as to optimize the effect of subjective and extrinsic factors while elevating to some degree the existing level of scholastic potential as measured by objective standards: 60 percent of total class.

C. Criteria and effective weights associated with subjective and extrinsic factors of that segment (60 percent) of the class to be admitted on combination of objective, subjective, and extrinsic factors.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Effective Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subjective</strong></td>
<td></td>
</tr>
<tr>
<td>a) Special talents and Creativity</td>
<td>30</td>
</tr>
<tr>
<td>b) Motivation and Commitment</td>
<td>15</td>
</tr>
<tr>
<td>c) Leadership and Activities</td>
<td>15</td>
</tr>
<tr>
<td>d) General Personality</td>
<td>10</td>
</tr>
<tr>
<td><strong>Extrinsic</strong></td>
<td></td>
</tr>
<tr>
<td>a) Background (Diversity)</td>
<td>20</td>
</tr>
<tr>
<td>b) Institutional considerations</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

II. Special Procedure

A. Scope: process by which 10 percent of each year's freshman class is to be selected, limited to categories set forth below.
B. Allocation of spaces (without respect to undergraduate school involved.)

1. Applicants identified by the Department of Intercollegiate Athletics as outstanding athletes: Not more than 5 percent of the class, not more than half of whom can be academic risks.

2. Applicants from economically and culturally deprived groups: Not more than 3 percent of the class, to be accepted on basis of minimal qualifications.

3. Children of faculty, staff, or alumni and special interest cases: At least 2 percent of class, not more than half of whom can be academic risks.

C. Recognition of these three classifications of applicants in the regular admission process:

1. Athletic ability to be recognized under "leadership and activities," with 5 specific points being given to an applicant on the "preferred" list of the University coaching staff and 3 specific points to an applicant on the "recommended" list.

2. Social and economic status to be recognized under "background."

3. Children of faculty, staff, and alumni:
   a. Early Decision Program: Admission assured in absence of any indications of failure (in case of alumni children, this preference is limited to alumni of undergraduate schools).
   b. Regular Competition:
      (1) Children of faculty and staff: admission assured in the absence of any indication of failure.
      (2) Children of alumni of undergraduate, graduate, and professional schools: points given under "institutional consideration."

III. Early Decision Procedure

A. General: Approval accorded to applicants clearly falling within the following categories:

1. Top 25 percent of class measured by objective evidence.

2. Top 5 percent of class measured by subjective and diversity factors.

3. Top quarter of those applicants to be selected on combination of objective, subjective, and extrinsic factors.
B. Cases eligible for Special Procedure may be approved if not academically marginal.

C. Children of faculty, staff, and undergraduate alumni: Admission assured in absence of any indication of failure.

D. Fully integrated with regular and special admission procedures.

E. Designation of Pennsylvania as first choice (implicit in Early Decision Program), is recognized under "institutional considerations" in regular admission procedure.
Appendix B

Proposed Procedure for Weighting

Objective, Subjective, and Extrinsic Factors

This procedure is designed for consideration of the regular candidates who constitute the "middle band" from which 60% of the freshman class will be filled.

A. The scholastic reference group: The freshmen matriculating in the two previous classes will constitute the scholastic reference group. For each of these students, a scholastic score will be computed in the same manner as for new applicants. This distribution of scores will be truncated by discarding the lowest 10% of the scores. The scores corresponding to the first, second, and third quartiles of this truncated distribution will serve as reference scores, in the manner about to be discussed.

B. Methods of combining scores: In combining the two scores for the current applicant group, the maximum weight for the non-scholastic score (subjective and extrinsic factors) will be given which still yields a "predicted" freshman class whose scholastic score distribution will be elevated over that of the reference group in an amount to be agreed upon annually by the Committee on Admissions.

Consider the following example of how this maximum permissible weighting may be obtained. 1) Convert both scholastic and non-scholastic scores to standard scores. 2) Calculate the weighted sum of each student's two standard scores, using a weighting factor of 0.9 for the non-scholastic score and 0.1 for the scholastic score. 3) Rank all applicants in the "middle band" according to this combined score. 4) By using the latest and most reliable matriculation rates, establish a cut-point on this combined score distribution which will be expected to yield 60% of the freshman class. 5) The expected yields from the "middle band" and the automatic admissions constitute the predicted freshman class for a non-scholastic weighting of 0.9. Determine the scholastic scores corresponding to the 1st, 2nd, and 3rd quartiles of this predicted freshman class. 6) If all of these scores lie above the corresponding scores of the scholastic reference group, go back to step 2) with an even higher weighting for the non-scholastic scores. If at least one of these scores is below the corresponding reference score return to step 2) with a lower weighting for the non-scholastic score. 7) Continue hunting until the highest non-scholastic weighting is found with which none of the predicted freshman class's quartile scholastic scores lie below the reference scores which will produce the agreed upon increment in the scholastic score distribution. 8) Use this weighting factor and admit all applicants above the corresponding cut-point, except where highly derogatory information exists; in the latter cases, refer to the Committee on Admissions.
Appendix C

Predictive Index Currently Used in Admissions Process

A revision of the Predictive Index was made in January, 1966 using data on the 1963 and 1964 entering classes. Included in the multiple regression analysis were the following variables: sex, University division, public-private secondary school, rank in secondary school class, SAT-Verbal, SAT-Math, and the average of all Achievement Tests. The Freshman Grade Average was used as the criterion variable.

It should be pointed out that the several predictor variables are not independent. The inter-correlation between certain of the predictor variables is higher than between the predictors and the criterion. This is clearly illustrated in the inter-correlation matrix for the data on all women.

### All Women

<table>
<thead>
<tr>
<th></th>
<th>Verbal</th>
<th>Math.</th>
<th>Ach.</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT-Math.</td>
<td>.29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement Tests</td>
<td>.51</td>
<td>.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank in Class</td>
<td>.24</td>
<td>.11</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>Fresh. G.P.A.</td>
<td>.34</td>
<td>.31</td>
<td>.45</td>
<td>.34</td>
</tr>
</tbody>
</table>

In this matrix it is clearly seen that the Scholastic Aptitude Tests are better predictors of the Achievement Test scores than of freshman grades. This is also evident in the correlation matrix for the Wharton men. The SAT-Verbal and SAT-Math correlate .47 and .49 with the Achievement Test variable and only .35 and .22 respectively, with freshman grades. The rank in class variable has a relatively higher correlation with the freshman grades while not being too highly inter-correlated with the other variables. Thus it assumes the greatest weight in our prediction of grades for Wharton men.

### Wharton Men

<table>
<thead>
<tr>
<th></th>
<th>Verbal</th>
<th>Math.</th>
<th>Ach.</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT-Math</td>
<td>.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement Tests</td>
<td>.47</td>
<td>.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank in Class</td>
<td>.12</td>
<td>.07</td>
<td>.21</td>
<td></td>
</tr>
<tr>
<td>Fresh. G.P.A.</td>
<td>.35</td>
<td>.22</td>
<td>.38</td>
<td>.41</td>
</tr>
</tbody>
</table>

The relative contribution of each variable to the prediction of Freshman Grade Average for the four groups is shown in the following table:

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>College</th>
<th>Wharton</th>
<th>Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal</td>
<td>-</td>
<td>14%</td>
<td>21%</td>
<td>-</td>
</tr>
<tr>
<td>Math</td>
<td>11%</td>
<td>6%</td>
<td>-</td>
<td>7%</td>
</tr>
<tr>
<td>Achievements</td>
<td>56%</td>
<td>34%</td>
<td>23%</td>
<td>62%</td>
</tr>
<tr>
<td>Rank in Class</td>
<td>33%</td>
<td>46%</td>
<td>56%</td>
<td>31%</td>
</tr>
</tbody>
</table>
When interpreting the above table, one must keep in mind the substantial inter-correlation between the several variables as discussed above.

The multiple correlation coefficients and the Standard Error of Estimate for each of the four groups is shown below.

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>Standard Error of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>.55</td>
<td>.45</td>
</tr>
<tr>
<td>College</td>
<td>.55</td>
<td>.55</td>
</tr>
<tr>
<td>Wharton</td>
<td>.54</td>
<td>.52</td>
</tr>
<tr>
<td>Engineering</td>
<td>.59</td>
<td>.55</td>
</tr>
</tbody>
</table>

It is important to note that these regression analyses are based on data for students who actually matriculated at Pennsylvania. This has certain implications for the above discussion and for the use of the prediction equations in the selection of students for the University.

The magnitude of the correlation coefficients is limited by the very restricted range of values for the variables within the matriculant groups. The accuracy of our predictions will be limited by the degree to which the matriculant group is representative of the applicant group. We know that the applicants with lower credentials are under-represented in our matriculant group and thus predictions at this level must be treated with caution.

Another factor limiting our ability to predict performance is the relative stability of the distribution of grades given by the faculty. While the quality of the academic credentials of entering students has improved markedly in the past decade, the distribution of grades has made only a much smaller move toward the higher side.

Above all it should be noted that all of the "objective" data which goes into the prediction equations suffers from the unreliability characteristic of measurement in education. The College Entrance Examination Board has recently appointed a panel to study the problems involved in the uncritical use which most colleges make of the CEEB test scores. Chance and bias are also involved in an individual's rank in class. Thus at best we are dealing with rather poor measures. A recognition of this was involved in the committee's emphasis on the role of the non-scholastic variables in the selection of future Pennsylvania students.

The computations for this analysis were done at the University of Pennsylvania Computer Center utilizing Statistical Library Program MREG 1 based on Cooley & Lohnes, Multivariate Procedures for the Behavioral Sciences, New York, 1962.