STATE OF LOUISIANA
COORDINATING COUNCIL
FOR
HIGHER EDUCATION

MASTER PLAN SUPPLEMENT

1972

Baton Rouge

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Introduction

Early in 1972, the Louisiana Coordinating Council for Higher Education published the *Master Plan—Toward Balanced Growth in Louisiana Posthigh School Education: Quantity and Quality*. This Plan, consisting of fifty recommendations regarding higher education in Louisiana was prepared under mandate from the Louisiana Legislature.

During the two years preceding publication of the recommendations, the Coordinating Council commissioned studies in a number of areas which the Council felt were important in the development of a sound Master Plan. Armed with the information provided in these studies, the Council members met for many hours to devise the recommendations in the Master Plan.

To make available to interested readers the vast amount of material relative to Louisiana and its ability to maintain quality education for all its citizens, the papers prepared by the consultants to the Council are being reproduced in this supplementary volume.

A number of working papers were prepared by the Coordinating Council staff during this period. These papers were also available to Council members during their deliberations, but since they were widely distributed upon their completion and are published separately, they have not been included in this supplement.

ABOUT THE AUTHORS

The following sketches provide information on the consultants contributing the working papers included herein:

I. *Dr. Thomas R. Beard* is Professor and former Chairman of the Economics Department at Louisiana State University at Baton Rouge. Dr. Beard is a native of Louisiana and received his PhD. degree at Duke University. He has previously served as consultant to several banks, the Board of Governors of the Federal Reserve System, and the U. S. Department of Health, Education and Welfare.

II. *Dr. Jan W. Duggar*, Associate Professor of Economics at Louisiana State University at Baton Rouge, received his PhD. degree at Florida State University. He has served as consultant to such organizations as the Louisiana Consumer Finance Association and the Urban Research Center at Titusville, Florida.

III. *Dr. John B. Legler*, Professor of Economics and Assistant Director of the Institute for Urban and Regional Studies at Washington University (St. Louis), has had wide experience in government finance. He has served as a consultant to the States of Illinois and Hawaii and to the cities of New York and San Francisco.

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VI. *Dr. Loren C. Scott* is Assistant Professor of Economics at Louisiana State University at Baton Rouge. Dr. Scott's PhD. degree was earned at Oklahoma State University. His primary area of interest is in Micro-economic Theory and Managerial Economics, and his major publications deal with the economic effectiveness of on-the-job training.

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Student Enrollment and Admissions Policy

by

JOHN H. REINOEHL

Student enrollment and admission policies are basic to any Master Plan or projection of educational needs for a state—indeed such policies determine the fundamental issues of the extent and nature of a higher education program. This report segment will examine enrollment trends for the past decade, admission and attrition practices, and related programs now in existence.

The information upon which this paper is based comes from a number of sources. Information concerning student performances on the ACT come from the class profile reports for the various institutions by the American College Testing service. Letters were sent to the chief administrative officer of each institution requesting catalogs, schedules, a student handbook and similar standard college publications. In addition, responses were requested from each institution to a series of ten questions concerning admission, testing, retention, student participation etc. (See Appendix.) Information was received from all institutions prior to the preparation of this paper except for Southern University (all branches) and LSU-Baton Rouge. Other information came from material made available by the Louisiana Coordinating Council for Higher Education and from conversation with officials at the University of Southwestern Louisiana. Finally, information on the various institutions was obtained from various college guides and the College Blue Book series.

ADMISSION TRENDS AND EDUCATIONAL FACILITIES

The trend for the past ten years in Louisiana, as elsewhere in the United States, has been for college and university enrollments to rise dramatically. There have been two reasons—first, and most important, the babies born during the post World War II boom period came of college age, and, second, a larger proportion of American youth attended college in 1969–70 than did so earlier. In addition, Louisiana has expanded its facilities for higher education to a considerable extent over the past decades. New schools were created and old units expanded to meet the needs of the burgeoning population. Few Louisiana residents reside more than 50 miles from a four-year, state-supported college or university as the decade of the 1970's begins. Some changes are discernible also, particularly in the primarily black colleges, whose enrollments generally have not increased over the past five years.

ADMISSION POLICIES AT INSTITUTIONS GOVERNED BY THE STATE BOARD OF EDUCATION

All state-supported institutions of higher education in Louisiana are open to any Louisiana High School graduate who chooses to attend that institution. The intention is that each high school graduate should have an opportunity for higher education to the extent of his ability. There are varying restrictions on out-of-state students, presumably based upon the standard assumption that the state of Louisiana should educate its own while other states should do likewise. There are some reciprocal tuition arrangements with neighboring states. All students are required to take the ACT (American College Test) for use by the accepting institution for whatever purpose it deems appropriate, although, except for out-of-state students and certain special cases which will be discussed, test scores are not a factor in admission requirements. It is the intention of the system (an intention placed in practice by the institutions of higher education in the state) that any native high school graduate be admitted to the institution of his choice in the state.

ACT PROGRAM

Scores on the ACT for students of the system are low by national standards, a fact that could be the result of the broad admission policy. Mean composite scores for the United States as a whole, involving 440 colleges and 279,435 students averaged 20.3; for students admitted to Louisiana institutions of higher education, 18.7. Within the Louisiana State Board controlled institutions, scores varied from Louisiana Tech University's 19.9 composite mean to Grambling's 12.3 (Figures for Southern University were not available for 1969–70. However, complete statistics on total ACT scores for 1969–70 on other institutions are available in the Council office.) The primarily black schools make up a separate category, with ACT scores well below those of the primarily white institutions. Institutions under the State Board of Education apart from Grambling and Southern ranged only from the 19.2 mean for Louisiana Tech to 17.2 for both Nicholls and Northwestern. The Southern scores from the previous year are similar to those of Grambling and show a substantial drop from scores made at the predominantly white institutions. It would be impossible to generalize from these scores in this paper without further information. Questions which would have to be answered would be for example, "Do the tests successfully measure academic potential?" (For a complete analysis on ACT scores, see *A Profile of Freshman Students at Louisiana's State-Supported Colleges and Universities as Revealed by ACT Data* by Beard and Duggar, p. 13.)

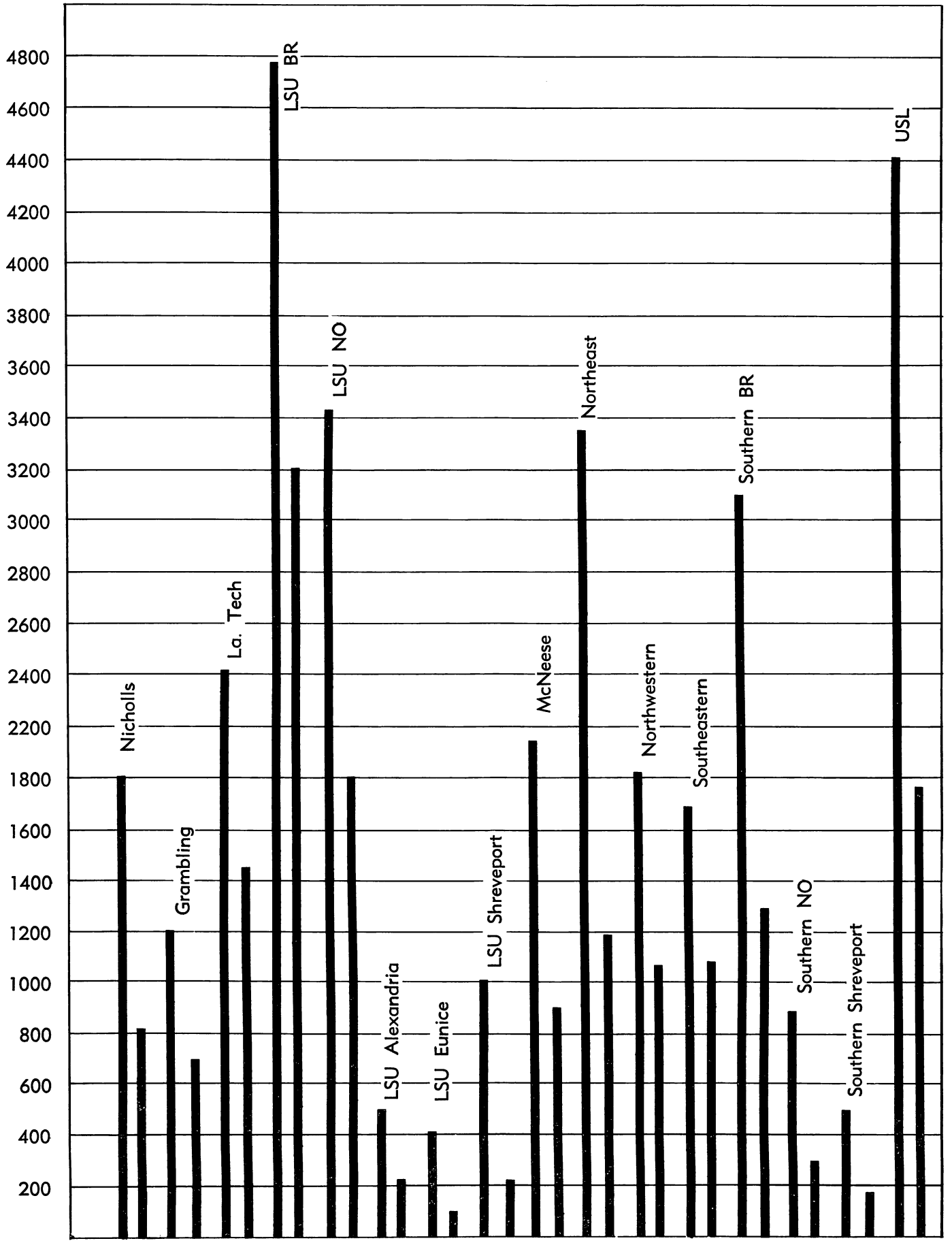
ATTRITION

As might be expected under such circumstances, the attrition rates are high although data are not available to explain these phenomena. For the entire State Board of Education system 22,757 freshmen admitted in the Fall of 1968 had been reduced to 10,954 sophomores by Fall, 1969 and 13,080 sophomores of 1968 were reduced to 9,148 juniors in 1969. The senior class of 1969 had increased by 300 students over the junior class of 1968. (See graph #1 showing attrition by institution.)

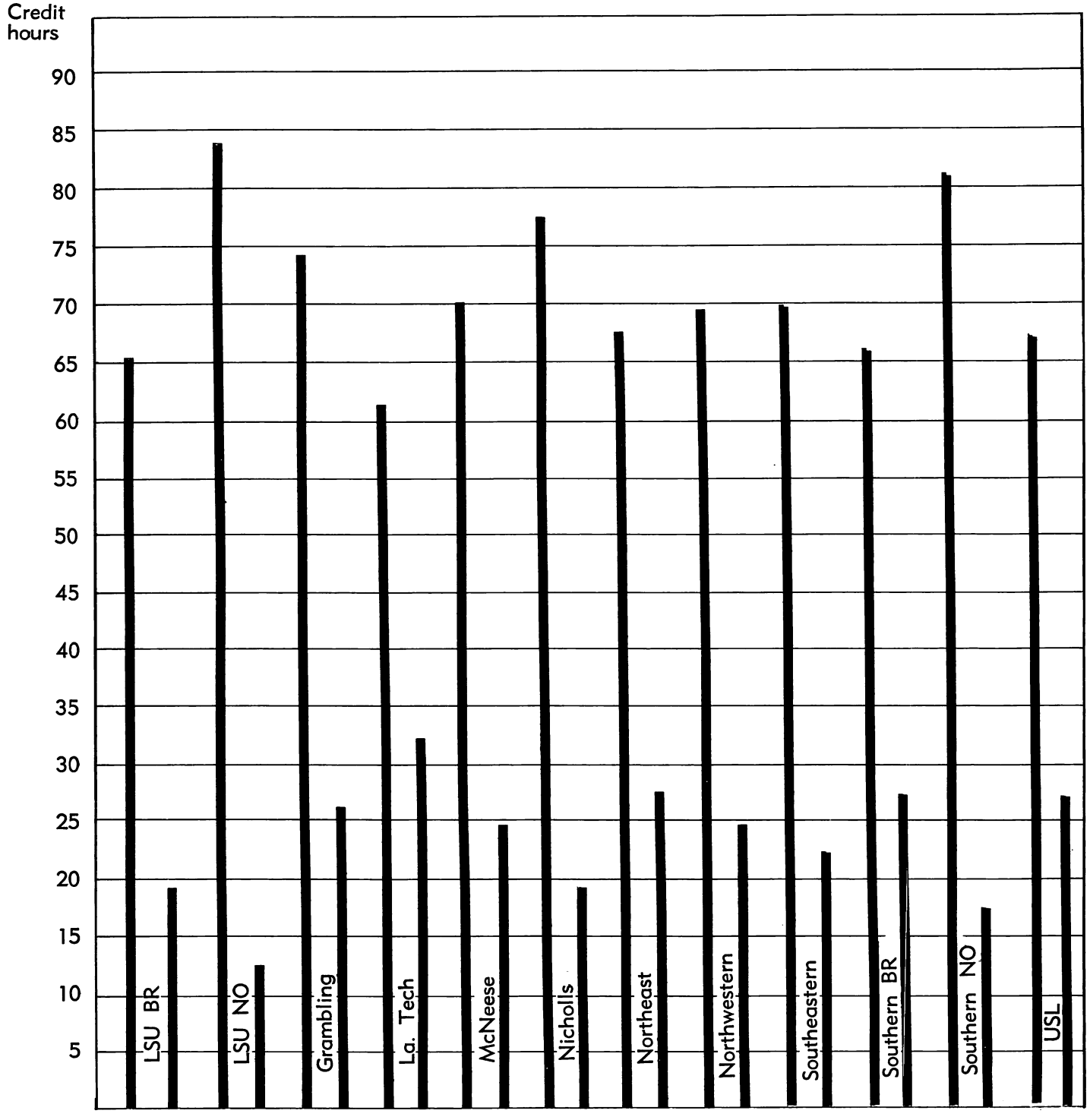
Other figures bear out the impression of a very high attrition rate throughout the entire Louisiana State Board system. A compilation from the Louisiana Coordinating Council for Higher Education shows that the number of lower class course credit hours taken is substantially higher than the number of upper class credits. (See graph #2). While some discrepancy in favor of freshmen-sophomore courses would be expected, the nearly 3 to 1 ratio indicated would suggest a much lower number of junior-senior students than there are freshmen-sophomores at these institutions.

It would appear from statistics available that nearly all of the attrition comes during the first two years of college attendance and that the bulk of this comes during the freshman year or between the freshman and sophomore years. Queries to the various colleges in the State Board system generally brought back the response that information was not available concerning attrition rates during the junior and senior years. Figures available concerning class enrollments for the 1968-69 and 1969-70 academic years would suggest that there is a negligible rate of drop for students during the junior and senior years. Between the 1968-69 junior class and the 1969-70 senior class, for the entire State Board system, there was an increase of 309 students (9,726 seniors, 1969-70, and 9,417 juniors, 1968-69). The increase probably comes from delays in students finishing their degrees, and the fact that most colleges "rate" students according to a flat number of credits earned. Thus, the University of Southwestern Louisiana considers anybody who has earned 90 of the 120 semester hours of credit required for graduation a senior, although he may in fact be more than 30 semester hours away from graduation. Under such a system, many students may be carried as seniors for their final three semesters in college, thus distorting the picture to some degree.

1. This graph shows the attrition from freshman to sophomore classes, 1968 to 1969, in Louisiana colleges. The column on the left shows the fall 1968 freshman class; the one on the right, the fall 1969 sophomore class.



2. This graph shows percentage of credit hours carried at each institution at freshmen-sophomore levels in comparison with credit hours carried at the junior-senior level.



Left column—Freshman-Sophomore credit hours
Right column—Junior-Senior credit hours

OUT-OF-STATE STUDENTS

A huge majority in 1969–70, 56,841 out of 59,917 or nearly 95% of the students at State Board controlled colleges and universities in Louisiana, are natives of Louisiana. Of the remaining 3,076 students, 1,000 came from the contiguous states of Arkansas, Texas and Mississippi; the remainder came from foreign countries or the other 46 states. For these students there are generally requirements more stringent than those for native Louisianians. Usually there is a performance requirement for high school (upper half in class ranking, 2.5 on 4.0 scale, and ACT scores) although Tech has the same requirement for out-of-state students as it has for Louisianians.

NON-MATRICULATED STUDENTS

There are also varying standards for admission for those not enrolled in a degree program. For these, normally described as "special students" who are not fulfilling degree requirements, the normal admission standards are waived. These programs are developed for the adult population and are geared to the "continuing education" needs of the community.

SPECIAL ADMISSIONS

Special admission policies obtain for those who, for some reason, have not met the normal requirements for admission to the institution concerned, which normally means those who haven't finished high school. For these a special waiver program allows them to enter college if their ACT scores are high enough. There is usually an age restriction on these students (they must be at least 21 years old), and some institutions state that the aim of this program is to allow the returning veteran to take advantage of the opportunity for higher education following the experience of military service.

ADVANCED HIGH SCHOOL PLACEMENT

Finally, there are programs which allow advanced high school juniors to carry work at the college level. This involves bringing these students to the campus during the summer and enrolling them in college courses. Credit is granted *after* the student completes high school and only then becomes a part of the student's college record. In other institutions, students are admitted to a summer session at the end of their junior year of high school on the basis of exceptionally high standardized scores. These are students with outstanding high school records and recommendations from their high school officials testifying to their ability, maturity and generally superior qualifications. These students may then enroll for a limited number of college courses while they are completing their high school programs, although they may not live on the campus and must finish high school without the college program interfering. Strict limitations on ACT performance, recommendations of high school principals or counselors and the need for the student to maintain a "B" average in high school keeps this program at a modest level.

None of the institutions acknowledged a special admission program for other groups—indeed with the rules by which admissions are granted there would seem to be little need for it.

TRANSFER STUDENTS

Transfer students are screened by the standards of the school at which they were previously enrolled—admission to a new school requires that the applicant be readmissable to the institution he attended previously. In addition, some institutions require a "C" average, and, in all cases, courses in which "D" grades or below were earned are not acceptable at the new institution. Since there is a high attrition rate in all of these schools, the policies concerning transfer students aim at avoiding the admission of students dropped from sister board institutions.

GRADUATE STUDENTS

There has been a significant expansion, both in enabling legislation and in enrollments, in the graduate programs of State Board institutions in recent years. Graduate programs were first authorized in State Board institutions in 1954 when a Masters program was authorized at Northwestern State University. In the fall of 1969, 194 doctoral candidates were enrolled in five State Board institutions (USL, LTU, McNeese, Northwestern and Northeast). The 194 students reflected a 31% growth over the 148 doctoral candidates at the same institutions in the Fall of 1968.

For the institutions admitting graduate students, correspondingly higher requirements are established, clearly with the intention of making graduate school a step up from undergraduate, and, as one respondent put it, to "select serious students who show a capability for advanced work." The overwhelming proportion of graduate students in the institutions governed by the State Board are studying for advanced degrees in Education. Of 194 doctoral students enrolled in State Board institutions in the Fall of 1969, 138 were enrolled in Education. The remaining 56 doctoral candidates were split evenly between Louisiana Tech University and USL, neither of which offered a doctorate in Education. In this respect, there has been a definite response to the educational needs of the students by the output of the institution. Several of the State Board institutions have developed from state regional teacher training units and graduate programs are largely extensions of that function.

SUMMARY

The beginning freshman admission policies of the institutions governed by the State Board of Education for Louisianians can be summarized in a phrase—high school graduation. The freshman year serves as a rigorous screening period for the system as approximately 50% of entering freshmen drop before the beginning of their sophomore year. Exception to this policy is made in the case of out-of-state students, who generally must finish in the upper half of their high school class and meet performance standards on the ACT. Likewise, older students are admitted on the basis of testing alone in the instance of their not having a high school diploma. Transfer students are judged on the basis of their performance at their previous institution. Graduate students are screened individually, based upon their performance en route to a baccalaureate degree.

ADMISSION POLICIES IN THE LOUISIANA STATE UNIVERSITY SYSTEM

General—ACT Program

Louisiana State University follows the same rule of admission as those institutions under the State Board of Education, with much the same results. All residents who have been graduated from an accredited high school are admitted to institutions of the LSU system. As with Board institution applicants, all LSU candidates for admission must take the ACT. The scores for students admitted to the LSU system average somewhat higher than those admitted to Board institutions, and are almost exactly at the national mean (composite 20.0 LSU, 20.3 National). Composite scores ranged from 21.3 at the Baton Rouge campus for 3,384 freshman students to 18.2 at the Alexandria campus for 381 freshman students. As is the case with the State Board institutions, the ACT is used not as a screening, but as a counseling and placement tool.

Attrition

The attrition rate for the LSU system, with the exception of the Baton Rouge campus, appears to parallel that of the State Board institutions. In the figures for the Fall Quarter of 1968 the sophomore classes at the New Orleans and Alexandria branches of LSU were under half the size of the freshman classes (1,494 to 3,276 and 237 to 504 respectively). Eunice and Shreveport at that time were in their second year of operation and their figures were scarcely indicative. LSU-Eunice stated that 35.5% of their freshmen of 1968 did not return as sophomores in 1969, and that an additional 14.9% dropped or were dropped during the Fall, 1969 semester. At LSU-Shreveport there were 1,171 freshmen in the fall of 1968 and 389 sophomores in the Fall of 1969, indicating a

substantial drop in the number continuing in school. The Baton Rouge statistics indicate that their loss rate is significantly lower than the rest of the state system, while their ACT scores are significantly higher.

The other basis for judging attrition rates, the ratio of lower division courses to upper division courses, is difficult if not impossible to interpret meaningfully, since three of the LSU campuses offer only lower level courses. The Baton Rouge branch has graduate and professional offerings which make comparisons with the State Board institutions almost meaningless.

It would appear, also, that there is a self-screening process involving students at LSU-Baton Rouge. Their ACT scores are significantly higher than those of students in the remainder of the LSU system and the entire State Board system, and their attrition rate is significantly lower.

The self-screening of students at LSU-Baton Rouge is most in evidence at the extreme levels of the ACT scores. When the scores are broken into four intervals (26-36, 21-25, 16-20, and 1-15) LSU-Baton Rouge has 20% in the top bracket and 11% in the lowest group. The other branches have far less in the highest grouping. (LSU-Alexandria—7%, LSU-Eunice—5%, LSU-New Orleans—11%, LSU-Shreveport—8%) and each has substantially more than double the number of LSU-BR in the lowest bracket (LSU-A—29%, LSU-E—27%, LSU-NO—28%, and LSU-S—24%). Put another way, 89% of the freshmen admitted to LSU-BR scored 16 or above on the ACT, compared with 71% at LSU-A, 73% at LSU-E, 72% at LSU-NO, and 76% at LSU-S. At the next break, 59% of LSU-BR freshmen scored above 20 on the ACT composite, compared with 32% at LSU-A, 35% at LSU-E, 40% at LSU-NO, and 41% at LSU-S.

In terms of ACT scores of entering freshmen, LSU-Baton Rouge stands above all other state supported schools—the other branches, in 1969, all fell within the range of the white, State Board schools so far as composite scores were concerned. (White State Board institutions ranged from 19.1 composite score mean to 17.2; LSU branch institutions apart from Baton Rouge ranged from 19.1 to 18.2.)

Out-of-State Admissions

Admission policy for out-of-state students includes performance standards, such as being in the top 50% of their high school graduating class and a level of performance on the ACT. The objectives, which are common to most states, are to limit out-of-state enrollment to those students who have an excellent chance of completing their college degrees. Significant numbers of out-of-state students were admitted to LSU branches at Baton Rouge, New Orleans and Shreveport in both 1968 and 1969. Within the entire LSU system, 3,294, or slightly more than 10% of the students, were from outside Louisiana in the Fall of 1969. LSU-Baton Rouge included 552 students from foreign countries in the 1969 Fall session. Many of these students come from contiguous states—Texas, Arkansas and Mississippi send nearly 1/3 (1038 of 3294) of the out-of-state students to the LSU system.

Special Admissions

Special provisions allow for the admission of persons who have not completed high school but who can demonstrate competence and maturity to a degree that makes them reasonable educational risks. Admission requirements include satisfactory performance on tests.

Advanced High School Placement

A special program in the University branches, similar to the one in the State Board operated institutions, allows exceptional high school juniors to enroll in college courses in the summer following their junior year. The credits earned by such students are deferred until high school graduation and admission to college, at which time they are used as regular college credit at the granting institution or transferred to another college designated by the student as the one he plans to attend.

Transfer Students

Transfer students are freely admitted among the various university branches provided the student is eligible to return to his own campus. Students from other accredited institutions are admissible if they are eligible to return to their own institutions and meet a specified and generally sliding grade point standard. Students are frequently admitted if some time (one or two years) has elapsed since they attended a college, even if they do not meet the standard qualifications for transfer students. The rationale for this latter category is a common one: many students mature

to such an extent that they are capable of doing work that was beyond them a year or two earlier.

Graduate Students

Only the branches at Baton Rouge and New Orleans offer graduate courses. Graduate school admission requirements include a minimum of 2.5 in undergraduate work and a minimum of a 3.0 average for any previous graduate work taken. In addition, the department offering the graduate work normally screens the candidates for admission to a degree program. Students at the graduate level are admitted on a non-matriculated basis during the summer.

Finally, in the area of admissions, there are the professional areas (Law, Medicine, Dentistry) which have their own screening boards and special admission requirements. These specialized areas have their own patterns of selection which are peculiar to the individual disciplines.

Summary

In summary, the admissions policies of the LSU system very closely parallel the policies of institutions governed by the State Board of Education. Operating under the general rationale that all Louisiana high school graduates are admissible to any state-supported college or university, the system has high school graduation as the sole requirement for undergraduate applicants. Out-of-state students are screened by their position in their high school class and by test scores. At the graduate and professional levels, careful screening of candidates is a standard procedure.

TRANSFERS

The problem of student transfers within the Louisiana system of higher education seems to follow one general standard—an undergraduate student may transfer freely within the system if he is readmissible at his own accredited institution. Credits are not accepted if a grade below "C" was earned.

CHANGE OF MAJOR

Within institutions, change or transfer of major is normally made after consultation with the dean's office of each involved department, and apparently wide variations exist in the number of changes made. One institution reported very few changes of major; one reported that 50% of its students change majors during their college careers; and still another said that 50% of its students change majors in one academic year. The number of students who change majors may simply be a reflection of the fact that many are undecided on this score when they enter college. Among those taking the ACT for college entrance in the Fall of 1969, over 15% were undecided as to what major they preferred and even more didn't know what vocation they preferred. Under such circumstances, a major change would be an expectation, as many students use the first part of their college careers to find an adequate major.

Although this is purely speculative also, many changes in major may result from student's failure to measure up to the major originally chosen. Careers in many of the professions attract students who simply are not equipped to cope with the rigorous curricula that are involved.

THE ADMISSION PROCESS

Admission in all Louisiana state supported institutions is processed by the individual institution, with each college or branch having its own unique application form. The forms ask for approximately the same information. Basic to each is information concerning the applicant's name, age, sex, residence, parents, and parent's residences and occupations, educational history and projected major, employment history, and health. Some application forms are keyed for computers, others are not. Some request information to be used by counselors, others do not. There is no centralized processing of applications for Louisiana institutions of higher education, and, with the open admissions policy which obtains, each student who has completed high school in Louisi-

ana is permitted to enroll wherever he wishes. The selection process, for Louisiana high school graduates, begins with college attendance and not with application for admission to a Louisiana institution of higher education.

COUNSELING SERVICES

Counseling services are available throughout both systems of higher education in Louisiana. Counseling functions vary drastically from school to school. In some they are restricted to educational counseling, vocational counseling and the personal and social problems counseling done by faculty advisors. In others a counseling agency provides these services and conducts a freshman orientation program, maintains records on excessive absences, investigates student conduct violations, and provides liaison between the college and the area high schools. Grambling is establishing a counseling program under the Dean of Students office in 1970–71.

REMEDIAL PROGRAMS

Remedial courses are offered in the bulk of the institutions under both boards of education in Louisiana. Louisiana Tech University and McNeese State, among those schools responding to the questionnaire, offer no remedial work. Those offering remedial courses confined them to reading, English, and/or mathematics, and based the need for remedial work upon the results of the ACT.

It appears that remedial courses would be a necessary adjunct to the programs offered by all of the public colleges and universities in Louisiana at the present time. Given the requirement that each high school graduate be admitted to the institution of his choice, obviously some, (those at the lower level of training or ability) need additional background and skills to compete at the college or university level. The standard remedial program, where one exists, includes all or some subjects that are the basis for education at any level.

SCHOLARSHIPS AND FINANCIAL AID

Approximately 60% of the students entering Louisiana institutions of higher education in the fall of 1969 indicated a need for financial support while in college as indicated by work plans (58% planned to work), by plans for scholarship aid (59% anticipated applying for scholarships at some time during their college careers), and loan plans (39% planned to apply for loans). That there was considerable overlap in these percentage figures goes without saying, but the 60% figure would be a minimum allowing nearly complete overlap.

There are substantial variations in available scholarships within the Louisiana structure, although there is obvious similarity in the way students set about acquiring them. The catalogs of the various institutions contain lists of moneys available for students in need of scholarship aid, together with procedures for applying for them. The sources of scholarship money have a wide range, from relatively unstructured National Merit funds and various state money, to funds provided by individual donors or companies which specify majors required or the area from which the students come. Scholarships, of course, require no work from the student, although they usually are contingent upon maintaining an above average grade point average (GPA).

The variation in scholarships is matched by the types of work available, which obviously vary with the nature of the community and its resources. Within the college structure, the federal government sponsors a "work-study" program in which 85% of the student pay (for students with demonstrated need) is furnished from federal funds. Truly needy students, as measured by family income, can take advantage of this program.

Two major loan programs are available to Louisiana students—the National Defense Education Act (NDEA) program sponsored by the federal government since its inception in 1958 and the Louisiana Higher Education Assistance Commission (LHEAC) loans, established in 1964 by the Louisiana legislature. Each of these programs guarantee loans of up to $1,000 per year for un-

dergraduates, limits or sets the rates of interest, and postpones repayment until after the student has completed his education. The federal plan has provision for cancellation of the debt provided the borrower enters and remains in specified occupations and meets other qualifications.

The higher education systems of Louisiana appear to have excellent scholarship systems as well as well-organized structures for employment of students during their academic progress. Even the new branches of LSU have scholarship offerings and each of the institutions has an office responsible for assisting students to find financial aid, employment or loans. LHEAC and NDEA loans are available throughout the state systems.

STUDENT RIGHTS AND RESPONSIBILITIES

The Louisiana colleges appear to be adjusting to meet the increased student demands with a minimum of the disruptions that have faced many state institutions over the past six years. All of the responding institutions except Grambling have some degree of direct student participation in the governance of the institution, primarily through membership on various "faculty" committees. The Grambling student government itself was described as serving "as a liaison between the administration and the students."

The real question of "student rights," one largely overlooked in the heated discussions on the overall issue, is the degree to which students can contribute meaningfully to the policies of the institution that has their education as its goal. One side sees the student as consumer, whose wishes should help to determine the nature of the product (the education) he receives. The reverse attitude sees the student role as a passive one, in which he accepts an educational experience whose nature is determined by professionals whose competence and training have qualified them to make such decisions. This latter group sees another function of the university, that of the creation and discovery of knowledge, as one in which the student is simply not qualified to determine policy.

ALTERNATIVE POLICIES

From the facts brought out in this paper, one important issue related to admission and retention in Louisiana higher education lies in the open admissions policy and the trend of expansion within the state's institutions. One can focus on two aspects of this: first, the high attrition rate between the freshmen and sophomore years in Louisiana colleges; and second, the tendency on the part of all the colleges to serve generally the same clientele.

The University which provided the most complete report on the attrition problem in response to a questionnaire was USL, which said that 50% of their freshmen do not return for their sophomore year. An additional 30% do not return for the senior year. That first figure, the 50% attrition, was standard for the entire state for 1968–69, although the previous year had seen only a 33⅓% drop between freshmen and sophomore years. Public Affairs Research Council of Louisiana, in its November, 1969 bulletin entitled *College Enrollments*, said that approximately 73% of Louisiana high school graduates enter college but that only about 24% receive a baccalaureate degree. Regardless of which figures are used, it seems apparent that about 2/3 of the students who enter Louisiana colleges leave without their degrees in a system which has degree production as its end, even for the 2-year institutions.

It seems logical to assume some relationship between test scores and success in college. ACT Program correlation coefficients show .53 between ACT scores and college GPA; if high school GPA is included, the correlation climbs to .60. If this correlation is anywhere near accurate, it seems that there is a strong probability that Louisiana is attempting to educate many young persons who simply are not equipped to go to the type college which the state provides. This conclusion is supported by an examination of the position of Louisiana college freshmen within the ACT ranges. Ignoring for the moment the primarily black colleges and LSU-BR and looking at the group that includes Louisiana Tech, LSU-New Orleans, McNeese, Nicholls, Northeast, Northwestern, Southeastern, and USL, all of these have university

status and all except one grant the Ph.D. degree, although some still only in the area of education. Each of them has a mean ACT for its admitted freshmen substantially below the national norm for Ph.D. granting institutions and in some cases substantially below the norm for four-year single-degree granting colleges. Based upon the limited information available, it would seem a reasonable working hypothesis that these institutions have the high attrition rate because they admit students that might better spend their time in some other sort of training or endeavor.

The attrition seems even heavier in the two year branches of LSU. Shreveport had 994 freshmen in 1968, and 227 sophomores in 1969; at Alexandria 504, 1968 freshmen returned 233, 1969 sophomores; the figures at Eunice are 402 and 94. The totals for all three two-year branches of LSU show 2,000 freshmen in the fall of 1968 and only 554 sophomores in 1969. Even allowing for a substantial number of transfer students, the attrition seems abnormally high. The ACT scores for these institutions fall within the general range of the above State Board governed institutions.

Closely related to this aspect of admission—retention is the nature of the two systems of public higher education in Louisiana. The state has expanded its facilities remarkably within the past thirty years—public college enrollments have at least doubled each decade since 1940. The expansion has been aimed almost entirely at the four-year college level, and even the two year branches of the Louisiana State University system state clearly, a) that their students are trained to transfer to a four-year branch of the system (Baton Rouge is the standard) and, b) that they plan to expand and become four-year degree granting institutions. LSU-Alexandria tells its students in its catalog that "Louisiana State University at Alexandria, as an integral part of the State University system, follows essentially the same academic program as prescribed by the senior divisions on the Baton Rouge Campus. Although the first two years of college work are designed to prepare the student to continue his studies on the Baton Rouge Campus, the schedule is basic and general enough to permit the student to continue work in his major field of study at most Colleges. . . ." (catalog, p. 38) Similarly, LSU-Eunice, describing its 150 different curricula, says "These courses are the same in number, title, credit, and content as those offered on the Baton Rouge Campus and make it possible for students to pursue a full two years of almost every curricula offered at LSU Baton Rouge." (catalog, p. 24) LSU-Shreveport has a plan running through *1980* which envisages its rapid growth to four-year status. (Four-year status has since been granted to LSU-S by the Coordinating Council. However, in view of the Master Plan recommendations, the likelihood of LSU-A and LSU-E attaining 4-year status is minimal.) The history of the State Board schools shows that they have followed this pattern. Nicholls State University was founded as a Junior College branch of LSU in 1948. It became a four year college under the State Board in 1956, and now offers the Masters degree in several areas of study as well as the education specialist degree. Northeast Louisiana State University has a similar history. It started as Ouachita Parish Junior College in 1931, became a Center for LSU in 1934, an LSU affiliated Junior College in 1939, and a degree-granting college under the State Board of Education in 1950. In 1961 a graduate school was added, and in 1967 doctoral programs were authorized. Others have similar histories.

The point here is not to disparage the progress that has been made, but to point out that the higher education system in Louisiana consists of institutions which have gone through an almost organic development, from junior colleges through four-year colleges to graduate degree granting universities, to become copies of each other. About 2/3 of the students who enter the system are casualties of it. It would be logical to assume that many of the 67% who drop out of the present system would fit into institutions with one or two-year technical or skills training programs. One might assume also that these are the same students who show the least academic potential as measured by the ACT scores.

Cutting across the entire problem of enrollments, admission, and attrition in Louisiana higher education is the problem of the primarily black institutions. Based upon ACT scores, students in Louisiana state-supported colleges and universities might actually be broken into three self-selecting, overlapping, quality groups—first, LSU-Baton Rouge, second, the other LSU branches and the State Board white institutions, and third, Grambling and Southern University. According to the ACT scores, about 80% of the freshmen at the two primarily black institutions fall in the bottom 21% of students tested nationally by the ACT program. No primarily white institution in Louisiana had more than 38% of its freshmen in this group.

ADMISSIONS

It seems reasonable to assume that some alternatives to the completely open admissions policy could be considered which would reduce the attrition. Obviously there is at present a hit-and-miss type self-selection taking place. Two obvious possible modifications come to mind.

1) Have three or four institutions conduct a study of the present (or past) students, by ACT scores and high school grades, and use this information to develop admission standards. One might start with the three universities with the widest graduate programs, LSU-BR, LTU, and USL, and have them admit only those students in the top one-half of their high school class or those who score at or above a set ACT score. The remainder of the institutions could continue as now, but could develop a number of programs including many two-year technical programs, which would take away the sting of failure from so many students in Louisiana higher education. The divergence of student population between the two sets of institutions would provide a more heterogeneous educational system for the state as a whole.

There are other possible ways of setting admission standards. USL, for example, admits nonresident graduates of outstate accredited high schools only if they are ranked in the upper half of their class or if they have scored 21 or over in the ACT. Such standards might be applied to Louisianians at specified institutions. There are other possibilities. The California state plan, adopted in 1960, agreed that the university would take students from the top one-eighth of all high schools graduates in the state. The state colleges restricted their admission to the top one-third, and the junior college program had completely open admissions. Such a system would presuppose some type of college system. The possibilities for screening are nearly infinite in number; the problem would be to agree upon a pattern to follow.

2) A second alternative would be for each institution to do a study of its entering freshmen by ACT scores and high school performance to see what practical chances for success exist for students with certain qualifications. If a prospective student could look at his high school record and ACT score and see that there was a 10% chance of his being able to complete a degree at College A, but a 75% chance of completing a degree at College B, he could make an intelligent choice of institution. Just as significant, if test scores showed that the student had only a 5% chance of receiving a degree at any institution of higher education, he could choose an alternative career without enduring the stigma of failure at a college or university.

APPENDIX

Questions

1. What are your entrance requirements for Louisiana students? for outstate students? What are the objectives of these requirements?

2. What percentage of your freshmen do not return for their sophomore year? What percentage of students drop from school, or are dropped, as upperclassmen?

3. Do you use a testing program? If so, what tests are used? What scores are achieved by your students? Do these have a predictive value for success in college?

4. Do you have a special admission program for any group?

5. What are your policies controlling admission of transfer students?

6. How do your students effect a change of major? What information do you have concerning the number of students who change majors and average number of changes?

7. Do you have a counseling service? What is its major role?

8. Do you have remedial programs? If so, how many students do they serve and how do you rate the effectiveness of the program?

9. Do students participate in the government of your university? In what way?

10. Do you have any special enrollment arrangements with private institutions of Higher Education in Louisiana?

A Profile of Freshmen Students at Louisiana's State-Supported Colleges and Universities as Revealed by ACT Data

by

THOMAS R. BEARD

The American College Testing (ACT) Program offers various research services to participating institutions throughout the nation. When a prospective college student takes the ACT test battery, he provides considerable information about himself which is essentially unavailable from other sources. While this information is designed primarily for the use of college administrators, counselors, etc. on their individual campuses, much of the data is also relevant for the state-wide co-ordination of higher education. It is the purpose of this study paper to analyze some of the relevant similarities and differences among the 1969 freshman students enrolled at state-supported institutions of higher learning in Louisiana and to suggest some implications of the data for planning and coordination.

SCOPE OF THE PAPER

The particular ACT Program service which is utilized in this working paper is the *Class Profile Report* developed for each participating institution.[1] Most state-supported colleges and universities in Louisiana now participate in this program so that a vast amount of comparable data is available on student characteristics by individual institution. The availability of comparable data is especially good for Louisiana's predominantly white institutions, and in most cases a large majority of fall semester freshmen are included in the *Class Profile Reports.* Unfortunately, data for predominantly black institutions are far less complete, and in several cases nonexistent. While data are available for a representative group of Grambling freshmen, only a very small number of freshman students at Southern in New Orleans are included in that institution's *Class Profile Report* (and the data are for 1968 rather than 1969). The only available data for Southern in Baton Rouge are from the Standard Research Service Summary Analysis rather than Class Profile information; consequently, there is no information for this campus on most of the student characteristics in which we are interested. No data for Southern in Shreveport were made available to us. Despite these omissions, however, it is sometimes possible to make tentative generalizations about the predominantly black institutions based on the fragmentary data available. In other cases, valid generalizations do not seem possible.

The *Class Profile Report* is intended to provide a comprehensive description of an institution's freshman class and is based on information from the ACT test battery. The test battery consists of sections covering four subject areas—English, Mathematics, Social Studies, and Natural Sciences —and a fifth part which is a Student Profile Section. These tests are given several times a year to college-bound students who are most often at the high school senior level. There are four ACT national test dates during the academic year and one in the summer, plus residual testing.[2] Ac-

[1] The ACT Program offers three other research plans—Basic Plan B, Standard Plan A, and the Discriminant Analysis Service. Not all institutions in Louisiana subscribe to these services. The Basic Report summarizes basic correlations, shows the distributions of ACT test scores and high school and college grades and describes how ACT scores and high school grades correlate with overall freshman grades. Plan A is designed to describe enrollees in terms of their academic potentials and college achievements and determine the relation between measures of academic potential and measures of college achievement in order to predict future student performance. Institutions which use the Discriminant Analysis Service receive individual interpretative assistance concerning certain student characteristics. For a description of these services see the ACT Program publication *Your College Freshmen.*

[2] Among the 1969 freshmen enrolled in Louisiana's State 4-Year Colleges, 81 per cent were tested as high school seniors, 10 per cent as high school graduates, 7 per cent as college students, and 2 per cent as high school juniors. Comparable figures for the various campuses of the L.S.U. System were 84 per cent, 11 per cent, 1 per cent, and 4 per cent, respectively.

cording to ACT Program officials, an institution's *Class Profile Report* for 1969 includes data for students tested from October 1, 1968 to September 30, 1969.

The 1969 ACT *Class Profile Reports* for each college and university provide data under six major headings—Academic Potentials, Goals and Aspirations, Student Personnel Needs, Non-academic Achievements, College Attractions, and Demographic Data. Some of the detailed information provided under these headings, however, would appear to be of greater value to individual college administrators, guidance counselors, etc. than to those concerned with an overall master plan for higher education in the State. For example, student personnel needs as reflected by housing expectations, campus transportation plans and extracurricular plans, as well as various measures of non-academic achievements, provide little useful information for the purposes of this paper. Certain demographic data—e.g., age on September 1 of test year, marital status, number of younger children in family living at home, number of other dependents living at home—are of little value either because inter-campus variations are slight or the potential significance of the data for almost any purpose is questionable. Some data have been omitted in the interest of simplicity. For example, analyzing separately each of the ACT test scores in English, Mathematics, Social Studies, and Natural Sciences would add appreciably to the simpler and more readily understandable analysis of the ACT Composite scores.

The titles of the tables in each major category are listed below. An asterisk denotes the titles of those tables which contain information that has been used in this study:

Academic Potentials

- Distributions and Percentile Ranks of ACT English Test Scores
- Distributions and Percentile Ranks of ACT Mathematics Test Scores
- Distributions and Percentile Ranks of ACT Social Studies Test Scores
- Distributions and Percentile Ranks of ACT Natural Sciences Test Scores
- *Distributions and Percentile Ranks of ACT Composite Scores
- Distributions of High School Grades
- *Distribution of the Average of Four H S Grades (HSA)

Goals and Aspirations

- *Distribution of Proposed Educational Majors
- *Distribution of Vocational Choice
- Vocational Role Preferences
- *Educational Plans—Degree Sought
- *Importance of Four Types of College Goals

Student Personnel Needs

- Housing Expectations
- Campus Transportation Plans
- *Part-Time Work Expectations
- Extracurricular Plans
- *Scholarship and Loan Plans

Non-academic Achievements

- Distributions of Non-academic High School Achievements in Six Areas
- Distribution of Total Number of Non-academic High School Achievements

College Attractions

- *Consideration Given to Various Factors in Making College Choice
- Men, Women, and Total for Each College Choice
- Within-State Institutional Preferences (Men)
- Within-State Institutional Preferences (Women)
- Within-State Institutional Preferences (Total)

Demographic Data

- *Type of Home Community
- Age on September 1 of Test Year
- Marital Status
- *Estimated Family Income
- *State of Residence at the Time of Testing
- Number of Younger Children in Family Living at Home
- Number of Other Dependents (Grandparents or Other Dependent Relatives) Living at Home
- *Type of High School Attended
- *Size of High School Graduating Class
- Type of High School Curriculum
- Major Feeder High Schools Within State
- Student Grade Level or Other Status at Time of Testing

An institution's *Class Profile Report* includes all students who asked that their ACT records be forwarded to that college or university. Information is reported separately for *enrolled* and *non-enrolled* students, the latter group including those individuals who listed the institution as one of their choices but did not actually enroll in the freshman class in the fall semester. As it is not clear what the nonenrolled group actually did, or more importantly, the reasons for nonattendance, it does not appear worthwhile to analyze in detail

the characteristics of this group. Thus, this paper concentrates on the enrolled students.

Data in the *Class Profile Report* are also presented separately for men, women, and the total number of students. Only the latter is used in this study, partly in the interest of simplicity and partly because the significance of male-female differences seems slight in a system of higher education in which all institutions are fully coeducational. However, it should be noted that the sex composition of freshman students does vary among campuses (see Table A in the Appendix) and that important differences, according to sex, are apparent in some of the student characteristics to be analyzed in this paper. Table B in the Appendix shows data by male-female breakdown from the ACT *High School Profile Report, 1969*, which covers all Louisiana students who completed the ACT examination during the first four national test dates (excluding the summer) of the 1968–69 test year. (The bulk of these high school students tested, of course, comprise the largest portion of the freshman students enrolled in the State's colleges and universities in 1969–70.) Among other things, these data indicate that men rate higher on the ACT Composite score (and on each of the individual tests except English), while women have an appreciably higher mean of high school grades in the basic four subject areas. Student responses to a question on proposed educational majors—which are very similar to responses concerning vocational choice —indicate that female students are much more heavily inclined than males to major in education, social science areas (which includes home economics), and the arts and humanities. Engineering and agriculture-forestry, on the other hand, are almost exclusively male areas. Men also show a considerably higher preference for the category "political-persuasive," which includes law.

As might be expected, relatively more male students expressed a desire to obtain an advanced degree beyond the bachelor's, while female students were more inclined both to seek a bachelor's degree and to terminate their education prior to the bachelor's level. In the matter of estimating family income, the most striking feature is that twice as large a percentage of women than men reported that they "do not know" this information. If we eliminated both students in this category and those who consider family income data confidential, it is clear that an appreciably larger percentage of the female students who estimated family income would fall in the less than $5,000 income bracket. Whether this represents some systematic bias in male-female perceptions of family income or represents a true economic difference is impossible to ascertain. Interestingly, while a somewhat larger portion of female students planned to apply for loans to help meet college expenses, male students indicated greater expectations of obtaining employment. Little difference can be noted in scholarship plans.

Clearly, then, the male-female composition of an institution's freshman class does influence its total freshman student characteristics. This fact might be kept in mind when analyzing those institutions with either unusually high or low proportions of students of a particular sex. Otherwise, however, the differences in male-female characteristics do not appear very important for the purposes of this paper.

Of more relevance for higher education in Louisiana would be a breakdown of the data on the basis of race since colleges and universities, while not legally segregated, have still not lost their earlier racial identity. Of course, some evidence on race can be inferred by comparing data for the twelve predominantly white institutions with the fragmentary data available for predominantly black institutions. However, many of the predominantly white institutions enroll substantial numbers of black students. If data were available, it would be useful to compare the student characteristics of blacks attending predominantly black institutions with other black students attending predominantly white institutions. In making such comparisons one might focus on institutions in close geographical proximity—i.e., LSUBR and Southern in Baton Rouge, LSUNO and Southern in New Orleans, LSUS and Southern in Shreveport, and Louisiana Tech and Grambling. Unfortunately, ACT data by race are not available so these, and other potentially significant comparisons, cannot be made.

In addition to its *Class Profile Reports* for individual institutions, the ACT Program also publishes national class profile norms in *Your College Freshmen* and a vast amount of data on institutions by level and region in *College Student Profiles*. The latter publication is particularly useful in that it enables us to study the degree of diversity in higher education in the United States. As the ACT data illustrate, student bodies typically differ according to both level (type) of college and geographical region. In this paper, whenever possible, attention will be given to comparing Louisiana's campuses with regional and national norms, as well as norms by institutional

level, with a view of ascertaining whether the State's colleges and universities display more or less diversity than is typical.

In *College Student Profiles*, the ACT Research and Development Division reported tabulations from its 1965 Class Profile Service in which institutions are grouped according to *region* and *level.* The students tested represent enrolled freshmen for the 1965–66 academic year. Regional and level-type computations, however, are available for only a portion of the information contained in the *Class Profile Reports* for individual Louisiana institutions, and in some cases the comparisons that can usefully be made are only suggestive, rather than exact ones.

Grouping by level is based on the U.S. Office of Education definition of institutional level:

Level I. Two but less than four years of work beyond the twelfth grade—includes junior colleges, technical institutes, and normal schools offering at least a two-year program of college level studies.

Level II. Only the bachelor's and/or first professional degree—includes those institutions offering courses of study leading to the customary bachelor of arts or bachelor of science degree, and all those degrees which entitle the possessor to enter the profession indicated; e.g., doctor of medicine, bachelor of pharmacy, or bachelor of science in engineering.

Level III. Master's and/or second professional degree—includes those institutions offering the customary first graduate degree, and any degree earned in the same field after the first professional, or after a bachelor's degree in that field; e.g., the degree of electrical engineer, earned after the bachelor of engineering.

Level IV. Doctor of philosophy and equivalent degrees.

For purposes of regional classification, the Southern region is defined to include Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia.

National norms are reported in the ACT publication *Your College Freshmen.* These norms are based on a 3 percent sample of students tested on the five (four academic year and one summer) national test dates in 1966–67, with supplemental score reports and students tested residually on campuses excluded. It is argued by the ACT Program that since virtually all tested students are college-bound, the sample may be considered as drawn from the population of enrolled college freshmen in the fall term of ACT-participating institutions.[3]

[3] ACT Program officials recognize, however, that participating colleges and universities are not completely representative of American higher education. The geographic bias in ACT participation is such that the national norms over-represent college-bound students in the Midwest, Rocky Mountains and Plains, and the South, and under-represent those in the Northeast and Middle Atlantic states. Private colleges and universities are also under-represented in the sample.

ACT COMPOSITE SCORES

ACT scores and high school grades in four areas are used as measures of academic potential. It is not the purpose of this paper to consider how accurately these measures actually predict academic success in college (various ACT publications report reasonably good success); rather, our purpose is to utilize these two widely-used measures to point up similarities and differences among freshman students enrolled in Louisiana's state-supported institutions.

The raw scores on each test in the ACT battery are converted to standard scores using a scale from 1 (low) to 36 (high). The Composite score is the average of scores in the four areas. As can be seen in Table 1, the mean ACT Composite score on the national sample as reported in *Your College Freshmen* is 19.7, while the mean score for high school students tested in Louisiana in 1968–69 is 18.7. In its *Class Profile Reports*, the ACT Program summarizes test results on the basis of four test score intervals—26-36, 21-25, 16-20, and 1-15. In the national sample there were 14 per cent in the top interval and approximately 47 per cent in the top two intervals combined. In Louisiana the scores were lower, with 10 per cent in the top interval and roughly 37 per cent in the top two intervals. The lower scores for Louisiana students are not unexpected as the ACT Program reported lower composite scores for the South in its study

of regional variations in *College Student Profiles*. Using a different sample than that for Class Profiles, the All Region mean was 20.1 and that for the South, 19.4.

As can be seen in Table 1, there are noticeable differences in the mean ACT Composite scores for enrolled students among Louisiana institutions. Mean scores range from 21.3 at LSUBR to 12.3 at Grambling. (See also the fragmentary data for Southern-BR and Southern-NO.) LSUBR was the only institution above the national norm. The next highest scores were reported for Louisiana Tech, 19.2, LSUS, 19.1, and LSUNO, 18.8.

There are some rather pronounced differences among institutions if one looks at the percentage of students in the highest and lowest test score intervals. If one arbitrarily called those students scoring 26 or above the "best" students (or at least the most promising) and those scoring 15 and below the "weakest" students, it is clear that some differentiation does exist among student bodies despite an open admission's policy in all state-supported institutions. Some 20 per cent of the enrolled freshmen taking the ACT test at LSUBR scored in the top interval, with Louisiana Tech having 15 per cent and LSUNO, 11 per cent, in this bracket. The remainder of the predominantly white institutions fell in the 4 to 8 per cent range, with the predominantly black institutions showing virtually a negligible number in the top test score interval (based on the fragmentary data available).

TABLE 1

ACT Composite Scores—Nation, State, and Enrolled Freshmen in Louisiana Institutions, 1969

	National Class Profile Norm	*High School Students Tested–La.*	*F. T. Nicholls*	*Grambling*	*LSU-A*	*LSU-BR*	*LSU-E*	*LSU-NO*	*LSU-S*
Percentage of students in various test score intervals:									
26–36	14	10	4	0	7	20	5	11	8
21–25	33	27	21	2	25	39	30	29	33
16–20	32	35	39	18	39	30	38	32	35
1–15	21	28	37	80	29	11	27	28	24
Mean	19.7	18.7	17.2	12.3	18.2	21.3	18.3	18.8	19.1
S.D.	5.2	5.2	4.6	3.8	4.8	4.7	4.9	5.5	4.7
Total Number	22,490 (3% sample)	23,321	1,274	452	381	3,384	145	2,761	416

	La. Tech	*McNeese*	*North-east*	*North-western*	*South-eastern*	*Southern-BR*	*Southern-NO*	*South-western*
Percentage of students in various test score intervals:								
26–36	15	7	8	5	4	(0)	(0)	7
21–25	33	24	25	21	21	(1)	(5)	28
16–20	25	42	37	37	42	(22)	(12)	37
1–15	27	27	29	38	33	(77)	(83)	27
Mean	19.2	18.4	18.2	17.2	17.5	(12.3)	(11.6)	18.6
S.D.	6.3	4.7	5.0	4.9	4.5	(4.4)	(4.4)	4.8
Total Number	1,686	1,004	1,743	1,769	1,082	99*	41*	2,053

Source: ACT *Class Profile Report, Enrolled 1969* (various institutions); ACT *High School Profile Report, Students Tested 1968–69 School Year, Louisiana*; *Your College Freshmen*

* Small numbers of students included render data of limited usefulness for comparative purposes; data for Southern-BR are from Summary Analysis 1968 Standard Research Service rather than Class Profile information; data for Southern-NO are from 1968, rather than 1969, *Class Profile Report.*

If we look at the bottom interval, LSUBR shows up as decidedly different from the other state-supported institutions with only 11 per cent of its students in this bracket. It appears that LSUBR is most distinguishable from such institutions as Louisiana Tech, LSUS, and LSUNO in this respect—i.e., in the much smaller percentage of enrolled students who are in the "weakest" student category. The latter three schools range from 24 to 28 per cent of their students in the lowest bracket. The figures for the predominantly black colleges should be noted in this connection—e.g., 80 per cent, or four out of five, of Grambling's freshman students taking the ACT test scored in the bottom bracket.

Of course, differentiation among institutions is to be expected and is observable throughout the country. The extent of differentiation by region and institutional level for enrolled college freshmen in 1965–66 is well documented in ACT's *College Student Profiles*. The national sample included 118 Level I, 108 Level II, 70 Level III, and 38 Level IV institutions, or a total, including a miscellaneous category, of 398. This represented 18 per cent of all institutions nationally and 32 per cent of ACT institutions. In the ACT publication it was argued that "this sample can provide rather accurate information about different levels of ACT institutions and useful information about different levels of institutions nationally." (p. 9.) This view seems a reasonable one. There were 56 institutions in the regional sample for the South. This, too, appears to be a sufficient number on which to base certain generalizations. However, in our view, the small number of institutions by *region and level combined* for the South—13 Level I, 17 Level II, 11 Level III and 5 Level IV—may render these data somewhat less useful for our purposes.

The mean ACT Composite scores of enrolled students at different levels of colleges and universities nationally are as follows: Level I, 18.2; Level II, 19.3; Level III, 19.6; Level IV, 22.1. (For the southern region, by levels, the figures are as follows: Level I, 16.3; Level II, 18.7; Level III, 17.3; and Level IV, 21.6.) It is clear from these figures that marked differences exist among institutional levels in the academic potential of enrolled students. While there is substantial overlap among levels in individual student scores, academic potential, on the average, increases with institutional level. Nationally, students at 2-year colleges score lower on the ACT tests, while students in doctoral-granting institutions score considerably higher. Students at Levels II and III institutions are in-between, and there is not much difference between these levels.

If we follow the procedure of classifying institutions according to their *highest* level of offering —i.e., a Level IV institution is one which offers a Ph.D. or equivalent doctoral degree in one or more fields—then we would have to classify *seven* of the State's public universities (not counting the LSU Medical School) in this category. LSUBR, of course, offers doctoral programs in a wide range of fields. In addition, LSUNO has a doctoral program in Chemistry (and has recently received approval to offer a doctorate in Education in the near future) ; Louisiana Tech has programs in Engineering, Business Administration, and Mathematics (plus a program authorized in Economics, but no students currently enrolled) ; Southwestern has programs in mathematics, English, history, biology, and microbiology; and three institutions—McNeese, Northeast, and Northwestern—have doctoral programs in education. (Northeast also has a doctoral program authorized in pharmacy, but no students enrolled.)

Of these seven universities, *all* are below the national norm for enrolled students in Level IV institutions. (LSUBR's 21.3 is reasonably close to the southern region Level IV figure of 21.6) Six of the seven institutions are *considerably* below the national figure of 22.1.

If we make a different type of comparison and consider the distribution of *institutional* means on the ACT Composite score—the institutional means are computed from Standard Research Service information rather than *Class Profile* information —we find that only five of the 45 Level IV universities in this national group had institutional means of less than 19.5. None had an institutional mean below 18.0. (While we cannot make an exact comparison of mean scores for institutions with means for enrolled students in institutions of a particular level, the comparisons should be sufficiently close for all practical purposes. For example, the mean of institutional means for Level IV institutions is 21.7 as compared to the mean of 22.1 for enrolled students in Level IV institutions.) It seems obvious that ACT Composite scores of 19.2, 18.8, 18.6, 18.4, 18.2, and 17.2—as reported in the *Class Profiles* of six doctoral-granting institutions in Louisiana—are unusually low as compared to doctoral institutions nationally.

One could argue, however, that it is more appropriate to compare some, or all, of these six universities with Level III institutions since they

offer doctoral programs in only one or a few fields. This argument might be particularly strong with respect to McNeese, Northeast, and Northwestern, all of whose ongoing doctoral programs are restricted to education alone. These institutions have the lowest mean scores of 18.4, 18.2, and 17.2. Southwestern, LSUNO, and Louisiana Tech—with ACT Composite score means of 18.6, 18.8, and 19.2, respectively—have graduate programs in a wider range of fields, but even in these cases it might be appropriate to compare them with Level III institutions because they are less complex than the typical doctoral institution.

Level III comparisons are less unfavorable to the Louisiana institutions involved, but still not very "satisfactory." Of 87 Level III institutions considered nationally, the mean of institutional means was 19.8. Some 27 of these institutions scored 18.5 or below and 15 scored 17.5 or below.

Clearly, one of the most striking comparisons that can be made involves the three predominantly white 2-year colleges in the LSU System. In the national sample of enrolled students, the ACT-Composite score was 18.2 for Level I institutions. (In the southern region it was 16.3.) Each of the three institutions—LSUS, LSUE, and LSUA—had a composite score equal to or above the national figure. With respect to institutional means, only 33 of 106 Level I institutions nationally had scores of 19.0 and above, and 44 had scores of 18.5 and above.

How can we interpret these results? Ignoring the predominantly black institutions for the moment, one might suppose that Louisiana's apparently "good" showing in Level I institutions and relatively "poor" showing among Levels III and IV institutions indicates that there is *less differentiation* among its student bodies by *type of institution* than is generally true throughout the nation. While this proposition has not been tested directly, there is at least some indirect evidence that such is likely to be the case. For one thing, the mean scores of enrolled students at each of the three L.S.U. 2-year colleges are *above* scores at such Level III (or in some instances, possibly IV) institutions as F. T. Nicholls, Northwestern, and Southeastern, and are roughly comparable to the scores at several other Louisiana institutions in the high-level categories. For another, it would appear unusual for freshman students at two-year colleges to exhibit greater academic potential than students at 5-year and doctoral-level institutions within the same state simply because of the distribution of scores in the national study of ACT Composite means by institutional level.

Table 2 indicates percentile ranks of various ACT Composite institutional means for different levels of institutions nationally. A mean ACT Composite score of 20 is in the 86th percentile for 2-year colleges, the 48th percentile for Level II institutions; the 55th percentile for Level III institutions, and the 16th percentile for Level IV institutions. To choose another figure, a mean of 18 corresponds to the 52nd, 20th, 22nd, and 1st percentiles for Levels I through IV institutions, respectively.

TABLE 2

PERCENTILE RANKS OF VARIOUS ACT COMPOSITE INSTITUTIONAL MEANS FOR DIFFERENT LEVELS OF COLLEGES AND UNIVERSITIES NATIONALLY

Institutional Mean	*Level I 2-Year*	*Level II 4-Year*	*Level III 5-Year*	*Level IV Ph.D.-Granting*	*All*
24.....99	99	98	93	99	
22.....98	91	82	59	87	
20.....86	48	55	16	56	
18.....52	20	22	1	28	
16.....17	5	3	1	8	

Source: *College Student Profiles*

Certainly there is overlap nationally in academic potentials. As noted in *College Student Profiles*, "two-year colleges enroll many students of exceptional academic promise, and Ph.D.-granting universities enroll many students of little academic promise." (p. 10.) There are also cases of Level I institutions having higher institutional ACT Composite score means than certain Level IV institutions have. But we have uncovered some evidence in this paper to suggest that the *degree of "overlap"* in Louisiana, at least among the majority of predominantly white institutions, may be *unusually great.*[4] While this hypothesis requires further testing, it does have some intuitive appeal in view of the generally "open door" admission policies in state institu-

[4] Of course, ACT test scores can vary from one year to the next as the composition of freshman students changes. Year-to-year variations might be largest in relatively new or small institutions. In general, however, year-to-year variations are not likely to be so large as to overturn our conclusions, and this is especially true for older, well established institutions. A study by the L.S.U. System's Office of Institutional Research (dated June 5, 1970) shows the following variations in ACT Composite mean scores for 1967, 1968, and 1969, respectively: LSU-A, 18.4, 17.1, 18.2; LSU-BR, 20.9, 21.0, 21.3; LSU-E, (scores not available), 16.4, 18.3; LSU-NO, 19.1, 18.8, 18.8; and LSU-S, 18.8, 18.3, 19.1.

tions, the unusually large number of institutions granting doctorates and the relatively small use of community junior colleges. If it is valid to argue, as stated in the SREB *Issues in Higher Education* of November 1970, that "Louisiana . . . appears to be moving toward a single system of comprehensive institutions offering programs at all levels," then it may not be surprising to find very little differentiation in the academic potentials of students enrolling in the *majority* of its colleges and universities.

With respect to academic potential as measured by ACT scores, the State's predominantly black institutions are almost in a separate category, as can be seen in Table 1. While the data are very fragmentary for Southern-BR and Southern-NO (and no data are available for Southern-S), the information that is available is quite consistent with that for Grambling. Because of the sketchy information for enrolled students, however, one might also wish in this particular case to look at available figures for *nonenrolled* students at Southern-NO (i.e., students who listed Southern-NO as one of their college choices on the ACT exam but did not actually enroll). There were 305 students included in this report. The mean ACT Composite score was 13.4 with a standard deviation of 4.7; 2 per cent of the nonenrolled students were in the 26-36 score interval and 68 per cent were in the 1-15 score interval. This information appears to lend further strength to our tentative generalizations concerning the predominantly black institutions, since it is likely that a number of these nonenrolled students at Southern-NO enrolled in other predominantly black institutions in the State.

Obviously, there are many complex issues involved in the question, frequently raised, of the desirability of merging predominantly black and white institutions located in the same geographical area, e.g., the Southern and L.S.U. System campuses in Baton Rouge, New Orleans, and Shreveport, as well as Grambling and Louisiana Tech. It is not our intention to go into this question in any detail or to propose any definite answers. However, in deciding whether or not to maintain the State's predominantly black institutions as independent units, it appears that some consideration should be given to the distributions of ACT Composite scores at neighboring institutions. Do the distributions of ACT test scores overlap sufficiently so that it would be in the best interests of the respective student bodies to merge? Or do the existing institutions serve students with such different degrees of academic potential that the respective student bodies are better served by the maintenance of separate institutions (assuming, of course, that individual students are always completely free to move from one institution to another)?

HIGH SCHOOL GRADES

High school grades are another measure of academic potential. At the time the student writes the ACT examination, he is asked to report his most recent term grades in English, mathematics, social studies, and natural sciences. (According to several ACT Research Reports, studies indicate that self-reported grades are sufficiently accurate.) Grades earned in the senior year are normally excluded, so that grades typically reflect high school performance in the junior year, although it is sometimes necessary to include courses taken in the sophomore or freshman years. Scores are assigned to the grades so that A=4, B=3, C=2, D=1, and F=0. The High School Average (HSA) is simply the average of the grades reported.

As can be seen in Table 3, the national class profile norm as reported in *Your College Freshmen* is 2.58, while the mean HSA for high school students tested in Louisiana in 1968–69 is 2.55. That there is little difference in these figures is not particularly surprising even though, as noted in the previous section, there are more appreciable differences in ACT Composite score means. Apparently, some rather interesting regional variations exist in the relationship between ACT scores and HSA's. Students in the South tend to receive higher grades compared to achievement test scores. In the particular sample used for making regional comparisons, students in the South had a mean HSA of 2.63 as compared to an All Region mean of 2.59. In noting that the South ranked fifth of six regions on ACT Composite scores but first on HSA's, the authors of *College Student Profiles* suggested that "this [and variations for other regions] may reflect regional differences both in experience with standardized achievement tests and in strictness or leniency in high school grading practices."

As is the case with ACT Composite scores, there are appreciable differences in mean HSA's by institutional levels nationally. The means are as follows: Level I, 2.33; Level II, 2.55; Level III,

TABLE 3

AVERAGE OF FOUR HIGH SCHOOL GRADES (HSA)—NATION, STATE, AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969

	National Class Profile Norm	*High School Students Tested–La.*	*F. T. Nicholls*	*Grambling*	*LSU-A*	*LSU-BR*	*LSU-E*	*LSU-NO*	*LSU-S*
Percentage of Students in various HSA categories:									
3.5–4.0	14	15	12	13	14	20	24	8	9
2.5–3.4	45	41	36	48	37	47	45	42	42
1.5–2.4	38	39	45	35	42	31	28	45	44
0.5–1.4	3	5	7	4	7	3	3	5	5
0.0–0.4	0	0	0	0	0	0	0	0	0
Mean	2.58	2.55	2.42	2.58	2.47	2.71	2.74	2.41	2.44
S.D.	0.68	0.73	0.73	0.65	0.76	0.71	0.72	0.66	0.67
Total Number	21,655 (3% sample)	22,706	1,231	429	338	3,327	140	2,616	394

	La. Tech	*McNeese*	*North-east*	*North-western*	*South-eastern*	*Southern-BR*	*Southern-NO*	*South-western*
Percentage of students in various HSA categories:								
3.5–4.0	17	14	15	14	8	(18)	(5)	12
2.5–3.4	44	43	40	36	34	(58)	(32)	36
1.5–2.4	36	38	41	46	51	(23)	(54)	47
0.5–1.4	3	5	4	4	7	(1)	(10)	5
0.0–0.4	0	0	0	0	0	(0)	(0)	0
Mean	2.63	2.56	2.55	2.49	2.33	(2.82)	(2.26)	2.44
S.D.	0.72	0.71	0.71	0.73	0.70	(0.62)	(0.60)	0.71
Total Number	1,640	980	1,668	1,702	1,043	99*	41*	2,000

Source: Same as Table 1

* Small numbers of students included render data of limited usefulness for comparative purposes; data for Southern-BR are from Summary Analysis 1968 Standard Research Service rather than Class Profile information; data for Southern-NO are from 1968, rather than 1969, *Class Profile Report.*

2.62; and Level IV, 2.77. (The HSA means for the southern region are 2.42, 2.59, 2.55, and 2.76, respectively.) These figures indicate that, on the average, the academic potential of enrolled students as measured by HSA is lowest in the 2-year colleges, highest in doctoral institutions, and somewhere in-between for Levels II and III institutions.

Table 3 indicates that appreciable differences in mean HSA's exist among freshman students enrolled in Louisiana institutions. As is the case with mean ACT Composite scores, such differences are not readily explained by any system of classifying institutions by level of offerings. Unlike ACT scores, however, there are no clear distinctions between mean HSA's for predominantly white and black institutions.

The highest HSA's were reported for LSUE, 2.74; LSUBR, 2.71; La. Tech, 2.63; and Grambling, 2.58. While the HSA's for LSUBR and La. Tech appear reasonably consistent with the reported ACT scores, there are wide differences in the results for LSUE and Grambling. In the former case, it appears either that the mean HSA is based on such a small number of students (140) that it may not be representative, or there are some pronounced differences in high school grading practices in those parishes—St. Landry, Evangeline, and Acadia—from which LSUE draws the bulk of its students. In the case of Grambling, it appears either that the grading practices in predominantly black high schools are determined quite independently of the standards in predominantly white high schools, or black students, as frequently alleged, are at a considerable disadvantage in taking standardized tests. While the data are quite fragmentary, this same

pattern—i.e., the much higher HSA than ACT Composite score—may also be characteristic of Southern-BR.

Table 4 indicates the means and relative rankings on ACT Composite scores and HSA's of the twelve predominantly white institutions in Louisiana. Of the three predominantly white institutions with the lowest mean ACT Composite scores, two—Southeastern and F. T. Nicholls—rank at or near the bottom on mean HSA's as well. The picture here of freshman potential is a rather consistent one. Northwestern, on the other hand, ranks much higher, 6th, on mean HSA. LSUS and LSUNO rank considerably lower on mean HSA's than on mean ACT Composite scores.

As with ACT scores, mean HSA's indicate considerable "overlap" among Louisiana's public institutions when they are classified (in some way) by institutional level. The effects of open door admissions and what the SREB calls the "[apparent movement] toward a single system of comprehensive institutions . . ." is readily apparent. Freshmen at the LSU System 2-year colleges have mean HSA's generally comparable to, and in many cases well above, figures for other institutions offering graduate, and sometimes even doctoral, work. Only LSUBR (and perhaps, marginally, Louisiana Tech) compare at all well with Level IV institutions nationally. Each of the State's colleges and universities can be compared with the data in Table 5, which indicate percentile ranks of various HSA institutional means for different levels of institutions nationally.

TABLE 4

MEANS AND RANKINGS ON ACT COMPOSITE SCORES AND HSA'S OF TWELVE PREDOMINANTLY WHITE INSTITUTIONS IN LOUISIANA, 1969

Institution	*ACT Composite Score*		*HSA*	
	Mean	*Ranking*	*Mean*	*Ranking*
LSUBR	21.3	1	2.71	2
La. Tech	19.2	2	2.63	3
LSUS	19.1	3	2.44	8 (tie)
LSUNO	18.8	4	2.41	11
Southwestern	18.6	5	2.44	8 (tie)
McNeese	18.4	6	2.56	4
LSUE	18.3	7	2.74	1
LSUA	18.2	8 (tie)	2.47	7
Northeast	18.2	8 (tie)	2.55	5
Southeastern	17.5	10	2.33	12
F. T. Nicholls	17.2	11 (tie)	2.42	10
Northwestern	17.2	11 (tie)	2.49	6

Source: Tables 1 and 3.

TABLE 5

PERCENTILE RANKS OF VARIOUS HSA INSTITUTIONAL MEANS FOR DIFFERENT LEVELS OF COLLEGES AND UNIVERSITIES NATIONALLY

Institutional Mean	*Level I 2-year*	*Level II 4-year*	*Level III 5-year*	*Level IV Ph.D.-Granting*	*All*
3.0	99	97	97	96	97
2.8	97	83	72	59	82
2.6	79	51	39	18	51
2.4	56	20	9	1	25
2.2	17	6	2	1	8

Source: *College Student Profiles*

PROPOSED EDUCATIONAL MAJORS AND VOCATIONAL CHOICE

As part of the Student Profile Section of the ACT test battery, students are asked to designate their proposed educational major and vocational choice from a list of alternatives. Nationally, there is a reasonably close correspondence between the percentage of students choosing a particular field as a proposed major and the percentage choosing that same category as a vocational choice. This result is hardly surprising.

As can be seen in Tables 6 and 7, however, this correspondence is not exact and some differences exist in particular categories. For example, slightly larger percentages of students choose educational majors in such categories as education, business-finance, scientific, and arts and humanities. At the same time, larger percentages of students choose the "some other field" and "undecided" categories in their designations of proposed vocations. Nevertheless, the close correspondence between these two distributions enables us to consider both proposed major and vocational choice simultaneously.

The results for high school students tested in Louisiana are very similar to the national figures for both distributions. The only differences among major categories that are even worthy of notice are the slightly higher percentages nationally who choose education as both a proposed major and a vocational choice and the slightly smaller percentage nationally who choose business-finance as a proposed major. In general, differences between the State and nation are inconsequential. Similarly, regional data for educational majors published in *College Student Profiles* show only

TABLE 6

DISTRIBUTION OF PROPOSED EDUCATIONAL MAJORS—NATION, STATE, AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969 (PERCENTAGES)

	Nationally Enrolled	*High School Students Tested La.*	*F. T. Nicholls*	*Grambling*	*LSU-A*	*LSU-BR*	*LSU-E*
Education	19	17	22	23	16	13	26
Social Science-Relig.	9	9	9	13	7	9	6
Business-Finance	12	14	16	18	11	9	12
Political, Persuasive	4	5	4	3	5	8	6
Scientific	6	6	6	6	3	7	4
Agri.-Forestry	3	3	2	1	8	2	10
Health	10	10	7	4	18	11	8
Arts & Humanities	10	9	6	8	5	11	3
Engineering	8	8	7	4	9	12	10
Trade & Industrial	3	2	2	2	2	1	1
Housewife	0	0	0	0	0	0	0
Some Other Field	1	1	1	0	1	1	0
Undecided	16	16	19	18	16	17	14
No. of Students	22,094 (3% sample)	22,871	1,249	427	374	3,326	143

	LSU-NO	*LSU-S*	*La. Tech*	*McNeese*	*Northeast*	*North-western*	*South-eastern*	*Southern-NO*	*South-western*
Education	16	15	15	22	16	23	20	(37)	17
Social Science-Relig.	9	7	7	7	8	9	8	(16)	7
Business-Finance	14	21	13	16	17	14	15	(24)	17
Political, Persuasive	5	6	4	3	5	3	4	(5)	6
Scientific	9	5	5	6	6	5	5	(0)	4
Agri.-Forestry	0	4	5	5	3	5	4	(0)	3
Health	11	10	5	9	14	10	6	(3)	9
Arts & Humanities	10	4	9	9	9	7	8	(5)	11
Engineering	7	8	18	7	4	4	5	(8)	9
Trade & Industrial	1	1	3	2	4	3	4	(0)	2
Housewife	0	0	0	0	0	0	0	(0)	0
Some Other Field	0	1	1	0	1	1	1	(0)	1
Undecided	17	17	15	13	15	17	20	(3)	16
No. of Students	2,704	408	1,671	979	1,707	1,715	1,054	38*	2,014

Source: Same as Table 1

* Small number of students included renders data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

minor variations among different sections of the country. (There are no regional data shown for vocational choice.) As the authors conclude, "[the] data suggest that students in the various regions distribute themselves similarly among the major field groupings. The various regions should, therefore, probably proportion their academic offerings in very similar ways in order to meet the needs of their respective students."

As one might suspect, there are more pronounced differences nationally for educational majors by *level* of institution. A difficulty arises in comparing national data by institutional level with the distributions in Tables 6 and 7, however, since in some cases the categories are not identical. It is especially unfortunate that "social, religious, and education" are considered a single category and "engineering and agriculture" are similarly combined. In these cases, it is difficult to interpret the results or to compare them to the situation in Louisiana.

Certain reasonably direct comparisons can be made, however. There is a clear tendency nationally for two-year colleges to have relatively more students interested in business majors (13 per cent), with both 4- and 5-year institutions somewhat lower (9 per cent), and Ph.D.-granting institutions the lowest of all (6 per cent). There is also an increase in the percentage of students choosing scientific majors as institutional level increases, with some 5, 7, 7, and 9 per cent, respectively, of enrolled students selecting this ma-

jor field. Percentages for the medical area are decidedly higher at Level IV institutions, 14 per cent, as compared with 9, 9, and 8 per cent in Levels I-III, respectively.

The above data, as well as that in subsequent sections of this paper, apply to enrolled students only. Since data by individual institutions are not available (e.g., the distribution of, say, Level I colleges according to their percentages of students choosing particular major fields), it is not possible to speculate on how typical or atypical Louisiana institutions may be.

A look at Tables 6 and 7, however, yields some interesting and potentially useful comparisons of the State's institutions. Pronounced differences exist for both proposed major and vocational choice of enrolled students by individual institution. In many cases, the students' choices obviously reflect the institution's historical role and reputation in a certain area—e.g., the 18 per cent choosing Engineering at Louisiana Tech. In other cases, the choices clearly reflect the availability of special programs—e.g., the 18 per cent choosing Health at LSUA, which has an associate degree program in Nursing, and the 14 per cent choosing Health at Northeast, which offers a bachelor's degree in Nursing. In some, but not all, cases, the pattern of student preferences in Louisiana institutions corresponds closely to national

TABLE 7

DISTRIBUTION OF VOCATIONAL CHOICE—NATION, STATE, AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969 (PERCENTAGES)

	Nationally Enrolled	*High School Students Tested La.*	*F. T. Nicholls*	*Grambling*	*LSU-A*	*LSU-BR*	*LSU-E*
Education	16	14	19	12	12	13	23
Social Science-Relig.	8	7	6	13	8	6	4
Business-Finance	10	10	12	13	7	6	10
Political, Persuasive	5	6	4	3	4	9	6
Scientific	3	3	3	4	2	4	2
Agri.-Forestry	2	2	2	0	6	2	11
Health	10	10	8	4	18	11	9
Arts & Humanities	6	6	5	8	2	7	2
Engineering	7	7	6	2	9	10	8
Trade & Industrial	3	3	2	2	2	2	3
Housewife	1	2	2	1	2	2	2
Some Other Field	7	7	7	10	6	6	3
Undecided	20	22	26	28	22	22	18
No. of Students	22,066 (3% sample)	22,894	1,251	429	377	3,335	141

	LSU-NO	*LSU-S*	*La. Tech*	*McNeese*	*Northeast*	*North-western*	*South-eastern*	*Southern-NO*	*South-western*
Education	15	10	12	19	13	16	18	(12)	14
Social Science-Relig.	6	6	6	6	6	8	4	(29)	6
Business-Finance	10	13	10	13	12	11	11	(17)	12
Political, Persuasive	6	7	5	4	5	4	5	(5)	7
Scientific	5	4	3	3	3	3	2	(5)	3
Agri.-Forestry	0	4	4	5	3	4	3	(0)	2
Health	11	11	5	9	13	10	6	(0)	8
Arts & Humanities	7	5	7	5	6	5	6	(0)	8
Engineering	6	6	14	6	4	3	5	(10)	7
Trade & Industrial	2	3	5	3	4	3	3	(2)	3
Housewife	2	1	1	1	2	1	2	(0)	2
Some Other Field	7	8	8	7	9	7	8	(2)	8
Undecided	23	22	20	19	22	25	29	(17)	22
No. of Students	2,696	409	1,668	984	1,700	1,716	1,055	41*	2,020

Source: Same as Table 1

* Small number of students included renders data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

differences by institutional level as reported in *College Student Profiles.*

The percentage of students indicating education as a major field ranges from 13 at LSUBR and 15 at Louisiana Tech to 23 at Grambling and Northwestern and 26 at LSUE. In general, those four institutions granting doctorates in fields other than (or in addition to) education show relatively low percentages in this category. Nicholls, McNeese, Northwestern, and Southeastern are all above average in the percentage of enrolled students indicating a major field in education.

LSUBR shows the smallest percentage of its students favoring the business-finance category. As noted above, Level IV institutions nationally show a smaller percentage in this category than do other levels, especially 2-year colleges. While LSUS shows a high proportion of its freshman students in this category, the other 2-year colleges in the LSU System do not. Following LSUS, the institutions showing the highest percentages of their students indicating proposed business-finance majors are Grambling, Northeast, and Southwestern.

In the scientific category, LSUNO, 9 per cent, and LSUBR, 7 per cent, show the highest percentages. In keeping with the national figures by institutional level, the three LSU System 2-year colleges show percentages in this category which are at or near the bottom for Louisiana institutions.

The percentage of enrolled students choosing agriculture-forestry as a prospective major field is low nationally and in most institutions in the State. At only two small 2-year colleges, LSUE, 10 per cent, and LSUA, 8 per cent, do a significant percentage of the freshman students indicate interest in this area. (As shown in a later section of this paper, these two institutions also have the largest percentages of enrolled freshman students indicating "farm or open country" as their type of home community.) At both LSUBR and Southwestern—two institutions long associated with a large agricultural program—the percentage of freshman students indicating this area as a proposed major was only 2 and 3 per cent, respectively. Of particular interest is the extremely low figure for Grambling, 1 per cent, even though some 41 per cent of enrolled students at that college came from "farm or open country." Obviously, the small amount of freshman student interest in agriculture-forestry has implications for the state-wide planning and co-ordination of higher education.

The percentages of students choosing engineering as a proposed major vary considerably among institutions. Louisiana Tech, with 18 per cent, is almost in a class by itself, especially among institutions under the State Board of Education. Students at LSUBR also show a relatively high interest in engineering, with some 12 per cent designating this area. Students at LSU System 2-year colleges show modest interest, ranging from 8 to 10 per cent.

Data for the other four major categories—social science-religious, political-persuasive, health, and arts and humanities—are more difficult to interpret since each contains a number of important sub-categories. For example, the first category includes home economics. The category "political-persuasive" includes law, which requires a professional degree for employment purposes, as well as such seemingly diverse designations as advertising-sales, military, government, public relations, etc. The health area contains medicine and dentistry, nursing, health technology, and "other" health areas.[5]

An important question involves the reliability of ACT statistics on proposed major field of study and vocational choice. Do college students actually do what they said they would do when they took the ACT test, in most cases as high school seniors? Some limited information is available through ACT Research Reports.

In *Do They Do What They Say They Will Do?*, Report 24 by Sandra W. Lutz, the question of how accurately students' pre-college responses predict their behavior and plans during the *first year* of college was investigated. A follow-up study in the original form of the ACT Student Profile Section was conducted at the end of the freshman year at 35 colleges; the resulting data were paired with original data for 5,617 students. Two general types of information of interest to us were included in the Lutz study—educational and vocational plans and financial needs and work expectations. Lutz concluded that "students in their first year of college generally do what they say they will do, or something closely related to it," and that "when students fail to follow through, their behavior seems to reflect not only a change of mind but also a change in the policies and opportunities presented by their colleges." It

[5] One potentially important piece of information involves the numbers of percentages of freshmen at various institutions who indicate an interest in such professional areas as law and medicine and dentistry; such information, however, is best analyzed from data on degrees sought which is considered in a later section of this paper.

should be noted, however, that a review of certain aspects of the study suggests that the first of Lutz's generalizations can be quite misleading in particular instances.

On both the Student Profile Section of the ACT test and the follow-up questionnaires, students were asked to choose their major field and future vocation from 84 specific fields grouped under 7 categories, plus "housewife," "undecided," and "other field" designations. Data were presented for four freshman groups—4-year college males, 4-year college females, 2-year college males, and 2-year college females. In general, the data indicated that about half the students selected the same category after one year of college, with the rate of consistency varying from 28 per cent to 71 per cent. Those students changing major fields moved to a closely related category in most cases (e.g., the category "administrative, political, and persuasive" to "business-finance," and "medical" to "scientific.")

The pattern for vocational choice closely followed that for major field with a slightly higher rate of change. The median for all vocational groups was 46 per cent consistency, with specific groups ranging from 20 to 70 per cent. Although vocational changers also tended to move to a closely related group, there was a greater tendency to select "undecided" or give no answer at the end of the freshman year than was evident in the major field data. Roughly one-fourth of the students who expressed initial preferences were undecided after one year, and about one-fourth changed to another vocational choice.

Certainly, there is evidence from many sources that students frequently change their minds about educational major and vocational choice. It is sometimes suggested that such changes indicate the success of the college experience in broadening the students' horizons. While ACT data on major field and vocational choice help us to develop a student profile for each institution in Louisiana, one should not assume that the students' original preferences will remain unchanged throughout their college experience.

DEGREES SOUGHT

Students are asked to indicate highest degrees sought as part of the Student Profile Section of the ACT test. Table 8 shows these data for the nation, high school students tested in Louisiana, and enrolled freshmen in publicly-supported institutions in the State.

Some differences can be noted between the State and nation. A smaller percentage of Louisiana students aspire to less than the bachelor's degree while a larger percentage aspire to advanced degrees beyond the bachelor's. In the latter category, slightly higher percentages of Louisiana students indicate a desire to obtain master's degrees, Ph.D.'s, M.D.'s and D.D.S.'s, and L.L.B.'s.

Data by geographical area, published in *College Student Profiles*, indicate that the greatest regional variation occurs in the "less than bachelor's degree" segment, with the West registering the highest (21 per cent) and the Northeast the lowest (13 per cent) percentages. The figure for the South is 16 per cent, the same as the All Region percentage in this sample. These figures can be compared with the lower figure for Louisiana high school students of 11 per cent. Furthermore, the latter percentage is clearly biased upward, with only about 8 per cent of freshmen actually enrolled in the fourteen Louisiana institutions shown in Table 8 being in the "less than bachelor's" category. Undoubtedly, the low figure for Louisiana is a partial reflection of the relative lack of emphasis in the State on terminal junior college education and the under-representation of typical Level I institutions.

Regional data for the South indicate a slightly lower than average selection of master's degrees, but a slightly above-average percentage of students seeking doctorates of all types and law degrees. In the latter respect, at least, Louisiana follows the regional pattern.

National differences in degrees sought by enrolled students are more pronounced by institutional level than by geographic region. While 4-year (Level II) and 5-year (Level III) institutions tend to be fairly similar, the differences between 2-year and Ph.D.-granting institutions are quite striking. For example, 27 per cent of the enrolled students nationally at 2-year colleges aspire to less than a bachelor's degree, while the figure is only 9 per cent in Ph.D.-granting institutions.

These figures can be contrasted with the percentages of enrolled students seeking less than the bachelor's degree in individual Louisiana institutions. As shown in Table 8, the three L.S.U. System 2-year campuses are in the range of 9 to

TABLE 8

DEGREE SOUGHT—NATION, STATE, AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969 (PERCENTAGES)

	Nationally Enrolled	*High School Students Tested La.*	*F. T. Nicholls*	*Grambling*	*LSU-A*	*LSU-BR*	*LSU-E*	*LSU-NO*	*LSU-S*
H. S. Diploma	1	1	1	2	2	0	1	1	1
Vocational or Technical Program (Less than 2 years)	3	3	3	2	1	1	0	1	1
Junior College Degree	10	7	10	6	13	3	8	4	10
Bachelor's or Equivalent	47	45	50	38	43	44	47	48	48
One or Two Years Grad or Professional Study (MA, MBA)	23	24	18	25	23	29	26	24	23
Doctor of Philosophy (Ph.D.)	5	6	5	14	4	7	8	7	4
Doctor of Medicine or Dental Surgery (M.D. or D.D.S.)	4	5	3	2	5	8	5	6	5
Bachelor of Laws (L.L.B.)	2	3	2	3	2	5	3	3	3
Bachelor of Divinity (B.D.)	0	0	0	0	0	0	0	0	0
Other	5	6	7	8	7	4	3	5	6
Number of Students	22,363 (3% sample)	23,235	1,269	447	380	3,366	144	2,741	413
Summaries ("other" omitted):									
Less than Bachelor's or Equiv.	15	11	15	10	17	4	9	7	12
Bachelor's or Equivalent	49	48	54	42	47	46	48	50	51
More than Bachelor's or Equiv.	36	41	31	48	37	51	42	42	37
Number of Students ("other" omitted)	21,293 (3% sample)	21,892	1,177	411	354	3,245	139	2,597	390

	La. Tech	*McNeese*	*Northeast*	*North-western*	*South-eastern*	*Southern-NO*	*South-western*
H. S. Diploma	1	1	1	2	0	(3)	1
Vocational or Technical Program (Less than 2 years)	1	2	2	3	3	(0)	2
Junior College Degree	4	8	5	7	5	(11)	7
Bachelor's or Equivalent	51	49	51	51	55	(34)	50
One or Two Years Grad or Professional Study (MA, MBA)	28	25	25	22	20	(32)	23
Doctor of Philosophy (Ph.D.)	6	4	5	5	4	(11)	4
Doctor of Medicine or Dental Surgery (M.D. or D.D.S.)	3	5	4	3	2	(0)	4
Bachelor of Laws (L.L.B.)	2	2	2	1	3	(3)	3
Bachelor of Divinity (B.D.)	0	0	0	0	0	(0)	0
Other	4	4	5	6	8	(8)	6
Number of Students	1,682	993	1,739	1,749	1,078	38*	2,037
Summaries ("other" omitted):							
Less than Bachelor's or Equiv.	6	11	8	12	9	(14)	11
Bachelor's or Equivalent	53	51	53	54	60	(37)	53
More than Bachelor's or Equiv.	41	38	39	34	31	(49)	36
Number of Students ("other" omitted)	1,608	952	1,645	1,642	993	35*	1,909

Source: Same as Table 1

* Small number of students included renders data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

17 per cent in this category—all well below the national figure for enrolled students in Level I institutions. Such graduate-degree granting institutions as F. T. Nicholls, McNeese, Northwestern, and Southwestern are in a somewhat comparable range of 11 to 15 per cent—a range that can be compared with the 15 per cent figure for enrolled students in Level III institutions nationally. Other Louisiana institutions had lower figures, ranging downward to only 7 per cent at LSUNO, 6 per cent at Louisiana Tech, and 4 per cent at LSUBR. In these doctoral-granting institutions, relatively fewer students appear satisfied with less than a bachelor's degree than is the case nationally for enrolled students in Level IV institutions.

While, relative to institutional level data, most Louisiana institutions are on the low side in the "less than bachelor's" category, it also appears that little difference exists among the majority of State institutions in this respect. That is, the L.S.U. System two-year colleges cannot be sharply distinguished from most 4- and 5-year colleges, and in some cases, doctoral-granting institutions. Undoubtedly, a major reason for this situation is that the role of the 2-year college is not sharply distinguished from the role of other institutions in the State. The three L.S.U. System 2-year institutions are not degree-granting colleges (only LSUA offers an Associate degree, and that in the field of Nursing), but rather serve as "transfer" colleges. Thus, it might be expected that a relatively large percentage of enrolled students in these "transfer" institutions anticipate the bachelor's degree or beyond. By way of contrast, some of the State's institutions who qualify for the Levels II-IV categories offer Associate degrees in addition to bachelor's and advanced degrees. Once again, our data seem to point up the relative homogeneity of higher education in Louisiana.

National data by institutional level also indicate appreciable differences between 2-year and Ph.D.-granting institutions in the percentages of enrolled students aspiring to advanced degrees. Percentages by level are as follows: Master's—Level I, 17 per cent; Level II, 22 per cent; Level III, 24 per cent; Level IV, 26 per cent; Ph.D., M.D., and D.D.S.—Level I, 5 per cent; Level II, 7 per cent; Level III, 6 per cent; and Level IV, 12 per cent; and L.L.B.—Level I, 2 per cent; Level II, 2 per cent; Level III, 2 per cent; Level IV, 3 per cent.

As can be noted in Table 8, the percentages of enrolled students in Louisiana institutions aspiring to the master's degree are most often equal to or above the figures for comparable institutional levels nationally. This is particularly true for the L.S.U. System 2-year colleges, with from 23-26 per cent of enrolled students in this category. The highest figures are for LSUBR, 29 per cent, and Louisiana Tech, 28 per cent.

Combining the Ph.D. and M.D.-D.D.S. categories as is done in the national study by institutional level, one can note in Table 8 a variation among Louisiana institutions from roughly 16 per cent at Grambling (obviously an unrealistically high level of aspiration in view of ACT Composite score data) and 15 per cent at LSUBR to 8 per cent at both Southwestern and Northwestern and 6 per cent at Southeastern. The three L.S.U. System 2-year colleges are well above the figure for enrolled students at Level I institutions. LSUBR and LSUNO are above the average 12 per cent for enrolled students in Level IV institutions nationally, but Louisiana Tech, McNeese, Northeast, Northwestern, and Southwestern (all doctoral-granting institutions) are below this figure.

The percentages of students aspiring to a law degree vary from 1 per cent at Northwestern to 5 per cent at LSUBR.

Considering the summary figures in Table 8 (with the "Other" category eliminated), it is clear that an appreciably larger percentage of freshman students at LSUBR, 51 per cent, aspire to some degree beyond the bachelor's than is the case in other institutions. Grambling is next with 48 per cent; based on the fragmentary data for enrolled students at Southern-NO, 49 per cent, and the figures for *nonenrolled* at Southern-NO, 45 per cent, it appears that a high level of aspiration—perhaps unreasonably high—may be a characteristic of predominantly black institutions in the State. Other relatively high percentages were recorded for enrolled freshmen at LSUE, 42 per cent; LSUNO, 42 per cent; and Louisiana Tech, 41 per cent. The lowest percentages were recorded for F. T. Nicholls and Southeastern, both 31 per cent.

In general, freshman students in most Louisiana institutions are not lacking in a high level of academic aspiration. Obviously, many initial aspirations will not be fulfilled, as is the case throughout the country. Whether Louisiana students are able to achieve their aspirations more or less frequently than is the case nationally is an important question, but one which cannot be answered from available ACT data.

Some evidence of the consistency of student aspirations nationally over the one-year high school to college "transition" period is available, however. In the ACT Research Report by Sandra W. Lutz, *Do They Do What They Say They Will Do?*, a national sample of students who had taken the ACT test battery were asked on a follow-up questionnaire at the end of their freshman year to indicate the highest level of education they planned to attain. Pre-college and freshman year responses were then compared for four separate groups of students—2-year college males, 2-year college females, 4-year college males, and 4-year college females. The results are shown in Table 9.

The least change occurred among students who

TABLE 9

DISTRIBUTION OF FRESHMAN YEAR EDUCATIONAL ASPIRATION FOR STUDENTS WITH THE SAME PRE-COLLEGE LEVEL OF ASPIRATION—LUTZ STUDY

	Pre-College Response																			
	Less than BA				*BA*				*MA*				*Ph.D.*				*Other*[1]			
	4-yr.		*2-yr.*		*4-yr.*		*2-yr.*		*4-yr.*		*2-yr.*		*4-yr.*		*2-yr.*		*4-yr.*		*2-yr.*	
	M	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*
Less than BA .	23	22	47	61	3	5	12	16	2	1	5	20	1	3	7	13	1	4	8	28
BA	54	56	37	24	52	63	54	57	21	30	25	24	9	11	7	38	13	22	17	31
MA	15	17	8	7	37	27	25	22	60	59	57	51	31	50	38	25	20	25	17	10
Ph.D.	3	0	1	1	4	2	2	2	10	7	7	4	49	32	36	25	9	7	3	7
Other[1]	6	4	8	7	4	3	7	3	7	3	6	1	10	5	13	0	57	41	54	24
N	114	183	230	321	800	725	539	446	608	349	261	182	141	38	45	8	280	55	143	58

Source: Sandra W. Lutz, *Do They Do What They Say They Will Do?*, ACT Research Report 24.

[1] Unlike the information in Table 8, "Other" includes responses of MD, DDS, LLB, BD, and other.

Note. All figures with the exception of N's are percents and indicate the percent of those in the column category who one year later gave the row response.

originally planned on the bachelor's degree—52 to 63 per cent consistency—and the master's degree—51 to 60 per cent consistency. Changers among those originally planning a master's degree were much more likely to reduce than to elevate their educational aspirations. Among those originally planning a bachelor's degree, a substantial portion—22 to 37 per cent—indicated after one year a desire to obtain a master's degree. The extent of consistency among those originally designating less than a bachelor's degree was generally low, especially for students in 4-year institutions. As can be noted in Table 9, there was clearly a greater tendency for females than for males to lower their level of aspirations after the completion of the freshman year.

COLLEGE GOALS AND FACTORS INFLUENCING COLLEGE CHOICE

Table 10 reports student reactions to four "college goals." These scores are based upon the importance the student attaches to 12 goal statements, grouped 3 each into 4 categories—academic (A), vocational (V), social (S), and nonconventional (NC). A scale of 0 to 9 is utilized. A mean score and standard deviation for each category is shown in Table 10, as well as the percentage of students considering the goals in each category as "essential" (8 or 9 points), "important" (5, 6, or 7 points), "desirable" (2, 3, or 4 points) and "not important" (0 or 1 point).

The three academic goals refer to improving abilities to think and reason, broadening intellectual interests, and increasing cultural appreciation. Vocational goals refer to discovering vocational interests, attaining vocationally-relevant skills, and meeting requirements necessary to enter a profession. The three social goal statements refer to the development of good interpersonal relations, leadership potentials, and social attractiveness. Nonconventional goals involve learning how to deal with injustice, developing independence, and finding personally meaningful causes.

Unfortunately, regional and institutional-level norms reported in *College Student Profiles* are for a somewhat different set of goal statements and therefore cannot be used in making comparisons with the results for individual Louisiana institutions. National norms as published in *Your College Freshmen* are available, however, and these are shown in Table 10.

In general, there is not much variation between national figures and those for high school students tested in Louisiana. The most noticeable divergence is in the nonconventional category, with the mean figure for Louisiana being 5.5 and that for the nation 5.0. Some 17 per cent of Louisiana high school students considered the goal statements in this category as "essential" as compared with 12 per cent nationally. Inasmuch as the ACT Program interprets high scorers in this category as more likely to be interested in "opportunities to engage in reform movements" and "to be more concerned about effecting change through action" (*Your College Freshmen*, p. 32),

TABLE 10

IMPORTANCE OF FOUR TYPES OF COLLEGE GOALS—NATION, STATE, AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969

	Nationally Enrolled				*High School Students Tested-La.*				*F. T. Nicholls*				*Grambling*				*LSU-A*				*LSU-BR*			
	A	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*
Mean (on Scale of 0 to 9)	6.4	7.2	5.3	5.0	6.3	7.3	5.4	5.5	6.1	7.2	5.5	5.5	6.4	7.1	5.7	6.0	5.9	7.3	5.1	5.2	6.5	7.4	5.4	5.5
S. D.	1.6	1.6	1.9	2.0	1.6	1.6	1.9	2.0	1.6	1.6	1.9	2.0	1.4	1.5	1.8	1.7	1.6	1.6	2.0	2.1	1.5	1.6	1.9	2.0
(Percentages)																								
8 or 9=essential	26	49	13	12	24	52	15	17	19	50	15	16	24	44	15	19	17	52	12	14	28	56	15	18
5, 6, or 7=important	62	45	52	51	63	42	54	53	66	43	55	54	67	50	60	61	63	42	47	49	62	39	54	52
2, 3, or 4=desirable	11	6	32	34	13	5	31	28	15	7	28	26	9	5	22	19	18	6	36	33	9	5	30	27
0 or 1=not important	0	0	3	4	0	0	3	3	0	0	2	3	0	0	2	1	1	0	5	5	0	0	1	3
Number of Students	21,704 (3% sample)				22,874				1,251				410				377				3,332			

	LSU-E				*LSU-NO*				*LSU-S*				*La. Tech*				*McNeese*				*Northeast*			
	A	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*
Mean (on Scale of 0 to 9)	6.1	7.3	5.3	5.6	6.4	7.3	5.4	5.5	6.3	7.3	5.4	5.5	6.3	7.4	5.4	5.4	6.2	7.4	5.6	5.6	6.2	7.3	5.4	5.5
S. D.	1.5	1.5	2.1	2.1	1.6	1.6	1.9	2.0	1.5	1.5	1.9	2.0	1.6	1.5	1.9	1.9	1.6	1.4	1.9	2.0	1.5	1.6	1.9	1.9
(Percentages)																								
8 or 9=essential	16	48	15	21	27	52	15	17	21	52	14	16	25	55	14	15	24	55	17	18	22	54	14	16
5, 6, or 7=important	68	46	48	52	63	41	52	51	67	43	52	52	63	42	54	53	61	41	54	53	66	40	54	54
2, 3, or 4=desirable	16	5	32	23	11	6	31	29	12	5	34	28	12	3	31	30	14	4	28	26	12	5	31	27
0 or 1=not important	0	0	4	4	0	0	3	3	0	0	1	3	0	0	2	3	0	0	2	2	0	0	2	2
Number of Students	139				2,705				408				1,659				951				1,713			

	Northwestern				*Southeastern*				*Southern-NO*				*Southwestern*			
	A	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*	*A*	*V*	*S*	*NC*
Mean (on Scale of 0 to 9)	6.1	7.3	5.4	5.4	6.2	7.2	5.3	5.3	(6.5	7.3	5.9	6.0)	6.3	7.3	5.4	5.5
S. D.	1.6	1.6	1.9	1.9	1.6	1.6	2.0	2.0	(1.2	1.5	1.8	1.5)	1.6	1.6	1.9	2.0
(Percentages)																
8 or 9=essential	20	51	13	15	22	51	41	15	(27	44	15	21)	25	52	15	18
5, 6, or 7=important	65	44	54	56	63	44	53	50	(71	51	61	59)	64	42	52	51
2, 3, or 4=desirable	15	4	30	27	15	4	31	31	(3	6	21	21)	12	6	31	28
0 or 1=not important	0	0	2	3	0	0	3	4	(0	0	3	0)	0	0	2	3
Number of Students	1,695				1,058				34*				2,016			

Source: Same as Table 1

* Small number of students included renders data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

Note: A = Academic, V = Vocational, S = Social, NC = Nonconventional

the relatively high score for Louisiana students seems interesting, but puzzling.

Variations among Louisiana institutions appear relatively small. As might be expected, the highest scores in the nonconventional category are at Grambling. Fragmentary data for Southern-N.O. further suggest the probability that students at predominantly black institutions score relatively high in this category.

However, mean scores in the vocational category are absolutely the highest of the four categories for *every* Louisiana institution. In this respect enrolled students in all institutions appear very similar in emphasizing the vocational aspects of a college education. Likewise, mean scores in the academic category are consistently the second highest. Clearly, little meaningful differentiation is apparent among Louisiana's colleges and universities in terms of the college goals of students.

Table 11 indicates the degree of consideration —"major," "minor," and "none"—given to seventeen factors in making a college choice. Responses are organized under four general headings: Intellectual Reputation; Practical Considerations; Outside Influences; and Social Climate.

Some differences can be noted between the responses in the national sample and those for Louisiana high school students. In general, Louisiana students indicated slightly less emphasis on the five items under Intellectual Reputation, but somewhat more emphasis on the four items under Social Climate. Differences among individual factors, however, do not appear to be very large.

For both the nation and the State, the four factors rated as "major" most frequently were (in order) "good faculty," "high scholastic standing," "special curriculum," and "location." Generally, more emphasis was placed on the individual items under Intellectual Reputation and Practical Considerations than on those items under Outside Influences and Social Climate.

Regional data published in *College Student Profiles* involve a listing of individual factors that is similar, but not identical, to that shown in Table 11. These data indicate that students in the various regions of the country are distributed quite similarly in their selection of major factors. As is the case for Louisiana high school students, there was a tendency for enrolled students in the South to give slightly more consideration to social factors than was evident in other regions. Although the differences were small, students in the South also gave above-average weight to intellectual factors and below-average weight to practical considerations.

National variations by institutional level are more pronounced, although on the whole students at all levels cite intellectual- and practical-type factors as the most important ones in choosing a college. Enrolled students at Levels II and III institutions were typical of all enrolled college students. Students at doctoral institutions gave intellectual reasons more often as major factors and practical reasons less often. In contrast, students at 2-year colleges gave intellectual reasons less often and practical reasons more often.

For example, the percentages of enrolled students citing "good faculty" as a major factor were as follows: Level I, 57 per cent; Level II, 65 per cent; Level III, 61 per cent; and Level IV, 68 per cent. The percentages citing "low cost" were: Level I, 51 per cent; Level II, 37 per cent; Level III, 39 per cent; and Level IV, 35 per cent.

As can be seen in Table 11, appreciable variations exist among Louisiana institutions in a number of factors. However, it is difficult to generalize about these differences; in some cases the variations follow the national pattern by institutional level and in other cases they do not.

The percentages of students in Louisiana institutions citing "good faculty" as a major factor in college choice range from highs of 66 at Grambling, 65 at LSUNO, and 64 at LSUBR, to lows of 57 at F. T. Nicholls and 55 at LSUE and Southeastern. In a related question, there were appreciably higher percentages of students at Grambling and LSUBR—45 and 44 per cent—indicating "national reputation" as a major factor in college choice; the lowest percentages, once again, were at F. T. Nicholls, 27; LSUE, 26; and Southeastern, 25. On the question of "high scholastic standards," the highest three percentages were 65 at LSUNO, 63 at Grambling, and 61 at LSUBR; the lowest figures were McNeese and Northwestern, 51 per cent, Southeastern, 50 per cent, and F. T. Nicholls, 49 per cent.

As noted earlier, one would expect, other things being equal, the percentage of enrolled students attaching major importance to Practical Considerations to be relatively high in 2-year and relatively low in doctoral institutions. Similarly, it seems likely that Practical Considerations would be of greatest importance to students in commuter-type institutions and in colleges which attract above-average proportions of students from low income families. As can be seen in Table

TABLE 11

CONSIDERATION GIVEN TO VARIOUS FACTORS IN MAKING COLLEGE CHOICE—NATION, STATE, AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969 (IN PERCENTAGES)

	Nationally Enrolled			*High School Students Tested–La.*			*F. T. Nicholls*			*Grambling*			*LSU-A*			*LSU-BR*			*LSU-E*			*LSU-NO*		
	Mj	*Mn*	*N*	*Mj*	*Mn*	*N*	*Mj*	*Mn*	*N*	*Mj*	*Mn*	*N*	*Mj*	*Mn*	*N*	*Mj*	*Mn*	*N*	*Mj*	*Mn*	*N*	*Mj*	*Mn*	*N*
I. Intell. Reputation																								
1. Intell. Atmosphere	40	46	14	39	46	16	32	49	19	46	38	15	30	48	23	39	46	15	31	46	23	42	44	14
2. Good Faculty	64	28	8	62	29	9	57	33	10	66	27	7	61	30	9	64	29	7	55	35	9	65	27	8
3. National Reputation	35	44	21	36	43	22	27	44	30	45	39	16	30	43	27	44	41	15	26	40	34	37	43	20
4. High Schol. Standards	58	34	7	58	33	8	49	39	12	63	30	7	57	35	8	61	32	7	52	36	12	65	28	7
5. Special Curriculum	58	29	12	55	31	14	47	35	18	54	30	16	55	32	13	56	30	14	43	41	16	51	34	15
II. Practical Considerations																								
1. Low Cost	34	47	19	30	46	24	42	41	17	34	41	25	42	38	20	21	48	31	34	44	22	45	37	18
2. Location	46	40	14	47	38	15	52	35	13	31	46	23	56	30	14	50	37	13	55	30	14	49	36	16
3. Close to Home	36	37	27	39	36	25	53	30	17	27	37	36	52	31	17	35	37	28	60	26	14	46	35	19
III. Outside Influences																								
1. Advice of Parents	35	41	25	37	39	23	40	35	25	48	35	16	40	34	26	35	41	24	43	40	17	34	38	29
2. Advice, H.S. Teacher	26	43	32	24	41	34	26	37	37	37	43	20	21	36	43	19	42	39	25	46	29	22	38	40
3. Advice, H.S.-Coll. Cslr.	35	38	27	32	37	31	34	33	33	43	36	21	30	36	34	26	38	36	31	42	26	29	34	37
4. Coll. Admiss. Cslr.	35	30	35	30	31	39	27	30	43	41	31	28	26	29	45	26	29	45	26	35	40	28	29	44
5. Financial Aid Offer	26	20	54	29	20	52	26	20	55	45	27	28	26	18	57	24	18	58	22	19	59	24	20	56
IV. Social Climate																								
1. Social Opportunities	34	51	15	36	49	14	32	51	17	38	48	14	34	48	18	42	46	12	38	45	18	33	51	16
2. Good Athletic Program	15	31	54	17	32	52	18	31	51	26	37	37	14	31	55	17	33	50	13	36	50	12	32	56
3. Has Frat. and Sor.	8	37	54	13	41	47	10	42	48	21	47	33	6	33	60	17	41	42	11	30	59	10	38	52
4. Coeducational	26	20	54	31	50	19	28	51	21	39	48	12	20	51	28	39	45	16	32	44	24	29	49	22
Number of Students	21,670 (3% sample)			23,001			1,254			428			375			3,335			141			2,702		

TABLE 11 (Cont'd)

	LSU-S			*La. Tech*			*McNeese*			*Northeast*			*Northwestern*			*Southeastern*			*Southern-NO*			*Southwestern*		
	Mj	*Mn*	*N*	*Mj*	*Mn*	*N*	*Mj*	*Mn*	*N*	*Mj*	*Mn*	*N*	*Mj*	*Mn*	*N*	*Mj*	*Mn*	*N*	*Mj*	*Mn*	*N*	*Mj*	*Mn*	*N*
I. Intellectual Reputation																								
1. Intell. Atmosphere	36	46	18	35	49	16	35	48	18	37	48	16	36	46	18	33	49	19	(55	27	18)	31	50	18
2. Good Faculty	59	32	9	62	28	10	58	32	11	58	32	10	59	30	11	55	35	10	(69	25	6)	58	33	9
3. National Reputation	32	40	28	34	44	22	28	45	27	32	43	25	32	44	24	25	45	30	(35	48	17)	31	47	22
4. High Schol. Standards	58	34	8	60	32	8	51	39	9	57	34	9	51	38	10	50	39	10	(71	26	3)	52	38	11
5. Special Curriculum	51	33	16	62	27	12	55	30	15	55	33	12	53	33	15	48	34	18	(52	39	9)	51	33	16
II. Practical Considerations																								
1. Low Cost	44	39	17	24	51	25	33	46	21	27	49	24	26	48	26	31	47	22	(34	41	25)	25	49	26
2. Location	60	30	10	42	42	16	55	33	12	52	35	14	45	39	16	50	36	15	(27	52	21)	48	37	14
3. Close to Home	57	27	16	34	38	29	53	30	17	43	33	24	35	35	30	45	37	19	(31	45	24)	39	35	26
III. Outside Influences																								
1. Advice of Parents	40	34	25	32	40	28	38	39	23	36	38	26	34	36	29	36	38	26	(43	50	7)	33	39	29
2. Advice, H.S. Teacher	21	34	45	21	41	38	22	43	35	24	41	35	24	38	38	26	38	36	(21	64	14)	22	38	40
3. Advice, H.S.-Coll. Cslr.	28	32	40	27	37	36	28	37	35	32	34	34	29	35	37	31	36	34	(41	52	7)	27	36	37
4. Coll. Admiss. Cslr.	28	29	43	25	32	43	25	31	44	29	29	41	27	28	45	27	30	43	(46	31	23)	26	29	45
5. Financial Aid Offer	23	14	63	23	19	58	29	18	52	30	18	52	26	18	56	26	18	56	(40	40	20)	24	17	59
IV. Social Climate																								
1. Social Opportunities	26	54	20	34	51	15	33	51	16	39	47	14	36	49	15	33	52	16	(29	59	12)	38	47	15
2. Good Athletic Program	10	23	66	15	33	52	16	29	55	16	32	52	21	32	47	19	31	50	(17	37	47)	17	32	51
3. Has Frat. and Sor.	8	34	59	11	38	51	9	38	53	12	39	49	12	38	51	10	38	52	(16	52	32)	12	42	46
4. Coeducational	24	49	27	29	52	20	29	51	20	30	52	18	30	51	20	30	49	21	(41	59	0)	32	50	18
Number of Students	407			1,664			987			1,709			1,720			1,068			36*			2,025		

Source: Same as Table 1

* Small number of students included render data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

Note: Mj = Major; Mn = Minor; N = None

11, 45 per cent of the students at LSUNO cited "low cost" as a major consideration in college choice. Relatively high percentages were recorded at LSUS, LSUA, and F. T. Nicholls. Only 21 per cent at LSUBR and 24 per cent at Louisiana Tech cited "low cost" as a major consideration. On the related category "close to home," each of the three LSU System 2-year colleges recorded a high percentage, with LSUE, 60 per cent, and LSUS, 57 per cent, being the highest. LSUBR and Louisiana Tech were again relatively low, with Grambling, 27 per cent, being the lowest.

Admittedly, the vast amount of information in Table 11 is confusing and often difficult to interpret or summarize. However, the data may be useful in suggesting a characterization of each institution if the figures for high school students tested in Louisiana are used as a benchmark. For example, the percentages of enrolled freshmen at LSUBR indicating "major consideration" are above the benchmark figures in four of five items under Intellectual Reputation; below in two of three items under Practical Considerations; below in all five items under Outside Influences; and above in three of four items under Social Climate. Similar comparisons can be made for each institution.

STATE, COMMUNITY, AND HIGH SCHOOL BACKGROUND

Some useful data on freshman student backgrounds are available from the Student Profile Section of the ACT test battery. In this part of the paper, four types of information are briefly considered: State of Residence at Time of Testing (Table 12); Type of Home Community (Table 13); Size of High School Graduating Class (Table 14); and Type of High School Attended (Table 15). National norms are shown for three types of information, but data for Louisiana high school students and data by region and institutional level are either unavailable or not very useful.

It does seem clear, however, that Louisiana institutions are characterized by a relatively homogeneous student population in the sense of small proportions of out-of-state students. In a national sample reported in *College Student Profiles*, 86 per cent of enrolled freshmen were in-state students and 14 per cent were from out-of-state. As can be seen in Table 12, no Louisiana institution had this large a percentage of out-of-state freshmen. LSUBR, with 12 per cent, was the highest. As one might expect, the three L.S.U. System 2-year institutions had extremely low percentages of out-of-state freshmen, as did F. T. Nicholls and LSUNO.

The ACT data show out-of-state students by state of residence. The three states with the largest numbers of freshman students enrolled in Louisiana institutions were (in order) Texas, Mississippi, and Arkansas. Figures for these three states are shown in Table 12; figures for other states can be obtained from the various *Class Profile Reports*.

An important question, obviously, is whether the degree of insulation from out-of-state students suggested by these data enhances or diminishes the total educational experience of Louisiana residents.[6] Certainly, the number of out-of-state students enrolled in Louisiana institutions is partially dependent upon the levels of tuition and the admissions policies in effect. Educational policy can be designed either to encourage or discourage college attendance by students from other states.

Table 13 indicates the type of home community of enrolled students. Three major categories are shown—Farm or Open Country; Suburb in Metropolitan Area; and Central City in Metropolitan Area.[7] The urban-rural character of a student body seems best described by the percentage indicating a farm or open country background. The national figure for this category is 26 per cent. Among Louisiana institutions, LSUE, 52 per cent; LSUA, 42 percent; Grambling, 41 per cent;

[6] It should be noted that ACT data on state of residence are not the most complete enrollment data available. For several years, the Public Affairs Research Council of Louisiana (PAR) has collected enrollment figures for freshman students in both public and private institutions in the State. The PAR data are actual head count figures for all freshman students, and therefore more complete than the ACT data. The PAR data provide breakdowns for each institution by in-state parish of residence, out-of-state, and foreign student categories. Unlike the ACT data, however, the state of residence for out-of-state students is not given.

[7] Actually, students are asked to select a population range if their home community is in either the "suburb" or "central city" categories. The student chooses from among four ranges in the former category or five ranges in the latter. Because it is apparent from the choices of students at particular institutions that many are unable to estimate accurately the population of their home community, the detailed breakdowns for population are omitted from Table 13.

TABLE 12

STATE OF RESIDENCE AT TIME OF TESTING—ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969

	F. T. Nicholls		*Grambling*		*LSU-A*		*LSU-BR*		*LSU-E*		*LSU-NO*		*LSU-S*	
	Freq.	*Pc.*	*Freq.*	*Pc.*	*Freq.*	*Pc.*	*Freq.*	*Pc.*	*Freq.*	*Pc.*	*Freq.*	*Pc.*	*Freq.*	*Pc.*
Total Students	1,274		452		381		3,384		145		2,761		416	
Total In-State	1,249	98	408	90	378	99	2,986	88	142	98	2,678	97	407	98
Total Out-of-State ..	25	2	44	10	3	1	398	12	3	2	83	3	9	2
Arkansas	0		5		0		10		0		3		0	
Mississippi	2		11		0		64		0		7		1	
Texas	7		8		0		99		0		4		2	
Others	16		20		3		225		3		69		6	

	La. Tech		*McNeese*		*North-east*		*North-western*		*South-eastern*		*Southern-NO*		*South-western*	
	Freq.	*Pc.*	*Freq.*	*Pc.*	*Freq.*	*Pc.*	*Freq.*	*Pc.*	*Freq.*	*Pc.*	*Freq.*	*Pc.*	*Freq.*	*Pc.*
Total Students	1,686		1,004		1,743		1,769		1,082		41*		2,052	
Total In-State	1,531	91	968	96	1,629	93	1,666	94	1,033	95	(39)	(95)	1,974	96
Total Out-of-State ..	155	9	36	4	114	7	103	6	49	5	(2)	(5)	78	4
Arkansas	47		1		14		4		1		NA		2	
Mississippi	7		3		21		1		8		NA		9	
Texas	13		22		9		21		3		NA		18	
Others	88		10		70		77		37		NA		49	

Source: ACT *Class Profile Reports, Enrolled 1969* (various institutions)

* Small number of students included render data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

TABLE 13

TYPE OF HOME COMMUNITY—NATION AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969 (PERCENTAGES)

	Nationally Enrolled	*F. T. Nicholls*	*Grambling*	*LSU-A*	*LSU-BR*	*LSU-E*	*LSU-NO*	*LSU-S*
Farm or Open Country	26	33	41	42	13	52	3	11
Suburb in Metropolitan Area..	38	36	26	21	46	14	50	49
Central city in Metropolitan Area	36	31	33	37	41	34	48	40
Total Number of Students	22,329 (3% sample)	1,269	446	378	3,359	144	2,737	413

	La. Tech	*McNeese*	*North-east*	*North-western*	*South-eastern*	*Southern-NO*	*South-western*
Farm or Open Country	31	29	35	37	27	(5)	21
Suburb in Metropolitan Area	31	31	27	29	39	(21)	36
Central city in Metropolitan Area	38	40	38	34	34	(73)	43
Total Number of Students	1,681	993	1,733	1,746	1,076	41*	2,040

Source: ACT *Class Profile Report, Enrolled 1969* (various institutions); *Your College Freshmen*

* Small number of students included render data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

Northwestern, 37 per cent; and Northeast, 35 per cent; recorded the highest percentages. The almost exclusively urban character of LSUNO is shown by its 3 per cent figure. LSUS and LSUBR are well below the national average, at 11 and 13 per cent. These three institutions, of course, are located in the State's three largest metropolitan areas.

Size of high school graduating class, shown in Table 14, seems partially related to type of home community. Those institutions with above-national average percentages of students from farm or open country also have above-average percentages of students from high school graduating classes of less than 100. Relatively small high schools tend to be more characteristic of Louisiana's rural areas than of its metropolitan areas.

Combining the first two categories in Table 14, 58 per cent of LSUE's enrolled freshmen graduated from high school in a class of less than 100; other high percentages were at Grambling, 55 per cent, Northeast and Northwestern, 40 per cent, and LSUA and McNeese, 39 per cent. Only 12 and 13 per cent, respectively, of enrolled students at LSUS and LSUNO were in this category. The figure for LSUBR was 22 per cent.

Table 15 shows type of high school attended: public; private-nondenominational; and private-church related. Few Louisiana institutions have a substantial percentage of students from private-nondenominational high schools, as is also the case in the national sample. The percentages of students from church-related private high schools varies considerably. Those institutions in the south-southeast region of the State, with its large Catholic population, typically have a substantial number of students with this background. LSUNO, which draws a substantial part of its student body from Orleans parish and its large parochial school system, recorded 39 per cent of enrolled freshmen from church-related private high schools. Other high percentages were recorded at Southwestern (at Lafayette), 26 per cent; LSUBR, 22 per cent; LSUE, 20 per cent; and F. T. Nicholls (at Thibodaux), 19 per cent.

The institutions located in north Louisiana draw, almost entirely, students with public high school backgrounds. Some 96 per cent of the students at LSUS and Grambling were in this category, as were 94 per cent at Northeast, 93 per cent at Northwestern, and 92 per cent at Louisiana Tech.

TABLE 14

SIZE OF HIGH SCHOOL GRADUATING CLASS—NATION AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969 (PERCENTAGES)

	Nationally Enrolled	*F. T. Nicholls*	*Grambling*	*LSU-A*	*LSU-BR*	*LSU-E*	*LSU-NO*	*LSU-S*
Fewer than 25	3	2	6	4	2	9	2	3
25–99	21	29	49	35	20	49	11	9
100–399	45	50	39	30	48	40	57	39
400 or more	31	19	6	31	30	1	30	49
Number of Students	22,289 (3% sample)	1,272	435	380	3,372	142	2,739	413

	La. Tech	*McNeese*	*North-east*	*North-western*	*South-eastern*	*Southern-NO*	*South-western*
Fewer than 25	8	7	8	10	5	(0)	4
25–99	27	32	32	30	23	(8)	32
100–399	46	41	48	42	55	(66)	49
400 or more	19	20	12	19	17	(26)	15
Number of Students	1,683	999	1,734	1,754	1,076	38*	2,041

Source: ACT *Class Profile Report, Enrolled 1969* (various institutions); *Your College Freshmen*

* Small number of students included renders data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

TABLE 15

TYPE OF HIGH SCHOOL ATTENDED—NATION AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969 (PERCENTAGES)

	Nationally Enrolled	*F. T. Nicholls*	*Grambling*	*LSU-A*	*LSU-BR*	*LSU-E*	*LSU-NO*	*LSU-S*
Public	87	77	96	92	74	78	55	96
Private—Nondenominational	2	4	2	1	5	1	6	0
Private—Church-Related	11	19	2	8	22	20	39	4
Number of Students	22,322 (3% sample)	1,270	443	381	3,375	144	2,743	413

	La. Tech	*McNeese*	*North-east*	*North-western*	*South-eastern*	*Southern-NO*	*South-western*
Public	92	90	94	93	81	(83)	71
Private—Nondenominational	2	2	1	1	4	(3)	4
Private—Church-Related	5	8	5	5	14	(15)	26
Number of Students	1,683	999	1,737	1,755	1,079	40*	2,043

Source: ACT *Class Profile Report, Enrolled 1969* (various institutions); *Your College Freshmen*

* Small number of students included renders data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

PART-TIME WORK, SCHOLARSHIP, AND LOAN EXPECTATIONS

Several questions are included in the Student Profile Section of the ACT exam relating to the student's plans for financing his education. These include Part-Time Work Expectations,[8] shown in Table 16, and Scholarship and Loan Plans, shown in Table 17. It will also be interesting to compare this information with students' estimates of family income (discussed in the next section) since one would expect students from low income families to require more funds from non-family sources.

Data by region and institutional level are not available, but the national class profile norms for student work expectations are shown in Table 16. One must be cautious in comparing national data with the work expectations of Louisiana high school students, however. It is to be recalled that the national sample involved students tested during 1966–67, while Louisiana figures relate to 1968–69. Even though the difference in test periods is probably unimportant for most ACT data—mean composite scores, educational majors, degrees sought, etc.—time differences are likely to be important for economic data. To the extent that work expectations (and scholarship and loan plans) are inversely related to the family incomes of students, yearly growth in income will decrease the numbers of students seeking part-time employment. On the other hand, financial need is directly related to the costs of attending a college or university. Since these costs have risen in recent years, this factor would tend to increase the percentage of students expecting to work. While it is not clear which factor is more important, it is clear that direct comparisons between data collected two years apart are risky.

As shown in Table 16, 42 per cent of Louisiana high school students indicated no work expectations. Some 19 per cent expected 1-9 hours of work per week, 26 per cent indicated 10-19 hours, and 13 per cent indicated 20 hours or more.

LSUBR was the only institution in the State in which *less* than half (48 per cent) of enrolled freshmen indicated some work expectations. Southwestern, Southeastern, Louisiana Tech, F. T. Nicholls, and Northwestern also had relatively low percentages in this category. LSUS and LSUNO—two predominantly "urban" institutions—Grambling—a predominantly black institution—and McNeese recorded the highest percentages. Alternatively, if we eliminate the shortest work category and consider the percentages of students indicating 10 or more hours of work per week, the same general picture emerges (with the possible exception of Grambling). Enrolled freshmen at LSUBR again record the lowest figure, 32 per

[8] Information pertaining to the type of work desired does not appear useful and has therefore been omitted.

TABLE 16

PART-TIME WORK EXPECTATIONS—NATION, STATE, AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969 (IN PERCENTAGES)

	Nationally Enrolled	*High School Students Tested–La.*	*F. T. Nicholls*	*Grambling*	*LSU-A*	*LSU-BR*	*LSU-E*	*LSU-NO*
Amount of Work:								
None	36	42	47	35	40	53	44	35
1–9 hours per week	18	19	18	28	19	16	20	18
10–19 hours per week	29	26	23	24	21	23	28	28
20–29 hours per week	11	10	9	8	13	7	6	14
30 or more hours	5	3	4	5	7	2	1	5
Number of Students	22,339 (3% sample)	23,196	1,270	446	378	3,361	145	2,728

	LSU-S	*La. Tech*	*McNeese*	*North-east*	*North-western*	*South-eastern*	*Southern-NO*	*South-western*
Amount of Work:								
None	31	47	34	41	46	49	(38)	49
1–9 hours per week	14	18	20	17	19	16	(15)	18
10–19 hours per week	29	25	29	28	24	24	(33)	23
20–29 hours per week	15	7	13	10	8	7	(5)	7
30 or more hours	12	2	4	4	3	4	(8)	3
Number of Students	412	1,679	998	1,733	1,742	1,072	39*	2,042

Source: Same as Table 1

* Small number of students included render data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

cent, and LSUS, LSUNO, and McNeese have the highest.

Because many students finance all or part of their university education through part-time work and because many institutions seek to assist students in this effort, it would be highly useful to know the reliability of pre-college expectations. While, of course, no such information is available for Louisiana institutions, the national study by Sandra Lutz referred to earlier (*Do They Do What They Say They Will Do?*) gives us some insights into this matter. On a follow-up questionnaire at the end of the freshman year, a large sample of students were asked whether they actually did work, and if so, how many hours per week. Lutz found the proportion of students who planned to work and actually did work during their first year to be considerably higher for two-year college students (73 per cent for males and 74 per cent for females) than for four-year college students (51 and 54 per cent, respectively). Also, a substantial portion of students at two-year colleges who did not plan to work actually did work during their first year (48 per cent for males and 40 per cent for females). The figures in this category for 4-year institutions were much lower—24 per cent for both males and females. With respect to comparing planned and actual hours of work, Lutz found that "with the exception of those who plan to work many hours, students do not estimate their future hours of work with any high degree of accuracy."

Certainly, students cannot obtain part-time employment if suitable jobs are not available at the proper places and times. The unwillingness or inability of students to follow through on original plans may in some cases be as much a function of limited job opportunities as of changes in plans.

Table 17 indicates both scholarship and loan plans of enrolled freshmen. Students are asked whether they intend to apply for each type of assistance (a) all through college; (b) after the first year; or (c) probably never. Responses indicate greater emphasis on scholarship aid than on loan assistance for the national sample, among Louisiana high school students tested, and among enrolled students in all State institutions for which a reasonable amount of data are available.

TABLE 17

SCHOLARSHIP AND LOAN PLANS—NATION, STATE, AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969 (IN PERCENTAGES)

	Nationally Enrolled	*High School Students Tested–La.*	*F. T. Nicholls*	*Grambling*	*LSU-A*	*LSU-BR*	*LSU-E*	*LSU-NO*
Do You Expect to Apply for a Scholarship to Meet College Expenses?								
Yes, all through college	40	43	36	53	37	45	41	36
Yes, but not first year	18	15	15	24	15	13	18	20
Probably never	42	41	49	23	48	42	41	44
Number of Students	22,285 (3% sample)	23,263	1,270	438	378	3,371	143	2,742
Do You Expect to Apply for a Loan to Help Meet College Expenses?			18	59	25	19	24	27
Yes, all through college	27	28	20	17	21	13	24	19
Yes, but not first year	19	16	62	24	54	67	52	53
Probably never	54	56	1,270	438	380	3,368	143	2,742
Number of Students	22,245 (3% sample)	23,242						

	LSU-S	*La. Tech*	*McNeese*	*North-east*	*North-western*	*South-eastern*	*Southern-NO*	*South-western*
Do You Expect to Apply for a Scholarship to Meet College Expenses?								
Yes, all through college	28	44	42	44	39	33	(30)	32
Yes, but not first year	19	14	15	15	16	17	(30)	16
Probably never	53	42	42	41	46	50	(40)	52
Number of Students	413	1,681	999	1,735	1,752	1,076	40*	2,043
Do You Expect to Apply for a Loan to Help Meet College Expenses?								
Yes, all through college	20	26	22	28	29	21	(44)	21
Yes, but not first year	20	14	16	17	16	18	(24)	17
Probably never	60	60	61	55	56	62	(32)	62
Number of Students	412	1,680	999	1,733	1,751	1,074	41*	2,045

Source: Same as Table 1

* Small number of students included render data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

The percentage of students expecting to apply for a *scholarship* during part or all of their college career ranged from 47 and 48 per cent at LSUS and Southwestern to 59 per cent at LSUE and 77 per cent at Grambling. (Fragmentary data for Southern-NO place 60 per cent in this category.)

The percentage of students expecting to apply for a *loan* during part or all of their college career ranged from 32 per cent at LSUBR to an extremely high 76 per cent at Grambling. Since fragmentary data for Southern-NO also record 68 per cent in this category, it appears that substantial need for loans, as well as scholarships, is characteristic of students in predominantly black institutions. This conclusion not only seems reasonable *a priori*, but is consistent with the data (shown later) for estimated family incomes of students in predominantly black institutions.

While relatively low family income increases the need for both scholarships and loans—as well as part-time work—the data in Table 17 suggest other factors must also be involved. For example, freshmen at LSUS indicate relatively high work expectations, but relatively low scholarship and loan plans. While the reason for this particular situation is unclear, it could be argued generally that for many students the various means of self-financing are alternatives (although many students obviously list more than one category in

their responses). If opportunities for part-time work are thought to be readily available—as is more likely with institutions in large metropolitan areas and/or colleges with well developed programs of student assistance—many students may indicate they do not expect to apply for either scholarships or loans. To cite another example, students at LSUBR indicate low work and loan expectations but relatively high intentions to seek scholarships. Certainly one factor in this case is scholastic ability as measured by ACT Composite scores and high school grade point averages.

In Sandra Lutz's study, *Do They Do What They Say They Will Do?*, slightly more than one-half of those students who indicated they needed financial aid (scholarships or loans) throughout college actually received aid during their first year. The per cent receiving aid was slightly higher for four-year college students (60 per cent male and 66 per cent female) than for two-year college students (54 per cent male and 55 per cent female). Of the students originally indicating no aid was needed at any time during college, from 9 to 14 per cent in the various categories actually received aid in their freshman year.

ESTIMATED FAMILY INCOME

Students are asked to estimate a range for family income when they take the ACT examination. While undoubtedly some reporting errors occur, the fact that students can choose the "Consider this confidential" and "Do not know" responses should eliminate most totally uninformed guesses. Some 27 per cent in the national sample, 30 per cent of Louisiana high school students tested, and reasonably comparable percentages in each institution chose one of these categories, thus serving to strengthen the reliability of reported income figures.

Table 18 shows the percentages of students in various family income brackets as well as those in the two nonestimating categories. Cumulative percentages are computed from unrounded data. In Table 19 the "Consider this confidential" and "Do not know" categories have been omitted in calculating the percentage and cumulative percentage figures. Therefore, the latter table shows students in a particular family income bracket as a percentage of students who actually provided an estimate of income. Alternatively, if we consider Table 19 figures as representative of enrolled freshmen generally, we are making the implicit assumption that students who did not estimate family income can be distributed among the various income brackets in the same proportions as reporting students. While there is no evidence to support this assumption, neither is there any reason to believe that nonestimating students are concentrated in either relatively low or relatively high income brackets.

As noted in the previous section, it is hazardous to compare income figures from the national sample, which are based on 1966–67 test dates, with the more recent data for Louisiana. Given the below-average personal income levels of Louisiana citizens, the upward bias created by growing incomes undoubtedly accounts for the relatively favorable income picture for Louisiana students in many of the categories shown in Tables 18 and 19. For example, the latter table indicates that 44 per cent of Louisiana high school students estimating family income reported less than $7,500, as compared with the national figure of 46 per cent. The figures for those reporting less than $10,000 family income were 62 and 66 per cent, respectively. However, even with the biases created by the time difference in the test dates and the underreporting of black students in Louisiana, it should be noted that compared with national figures a larger percentage of the State's high school students indicated family incomes in the bottom two brackets—under $3,000 and $3,000 to $4,999.

Rather substantial family income differentials are apparent when comparing enrolled students in state-supported institutions. Undoubtedly, the most striking differences are between predominantly white and black institutions (although data for the latter are incomplete). Extraordinarily low family incomes were reported by Grambling students, with 45 per cent of those providing estimates being in the under $3,000 category (Table 19). Another 31 per cent estimated family income in the $3,000 to $4,999 range, thus indicating a total of 76 per cent, or roughly three of every four freshmen, having family incomes of under $5,000. Fragmentary data for enrolled students at Southern-NO place 62 per cent in these two bottom brackets. Statistics for *nonenrolled* students at Southern-NO (not shown in the tables) indicate 57 per cent with family incomes of less than $5,000.

In no case does the economic level of enrolled

TABLE 18

ESTIMATED FAMILY INCOME—NATION, STATE AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969 (PERCENTAGES)

	Nationally Enrolled		*High School Students Tested–La.*		*F. T. Nicholls*		*Grambling*		*LSU-A*		*LSU-BR*		*LSU-E*		*LSU-NO*	
	Pc.	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*
Estimated Family Income:																
Less than $3,000 per year	4	4	7	7	5	5	33	33	5	5	2	2	10	10	6	6
3,000 to 4,999	10	14	10	16	10	15	23	56	11	16	5	7	14	24	11	17
5,000 to 7,499	20	34	14	31	16	31	10	66	22	38	8	16	21	46	16	33
7,500 to 9,999	15	49	12	43	17	48	4	70	16	54	11	26	16	61	14	47
10,000 to 14,999	16	65	17	60	16	64	2	72	17	70	21	47	13	74	17	64
15,000 to 19,999	4	69	5	65	3	67	1	73	5	75	10	57	3	77	5	69
20,000 to 24,999	2	71	2	68	2	69	0	73	1	76	5	61	1	78	2	71
25,000 and over	2	73	3	70	1	70	0	74	1	77	6	67	3	81	1	72
Consider this confidential..	4	78	5	75	3	73	5	79	3	80	6	74	3	84	4	76
Do Not Know	22	100	25	100	27	100	21	100	20	100	26	100	14	100	24	100
Total Number of Students..	22,398 (3% sample)		23,275		1,270		451		381		3,371		145		2,748	

	LSU-S		*La. Tech*		*McNeese*		*North-east*		*North-western*		*South-eastern*		*Southern-NO*		*South-western*	
	Pc.	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*
Estimated Family Income:																
Less than $3,000 per year	1	1	3	3	7	7	7	7	7	7	4	4	(17)	(17)	5	5
3,000 to 4,999	7	8	8	11	10	17	10	18	12	19	8	12	(34)	(51)	8	13
5,000 to 7,499	18	26	17	28	16	33	16	34	19	38	14	26	(20)	(71)	12	25
7,500 to 9,999	22	48	15	43	16	50	13	47	13	51	14	40	(2)	(73)	13	38
10,000 to 14,999	21	69	19	62	17	67	16	63	16	67	21	61	(5)	(78)	18	56
15,000 to 19,999	6	75	5	67	4	71	5	68	4	71	6	67	(2)	(80)	7	63
20,000 to 24,999	1	76	3	69	1	72	2	70	1	72	2	69	(2)	(83)	2	65
25,000 and over	1	77	2	71	2	74	2	72	2	74	2	71	(0)	(83)	3	68
Consider this confidential..	3	80	5	76	4	78	4	75	4	78	5	76	(5)	(88)	6	74
Do Not Know	20	100	24	100	22	100	25	100	22	100	24	100	(12)	(100)	26	100
Total Number of Students..	414		1,680		997		1,741		1,751		1,081		41*		2,042	

Source: Same as Table 1

* Small number of students included renders data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

Note: Cumulative percentages are computed from unrounded data.

students in predominantly white institutions approach these low figures. Nevertheless, there are substantial numbers of students from low income families enrolled in many predominantly white institutions in the State. Twelve per cent of LSUE freshmen who provided an estimate placed their family income under $3,000. Among the larger institutions, 10 per cent at Northwestern, Northeast, and McNeese, and 9 per cent at LSUNO were in the bottom bracket. The percentage of students in this category was relatively low at LSUS, LSUBR, and Louisiana Tech.

If we combine the bottom brackets, the general picture remains largely unchanged. Some 30 per cent at LSUE, 26 per cent at Northwestern, 25 per cent at Northeast, and 24 per cent at McNeese and LSUNO reported family incomes of less than $5,000. By contrast, the figures were 10 per cent at LSUS and 11 per cent at LSUBR.

Both tables show that as one moves to higher income brackets, LSUBR becomes more readily distinguishable from other institutions. For example, as indicated in Table 19, only 23 per cent of estimating students at LSUBR reported

TABLE 19

ESTIMATED FAMILY INCOME (OMITTING "CONSIDER THIS CONFIDENTIAL" AND "DO NOT KNOW" CATEGORIES)—NATION, STATE, AND ENROLLED FRESHMEN IN LOUISIANA INSTITUTIONS, 1969 (PERCENTAGES)

	Nationally Enrolled		*High School Students Tested–La.*		*F. T. Nicholls*		*Grambling*		*LSU-A*		*LSU-BR*		*LSU-E*		*LSU-NO*	
	Pc.	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*
Estimated Family Income:																
Less than $3,000 per year	6	6	10	10	7	7	45	45	6	6	3	3	12	12	9	9
3,000 to 4,999	13	19	14	24	14	20	31	76	14	21	7	11	18	30	15	24
5,000 to 7,499	27	46	20	44	23	43	13	89	28	49	12	23	26	56	22	46
7,500 to 9,999	20	66	18	62	24	67	5	94	21	70	16	39	19	75	19	65
10,000 to 14,999	22	88	24	86	23	90	3	97	22	92	32	71	16	91	24	89
15,000 to 19,999	6	94	7	93	5	95	1	98	6	98	14	85	4	95	7	96
20,000 to 24,999	3	97	3	96	3	98	1	99	1	99	7	92	2	97	2	98
25,000 and over	3	100	4	100	2	100	1	100	1	100	8	100	3	100	2	100
Total Number of Students..	16,451 (3% sample)		16,361		890		333		292		2,260		120		1,978	

	LSU-S		*La.Tech*		*McNeese*		*North-east*		*North-western*		*South-eastern*		*Southern-NO*		*South-western*	
	Pc.	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*	*Pc.*	*Cum. Pc.*
Estimated Family Income:																
Less than $3,000 per year	1	1	4	4	10	10	10	10	10	10	6	6	(21)	(21)	7	7
3,000 to 4,999	9	10	12	16	14	24	14	25	16	26	11	18	(41)	(62)	12	19
5,000 to 7,499	23	33	23	39	22	45	23	47	26	52	20	38	(24)	(85)	18	37
7,500 to 9,999	28	61	21	60	22	67	18	65	17	69	19	57	(3)	(88)	19	55
10,000 to 14,999	28	89	26	86	23	91	22	88	22	91	29	86	(6)	(94)	27	82
15,000 to 19,999	7	96	7	93	5	96	7	95	5	96	8	94	(3)	(97)	10	92
20,000 to 24,999	2	98	4	97	2	98	2	97	2	98	3	97	(3)	(100)	4	96
25,000 and over	2	100	3	100	2	100	3	100	2	100	3	100	(0)	(100)	4	100
Total Number of Students..	320		1,200		735		1,247		1,300		762		34*		1,382	

Source: Same as Table 1

* Small number of students included renders data of limited usefulness; data are from 1968, rather than 1969, *Class Profile Report.*

Note: Cumulative percentages are computed from unrounded data.

family incomes in the lowest three brackets—i.e., less than $7,500. The next lowest percentages were for LSUS, 33 per cent, and Southwestern, 37 per cent. While 39 per cent of LSUBR students reported family incomes of under $10,000, the next lowest percentage was at Southwestern, 55 per cent.

The "relative affluence" of LSUBR students is clear from these data. Although students reporting family incomes in excess of $15,000 were in a quite small minority in most institutions, some 29 per cent of LSUBR freshmen were in this category. On the other hand, it is striking that freshmen at LSUNO report relatively "low-to-middle" family incomes, since that institution draws its student body largely from the relatively high personal income parishes of Jefferson and Orleans. By comparison, Louisiana Tech, located in a lower income region of the State, attracts a smaller percentage of students from low income families. LSUS, which is similar to LSUNO in attracting its student body almost exclusively from an urban environment, also records a considerably smaller percentage of students from the lowest income categories.

INCOME AS RELATED TO OTHER STUDENT CHARACTERISTICS

Family income is clearly a critical factor in educational planning, affecting the tuition a student can pay and the type of college he can attend. It also influences the careers that are available to him, e.g., whether or not he can attend professional schools such as law and medicine. The implications of family income for financial assistance are obvious. This involves not only loan and scholarship assistance, but the availability of part-time student jobs.

In Table 20, the State's institutions are ranked according to the percentages of enrolled students in various income and income-related categories. High ranks indicate a large percentage of students reporting low (or middle) family incomes, expecting to work and make loan applications, and giving "major consideration" to low cost in making college choice. In other words, high rankings suggest a low economic or financial profile.

Factors such as scholarship plans and "close(ness) to home" and "location" as major considerations in college choice are not shown in Table 20 since it is less clear, *a priori*, that such variables are as closely related to economic status. Scholarship plans reflect not only financial need, but some estimate of one's academic ability. (LSUBR students rank relatively high in this category, for example.) While "close(ness) to home" may reflect economic considerations in many cases, this factor is very misleading for certain institutions. Grambling, for example, is located in a small town and must attract students, many from rural backgrounds, from a wide geographic area; as a result, Grambling's rank is last in this category. While "location" may reflect economic considerations to some extent, this factor may also signify preferences for large versus small cities, certain sections of the State, or other noneconomic considerations.

For some institutions, the "economic profile" shown in Table 20 provides a rather consistent picture of freshman students. At Grambling, for example, enrolled students rank first in the three categories of "lowness" of income, first in both loan categories, and above-average in both categories of work expectations and in low cost as a major factor in college choice. The rankings at LSUNO, LSUA, and LSUE are consistently middle-to-high—reflecting, of course, a relatively

TABLE 20

PERCENTAGES OF ENROLLED STUDENTS AND RANKINGS OF LOUISIANA INSTITUTIONS ACCORDING TO VARIOUS ECONOMIC CHARACTERISTICS

Institution	*Estimated Family Income*[1]						*Work Expectations*				*Loan Plans*					
	Under $5,000		*Under $7,500*		*Under $10,000*		*Expect to work*		*Expect to work 10 or more hours per week*		*Expect to apply for loan all through college*		*Expect to apply for loan at some time during college*		*Major consideration given to "low cost" in college choice*	
	Pc	*Rank*	*Pc*	*Rank*	*Pc*	*Rank*	*Pc*	*Rank*	*Pc*	*Rank*	*Pc*	*Rank*	*Pc*	*Rank*	*Pc*	*Rank*
F. T. Nicholls	20	8	43	8	67	5*	54	8*	36	7	18	13	38	10*	42	3*
Grambling	76	1	89	1	94	1	65	3*	37	6	59	1	76	1	34	5*
LSU-A	21	7	49	4	70	3	60	5	41	5	25	6	46	3*	42	3*
LSU-BR	11	12	23	13	39	13	48	13	32	13	19	12	32	13	21	13
LSU-E	30	2	56	2	75	2	55	7	35	8*	24	7	48	2	34	5*
LSU-NO	24	5*	46	6	65	7*	65	3*	47	2	27	4	46	3*	45	1
LSU-S	10	13	33	12	61	9	70	1	56	1	20	11	40	7*	44	2
La. Tech	16	11	39	9	60	10	52	10	34	11	26	5	40	7*	24	12
McNeese	24	5*	45	7	67	5*	66	2	46	3	22	8	38	10*	33	7
Northeast	25	4	47	5	65	7*	59	6	42	4	28	3	45	5*	27	9
Northwestern	26	3	52	3	69	4	54	8*	35	8*	29	2	45	5*	26	10
Southeastern	18	10	38	10	57	11	51	11*	35	8*	21	9*	39	9	31	8
Southwestern	19	9	37	11	55	12	51	11*	33	12	21	9*	38	10*	25	11

Source: Tables 11, 16, 17, and 19

[1] "Consider this confidential" and "do not know" categories omitted in computing percentages

* tie

"middle-to-low" economic profile. Northeast ranks from 3rd to 7th in seven categories and 9th in the other. Rankings at Louisiana Tech are generally middle-to-low. Southeastern and Southwestern, particularly the latter, are consistently low in the rankings. The most consistent rankings are for LSUBR—13th in six categories and 12th in the other two.

The profiles for some institutions are very ambiguous. Enrolled students at LSUS, for example, rank at the top in work expectations and second in low cost as a major consideration in college choice, but relatively low in other categories including "lowness" of income.

It should be stressed that available data pertain only to aggregate figures by institution and not to the characteristics of individual students. It would be interesting to take a cross-section of enrolled freshmen in Louisiana institutions and relate their family incomes to other economic as well as non-economic factors. A national study along these lines has been carried out by Leonard L. Baird and published as ACT Report 17, *Family Income and the Characteristics of College-Bound Students.* Baird's findings are of considerable interest.

Baird considered the estimated family incomes of 18,378 students applying to college in relation to ACT Composite scores, high school grades, reasons for college choice, degree plans, etc. He used a three-percent representative sample of the population of roughly 612,000 students tested by ACT on national test dates between November 1, 1964, and October 31, 1965. The statistics were descriptive with no tests of significance applied to the data. (Note, however, the extremely large size of the sample.)

In general, he found that students from low income families, when compared to students from high income families, had lower ability test scores. (See Table 21.) More specifically, ACT scores were positively related to family income for the bottom four income brackets in the study, which contained the bulk of students who provided an income estimate. While the differences in means were small for each income bracket, the results were consistent. The lowest mean score was 19.6 for the under $5,000 bracket, and the highest score, 21.0, for the $10,000-$14,999 bracket. High school grades, on the other hand, showed the opposite pattern, with the highest mean of 2.72 in the under $5,000 family income bracket.

TABLE 21

NATIONAL SAMPLE OF STUDENTS WITH DIFFERENT FAMILY INCOMES AS RELATED TO CERTAIN OTHER STUDENT CHARACTERISTICS—BAIRD STUDY

Student Characteristics	*Estimated Family Income*								
	Below $5,000	*$5,000-$7,499*	*$7,500-$9,999*	*$10,000-$14,999*	*$15,000-$19,999*	*$20,000-$24,999*	*Above $25,000*	*Consider Confidential*	*Do Not Know*
ACT Composite Score:									
Mean	19.6	20.3	20.8	21.0	20.5	20.4	20.9	19.7	19.5
S.D.	5.4	5.0	4.9	4.8	5.0	5.4	5.0	5.2	5.1
HSA in Four Areas:									
Mean	2.72	2.60	2.57	2.53	2.45	2.51	2.55	2.47	2.57
S.D.	.73	.72	.73	.70	.69	.74	.68	.73	.70
Per Cent Whose Home is on Farm or in Open Country	47.8	29.9	20.5	15.4	15.9	14.5	12.5	19.0	...
Per Cent Indicating Reason for College Choice as "Major":									
Financial Aid Offer	31.3	24.3	21.6	16.8	12.7	11.5	9.0	17.9	21.3
Low Cost	53.2	48.3	38.9	31.9	21.3	16.9	12.3	33.2	35.7
Close to Home	46.2	43.6	38.3	34.8	29.9	24.4	22.1	38.2	37.3
Good Faculty	60.0	63.6	64.0	66.0	71.2	67.7	76.1	68.9	64.6
National Reputation	40.8	39.6	42.0	41.0	45.5	48.1	45.2	42.8	43.8
Per Cent Expecting to Work	74.9	68.3	62.1	54.2	46.6	39.9	36.5	51.3	54.9
Highest Degree Sought (by per cent choosing each degree goal):									
College but Less than B.A.	19.4	17.6	14.9	12.8	12.9	9.8	10.2	15.9	20.1
B.A.	48.2	47.8	46.6	44.7	44.3	46.1	36.4	43.8	48.5
M.A.	20.4	22.3	25.8	26.9	23.5	23.9	27.5	22.9	19.2
Total Professional Level Degrees (Ph.D., M.D., L.L.B., etc.)	7.8	8.6	10.1	13.1	16.5	16.0	22.2	16.8	6.9

Source: Leonard L. Baird, *Family Income and the Characteristics of College Bound Students,* ACT Research Report 17

As one might expect, a substantial percentage of low income students came from homes on farms or in open country—in fact, 47.8 per cent of the students in the under $5,000 family income category. In sharp contrast, a much lower percentage in the $5,000-$7,499 bracket—29.9 per cent—were in this category, and the percentage continued to drop dramatically in the next two income brackets. This relationship was one of the most pronounced of any student characteristic studied.

In choosing a college, students from lower income families were considerably more inclined to give "major consideration" to such practical matters as offers of financial aid, low cost, and closeness to home. For example, low cost as a major factor varied from 53.2 per cent in the under $5,000 bracket to 12.3 per cent in the above $25,000 bracket. Less pronounced differences can be noted in such factors as "good faculty" and "national reputation," with students from higher income families tending to assign greater importance to these reasons for college choice.

Roughly three out of four students in the below $5,000 family income category expected to work while attending college. This percentage dropped off considerably in the higher income brackets, falling to below 40 per cent in each of the top two brackets. Roughly twice as large a percentage of students in the lowest income group, as compared with students in the top two income categories, intended to stop their education short of a bachelor's degree. While only 7.8 per cent in the under $5,000 income bracket intended to seek professional degrees beyond the master's, the percentages for the top three income groups were 16.5, 16.0, and 22.2 per cent, respectively. Although not shown in Table 21, by far the largest differences were in the M.D. and L.L.B. degrees.

SUMMARY AND CONCLUSIONS

Many of the ACT Research Reports point to the importance of recognizing the wide diversity of student characteristics of college-bound high school seniors. It is important that higher education provide a wide range of opportunities for post-high school training and different kinds of colleges and universities to serve various types of student needs, abilities, and aspirations. An important question for the coordination of higher education in Louisiana is whether the State is providing sufficient diversity among its institutions. Is there sufficient emphasis on comprehensive two-year junior colleges? Are too many of the State's institutions attempting to be carbon copies of one other in their academic offerings? Are too many institutions attempting to offer graduate, even doctoral-level, work although in some cases ACT Composite scores and certain other freshman characteristics suggest a student profile which is more in keeping with that of the "typical" 2-year junior college?

As noted in *College Student Profiles* (p. 12), ". . . students at two-year colleges score lower on the ACT tests and earn lower high school grades than students attending institutions at the other levels while students at Ph.D.-granting institutions score higher and earn higher grades. The lower scores and grades for students attending two-year colleges reflect junior college 'Open Door' admission policies and the philosophy of providing an educational program for a broad range of student ability. Ph.D.-granting institutions, in contrast, are more selective; sometimes, in allocating resources between graduate and undergraduate instruction, they are forced to limit undergraduate enrollment."

Some important differences exist among individual Louisiana institutions with respect to ACT Composite scores. In general, such scores indicate a relatively "good" showing for the State's 2-year colleges in comparison with Level I institutions nationally, but a relatively "poor" showing for the State's doctoral-granting institutions in comparison with Level IV, and sometimes Level III, institutions nationally. These and other comparisons suggest that Louisiana is probably quite unusual in its lack of differentiation by institutional level. Apparently, a very considerable differentiation does exist between the ACT scores of freshmen in predominantly black and white institutions. This fact has implications for the question of merger or continued separation of predominantly black and white institutions located in the same geographical area of the State.

A study of mean HSA's indicates appreciable differences among freshman students in Louisiana institutions. As is the case with mean ACT Composite scores, such differences are not readily explained by any system of classifying institutions by level of offerings. Unlike ACT scores,

however, there apparently are no clear distinctions between mean HSA's for predominantly white and black institutions.

Data from the Student Profile Section of the ACT examination enable one to make a number of useful comparisons. In this paper we have looked at proposed educational majors and vocational choice, college goals and factors influencing college choice, degrees sought, and state, community and high school background. Several more specifically "economic" variables have also been considered—part-time work expectations, scholarship and loan plans, and estimated family income. Taken together, these variables provide a realistic, if occasionally confusing, profile of enrolled students at each institution in the State.

The most consistent profile emerges for LSUBR —although even here not all pieces of information fit together neatly. One cannot help but conclude that LSUBR students are distinguishable on the average from freshmen at other Louisiana institutions in their abilities, goals, ambitions, and economic characteristics. Not only do they score highest on the ACT examination and have a relatively high mean HSA, but in keeping with typical doctoral institutions nationally they are above-average in the percentage choosing engineering as an educational major and vocational choice and below-average in their choice of business-finance and education; they give above-average emphasis to certain "intellectual" factors in college choice and below-average weight to "practical" considerations; and they are near the top in the percentage seeking advanced degrees. In addition, LSUBR students report the highest family incomes and they are near the bottom in work and loan plans.

While the overall profiles for other institutions are far less uniform, a careful study of the data will reveal some subtle and rather consistent differences among institutions. On occasion, scores and/or student responses at LSUE, LSUS, and Grambling seem more "erratic" than one might expect. For example, LSUE students record the highest mean HSA; LSUS students, who are not generally from low income families, record the highest work plans; and Grambling students lead all institutions in the percentage who indicate a desire for the Ph.D. degree. With some exceptions, however, the profiles for most institutions indicate a reasonably consistent picture of enrolled freshmen.

Several possible shortcomings of this study should be noted:

(1) There is an underrepresentation of enrolled freshmen in predominantly black institutions. Only fragmentary data are available for Southern-BR and Southern-NO and no data are available for Southern-S. This lack of information has undoubtedly limited the useful generalizations that can be made concerning predominantly black institutions in the State.

(2) The only two-year institutions considered are the three LSU System campuses. In addition to Southern-S, no data were available to us for Delgado College, which is the largest 2-year institution in the State according to the *Louisiana School Directory 1969–70*, or for Airline Community College or St. Bernard Community College. The latter two institutions are relatively new and quite small. Delgado, Airline, and St. Bernard are locally controlled to a large extent—unlike the other institutions considered in this study which are directly under either the State Board of Education or the LSU Board of Supervisors. It would be interesting to determine whether freshmen in these three institutions are more distinguishable from students enrolled in graduate-degree granting institutions in the State than is the case for LSUA, LSUE, and LSUS.

(3) The data used in this study pertain to a one-year period only. While it is unlikely that pronounced changes in most student characteristics occur over a short period of time, it is possible that year-to-year changes will affect an institution's relative rankings in certain categories. New and especially small institutions appear most susceptible to significant changes in their profiles—in our study, LSUE in particular, and then LSUS and LSUA.

(4) The statistics presented are purely descriptive with no tests of significance applied to the data. If sufficient time were available, it would be possible to test for the significance of the differences in means (for example, on ACT Composite scores) and to test for rank correlation in cases where the institutions have been ranked according to certain combinations of student characteristics. If considered worthwhile, these tests could be reported in a future paper.

Based on our survey and analysis of ACT data, several recommendations can be made with respect to further data requirements. These items are listed in order of priority.

(1) The Louisiana Coordinating Council for Higher Education should request that all publicly-supported institutions submit annually their latest *Class Profile Report.* These *Reports* should be

comprehensive in the sense that virtually all enrolled freshmen in the fall term are included. A reasonably complete *Class Profile Report* means that each institution must require the ACT test battery for admission purposes and make this requirement known to prospective students. Data from these *Reports* can be used to indicate the changes in student characteristics that may occur as the character and role of institutions evolve over time.

(2) The Louisiana Coordinating Council for Higher Education should request that all institutions in the State which offer graduate work require the Graduate Record Examination (GRE) and/or comparable standardized tests for admission purposes. GRE and/or other test scores of entering graduate students should be compiled and forwarded to the Coordinating Council in a form usable for comparative purposes.

While the ACT Program provides comparable data on the academic potential of entering freshmen in various institutions, there is a distinct need for comparable data at the graduate level. It seems important to include some measure of the overall potential of graduate students when considering what the role of each institution is, or should be. In the absence of such data, one must assume that ACT scores of entering freshmen are reasonably representative, in a comparative sense, of the types of students an institution attracts, including its graduate program. In fact, however, the differences among institutions in the potentials of their graduate students may be larger or smaller than the differences in freshman student potentials. Since Graduate Schools utilize selective admission policies, and since such policies conceivably could differ widely, there is a possibility of wide variations in GRE scores. This possibility deserves study.

(3) The Louisiana Coordinating Council for Higher Education should consider the feasibility (including cost) of follow-up studies along the lines of several of the ACT Research Reports. To what extent do individual freshman students in Louisiana institutions follow through on their original intentions? Undoubtedly, in conducting a study of this type a considerable amount of cooperation would be required from ACT Program officials.

APPENDICES

Appendix A

TABLE A-1

MEN, WOMEN, AND TOTAL ENROLLED FRESHMEN INCLUDED IN CLASS PROFILE REPORTS FOR LOUISIANA INSTITUTIONS, 1969

		Men		*Women*	
Institution	*Total*	*No.*	*Pct. of Total*	*No.*	*Pct. of Total*
F. T. Nicholls....	1,274	723	57	551	43
Grambling	452	165	37	287	63
LSU-A	381	223	59	158	41
LSU-BR	3,384	1,851	55	1,533	45
LSU-E	145	99	68	46	32
LSU-NO	2,761	1,493	54	1,268	46
LSU-S	416	259	62	157	38
La. Tech	1,686	1,044	62	642	38
McNeese	1,004	533	53	471	47
Northeast	1,743	893	51	850	49
Northwestern ...	1,769	930	53	839	47
Southeastern	1,082	633	59	449	41
Southern-BR	99*	(N.A.)	(N.A.)	(N.A.)	(N.A.)
Southern-NO	41*	(17)	(41)	(24)	(59)
Southwestern ...	2,053	1,178	57	875	43

Source: Number reported for ACT Composite scores in ACT *Class Profile Report, Enrolled 1969* (various institutions)

* Small number of students included render data of limited usefulness for comparative purposes; data for Southern-BR are from Summary Analysis 1968 Standard Research Service; data for Southern-NO are from 1968 *Class Profile Report.*

Appendix B

TABLE B-1

SOME CHARACTERISTICS OF MEN AND WOMEN HIGH SCHOOL STUDENTS TESTED DURING THE 1968–69 SCHOOL YEAR, LOUISIANA

Category	*Men*	*Women*	*Total*
Mean ACT Composite Scores	19.2	18.1	18.7
Mean Average of Four HS Grades (Eng., Math., Soc. St., N. Sci.) ..	2.39	2.72	2.55
Proposed Educational Majors (in percent)			
Education	8	28	17
Soc. Sci.-Relig.	4	13	9
Bus.-Fin.	14	13	14
Political-Persuasive	7	2	5
Scientific	8	5	6
Agr.-Forestry	5	0	3
Health	8	12	10
Arts and Humanities	6	12	9
Engineering	15	0	8
Trade and Industrial	4	0	2
Some other Field and Undecided..	20	14	17
Educational Plans-Degrees Sought (in percent) *			
Less than Bachelor's or Equiv.	9	14	11
Bachelor's or Equiv.	45	52	48
More than Bachelor's or Equiv.....	46	34	40
Importance of Four Types of College Goals—Mean based on 0 to 9 scale			
Academic	6.0	6.6	6.3
Vocational	7.2	7.4	7.3
Social	5.4	5.5	5.4
Non-Conventional	5.3	5.8	5.5

TABLE B-1 (Cont'd)

Category	Men	Women	Total
Part-Time Work Expectations (in percent)			
None	38	47	42
1-9 Hours Per Week	16	22	19
10 or More Hours Per Week	47	31	39
Scholarship Plans (in percent)			
Expect to apply all through college	42	45	43
Expect to apply, but not first year	17	14	15
Probably never will apply	41	42	41
Loan Plans (in percent)			
Expect to apply all through college	24	32	28
Expect to apply, but not first year	17	14	16
Probably never will apply	59	54	56
Estimated Family Income (in percent)			
Less Than $5,000 per year	14	18	17
$5,000 To $9,999	30	22	26
$10,000 To $14,999	21	13	17
$15,000 and Over	12	8	10
Consider Confidential	5	5	5
Do Not Know	17	34	25

Source: ACT *High School Profile Report 1968–69 School Year, Louisiana*

* "Other" Category omitted in computing percentages

Appendix C

In an August 1968 ACT Research Report, *Forecasting Academic Success in Specific Colleges,* Donald P. Hoyt attempted to derive some statistical equations that would be useful in predicting the academic success of high school students in individual four-year colleges. While we are not interested in prediction or the accuracy of prediction as such, one element of the study is of interest to us if interpreted with appropriate caution. In deriving his equations, Hoyt estimated a mean ACT Composite score for each college. Since not all institutions have such data, estimates were based on so-called "college profile" scores for individual institutions which were published in *Who Goes Where to College?* by A. W. Astin.

In using a sample of 169 four-year colleges which had participated in one of ACT's predictive research services in 1965 or 1966, Hoyt correlated Astin's scores with the mean ACT Composite scores for each participating college. After eliminating any of Astin's scores which did not contribute significantly to the accuracy of prediction, Hoyt reported a multiple correlation of .78. He then predicted ACT Composite scores for four-year institutions throughout the country on the basis of a formula which included Astin's measures of "intellectualism," "estheticism," "masculinity," "selectivity," and "science."

Table C-1 reports Hoyt's estimates of mean scores for public and private institutions in Louisiana. The estimate is given as an interval, which reflects the predicted mean plus or minus one standard error of estimate.

Clearly, these estimates must be interpreted with caution as they depend critically on the methodology used. While not passing judgment on the validity of Hoyt's procedures, it should at least be noted that the means resulting from actual testing fall within the estimated intervals in a majority of cases for the 1969 freshman students in Louisiana's state-supported institutions. The advantage of Hoyt's estimates is in providing some means of comparing public and private institutions on the basis of ACT data.

As of the date of Hoyt's study, Tulane and Loyola had decidedly higher predicted intervals than any of Louisiana's state-supported institutions. On the other hand, many private colleges were roughly comparable to particular public institutions. For example, Centenary was roughly comparable with "Louisiana State University"; Louisiana College was quite similar to McNeese; Xavier was most closely comparable to Northwestern and Southeastern; and Dillard was similar to Grambling. Thus, as reflected by these estimates at least, Louisiana's private institutions enrolled freshman students who varied in average potential over a rather wide range.

TABLE C-1

HOYT'S PREDICTED MEASURE OF ACT COMPOSITE SCORES FOR LOUISIANA PUBLIC AND PRIVATE INSTITUTIONS

Institution	ACT Composite Mean Interval*
Centenary	19.1-22.2
Dillard	13.8-16.9
Grambling	13.8-16.9
Louisiana College	16.9-20.0
Louisiana Polytechnic Institute	19.0-22.1
Louisiana State University	19.9-22.9
Loyola	22.5-25.6
McNeese	16.7-19.8
Northeast	17.0-20.1
Northwestern	16.1-19.2
St. Mary's Dominican	17.3-20.4
Southeastern	16.5-19.5
Southern	13.5-16.6
Tulane	22.4-25.5
Southwestern	18.7-21.8
Xavier	16.3-19.4

Source: Donald P. Hoyt, *Forecasting Academic Success in Specific Colleges,* ACT Research Report 27, p. 34.

* Predicted mean $\pm$ 1 standard error of estimate

Relationship of 1969-70 Freshmen in Louisiana Institutions of Higher Education to 1968-69 Louisiana High School Graduates

by

THOMAS R. BEARD AND JAN W. DUGGAR

INTRODUCTION

One useful measure of the "rate of college attendance" is to compare the number of *in-state* freshman students in Louisiana institutions with the number of Louisiana high school graduates of the previous year. By this measure, the State's overall rate of college attendance was 64.4 per cent in 1969-70. As can be seen in Table A-1 in the Appendix, the rates for individual parishes varied considerably. An objective of this working paper is to "explain" some of the reasons for inter-parish variations.

According to statistics reported by the State Department of Education, there were 50,611 graduates of Louisiana high schools, both public and private, during the 1968–69 school year (including summer, mid-term, and spring). Breakdowns by race and sex are shown in Table A-1 in the Appendix. College enrollment data were collected by the Public Affairs Research Council, with some modifications being made by us in the course of this study. These data indicate 32,612 in-state college freshmen in the fall, 1969–70.[1] Since we are concerned with rates of college attendance for Louisiana residents, both out-of-state and foreign freshmen have been excluded.[2] Home address of parent or student was used in determining the parish from which a student originated. Data for freshmen are not for new or "first time" students only, but include freshmen who remain so for longer than a year. While it would have been better to use first time freshmen in this study, such data were not available. The use of total freshmen obviously results in some overlap in relating freshman students to previous year high school graduates. It should also be noted that our concept of rate of college attendance understates the "true" rate to the extent that Louisiana high school graduates go out of state for their college education.

[1] Enrollment data pertain to resident degree credit students only; part-time as well as full-time students are included. Enrollments for the following institutions are included: (public) Nicholls, Grambling, LSUA, LSUBR, LSUE, LSUNO, LSUS, Louisiana Tech, McNeese, Northeast, Northwestern, Southeastern, Southern-BR, Southern-NO, Southern-S, and Southwestern; (private) Centenary, Dillard, Louisiana College, Loyola, St. Mary's Dominican, Tulane, and Xavier. Enrollments for the following institutions are excluded: (public) Airline Community College, Delgado College, and St. Bernard Community College; (private) Baptist Christian College, New Orleans Baptist Theological Seminary, Notre Dame Seminary, Our Lady of Holy Cross, John Curtis Junior College, St. Charles College, and St. Joseph's Seminary.

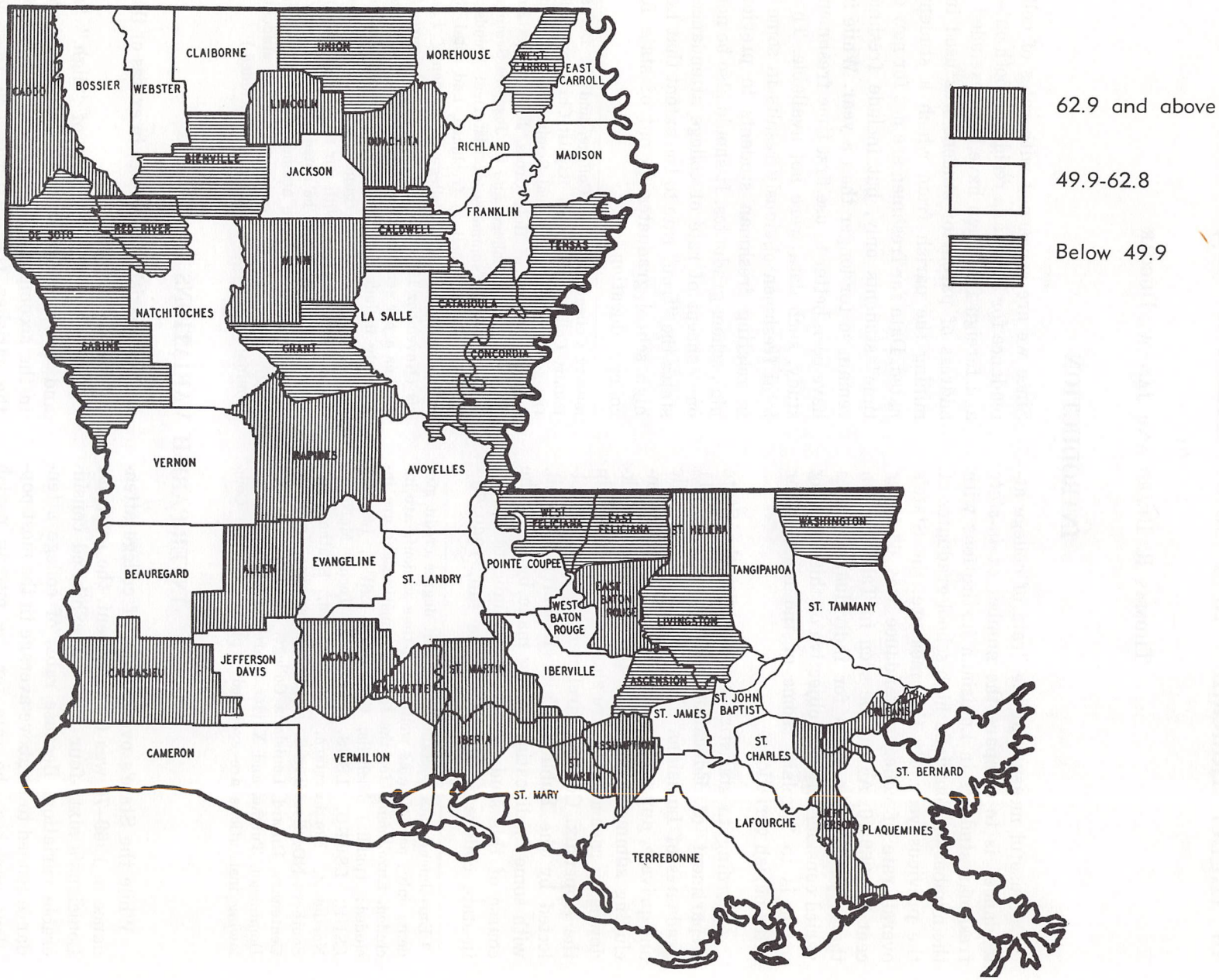
[2] An excellent summary of historical trends for high school graduates, college freshmen, and total college enrollments is found in "College Enrollments" *PAR Analysis* (November 1969). However, the PAR figures for freshmen as a per cent of high school graduates (Table 8) apparently include out-of-state and foreign, as well as in-state, freshmen. This accounts for the PAR figure of 72.3 per cent, as compared with our figure of 64.4 per cent for 1969–70. (It might also be noted that PAR figures understate the rate of college attendance by black high school graduates in recent years in that black students in predominantly white institutions are excluded.)

INTER-PARISH VARIATIONS

While the State's overall rate of college attendance in 1969–70 was 64.4 per cent, the rates for Louisiana's sixty-four parishes exhibited considerable variation. Because rates of college attendance tended to be above-average in the most populous parishes, the rate for the median parish (defined here as the one ranked thirty-second) was considerably lower at 56.9 per cent. Only thirteen parishes had rates in excess of the State's average of 64.4 per cent.

The geographic pattern of "high," "middle," and "low" college attendance parishes are shown in the accompanying map. The top one-fourth of the parishes (i.e., sixteen) had rates of attendance of 62.9 per cent and above; the bottom one-fourth had rates of less than 49.9 per cent.

1969-70 Louisiana College Freshmen
As Per Cent of 1968-69 High School Graduates



Assuming a reasonable degree of accuracy for the basic data, why do inter-parish variations exist? Even a casual glance at the map (or a more detailed study of Table A-1 in the Appendix) will indicate that no simple, single explanation exists for all of the variations. It might be noted, for example, that the eight most highly populated parishes—Orleans, Jefferson, East Baton Rouge, Caddo, Calcasieu, Rapides, Ouachita, and Lafayette—all have relatively high rates of college attendance. At first glance, this suggests that population—or to adopt a more refined measure, population density (or its reciprocal)—might be an important explanatory variable. At the same time, however, it can be noted that Orleans, the State's most populous parish, is only thirteenth in the rankings for rates of college attendance, while Lincoln parish, with an estimated population of well under 40,000, is second. Lincoln, of course, is the home parish for two major state institutions—Louisiana Tech and Grambling—thus suggesting that proximity to an institution of higher education may be an even more important factor in college attendance. Similarly, it might be noted that the most populous parishes mentioned above are often ones with relatively high per-capita incomes, so that perhaps per-capita income is equally as important as population density. But what, then, of such relatively high attendance rate parishes as Allen, Assumption, St. Martin and St. Helena, for example—parishes which do not have an institution of higher education located within their boundaries and which are certainly not characterized by either high population density or per-capita income?

A brief look at those sixteen parishes with the lowest college attendance rates also shows that no single explanation can possibly account for all of the variations. None of these parishes contain a higher educational institution, but at the same time, one obvious reason for this fact is the generally low population and often low income in these areas. Are there some additional variables—perhaps the sex or race composition of high school graduates—that might also help account for inter-parish variations?

THE STATISTICAL ANALYSIS

Rather than rely on casual observation as above, the major purpose of this working paper is to attempt to "explain" the variations in college attendance rates among parishes by the use of classical least-squares regression techniques. First, simple correlation coefficients are reported, and later the results of more sophisticated multivariate analysis are presented. The computations were made using a stepwise regression program developed by the Health Services Computing Facility of the University of California, Los Angeles. The stepwise regression program computes a sequence of multiple linear regression equations. At each step in the computations one variable is added to the regression equation. The variable added is the one which makes the greatest reduction in the error sum of squares. It is also the variable that has the highest partial correlation with the dependent variable, partialed on the variables which have already been added.

Seven potential independent variables were selected. They are:

X_1 *Dummy variable for parishes with a college or university*—a value of 1 for those parishes in which one or more state-supported institutions of higher education[3] are located and 0 in all other parishes.

X_2 *Dummy variable for non-contiguous parishes*—a value of 1 for those parishes which are not contiguous to any parish in which one or more state-supported institutions of higher education[4] are located and 0 in all other parishes.

X_3 *Per-capita personal income* (1968)

X_4 *Ratio of white to black high school graduates* (1968–69)

X_5 *Ratio of total 9th grade enrollment* (1964–65) *to total high school graduates* (1968–69)

X_6 *Population density (reciprocal)*—land area divided by population (1968)

X_7 *Ratio of female to total high school graduates* (1968–69)

The eighth variable, which is the dependent variable, is:

[3] This includes only those state-supported institutions whose enrollment data are included in the study. See footnote 1.

[4] Same as footnote 3.

Y *Rate of college attendance*—ratio of total college freshmen (1969–70) to high school graduates (1968–69).

A simple correlation matrix of these variables is shown in Table 1. The highest simple correlations with the dependent variable are found for independent variables X_1, X_3, and X_6. A coefficient of correlation (denoted by r) may vary from 1.000 in the case of perfect correlation to 0 in the case of a total absence of correlation. A plus sign (which is implied when no sign is attached) indicates a positive relationship between the dependent and independent variables; a minus sign indicates a negative relationship between the dependent and independent variables. If r is squared, we get the coefficient of determination (r^2) which, according to the classical theory of regression, gives us the proportion of variation in the dependent variable that is "accounted for" by variations in the independent variable.

X_1 and X_2 are location dummies. X_1 attempts to measure the influence of location on college attendance by assigning a value of 1 to those parishes in which one or more state-supported institutions are located (and a value of 0 to all other parishes). There are twelve such parishes. *A priori*, one would expect that the location of a college or university in a particular parish would have a positive influence on the rate of college attendance by high school graduates from that parish. X_2 also attempts to measure location by assigning a value of 1 to the State's thirteen parishes which are not contiguous to any other parish in which a state-supported institution is located (and a value of 0 to all other parishes).[5] Other things being equal, one would expect the relationship to be negative, i.e., there would be a lower college attendance rate in non-contiguous parishes.

Both X_1 and X_2 have the expected signs, with the simple correlations between X_1 and Y being 0.527 and between X_2 and Y being –0.268.

X_3 is per-capita personal income. Since income is a widely-accepted measure of living standards and "ability to pay," it seems reasonable that families living in areas with relatively high incomes would be better *able* to send their children to college than would families from relatively low income parishes. (Furthermore, since income and educational attainment are themselves directly related, it seems reasonable that more highly educated parents would be more *willing* to send their children to college.) Thus, other things being equal, one would expect a higher rate of college attendance the higher the parish's level of per-capita personal income.

TABLE 1

SIMPLE CORRELATION MATRIX

	X_1	X_2	X_3	X_4	X_5	X_6	X_7	Y
X_1	1.000	–0.243	0.204	–0.055	–0.335	–0.339	0.024	0.577
X_2		1.000	–0.081	–0.182	0.276	0.128	0.023	–0.268
X_3			1.000	0.364	–0.086	–0.268	0.085	0.318
X_4				1.000	–0.072	0.073	–0.035	0.015
X_5					1.000	0.028	0.201	–0.091
X_6						1.000	0.239	–0.364
X_7							1.000	0.126
Y								1.000

As expected, X_3 has a plus sign, with the simple correlation between X_3 and Y being 0.318.

X_4 is the ratio of white to black high school graduates. Since historical data indicate that a larger percentage of white, than black, high school graduates have attended college in the past, it was felt that a plausible explanatory variable in our study might be the racial composition of high school graduates. However, while we found the expected sign, the simple correlation between X_4 and Y was so small, 0.015, as to indicate virtually no relationship between the variables.

X_5 measures the ratio of total 9th grade attendance to high school graduates four years later. The higher this ratio, the greater the "attrition rate." It was thought that the size of this ratio might indicate something about the students' basic attitudes toward further education and thus establish a pattern that would carry over into their decision of whether or not to go on to college following high school graduation. That is, the higher this ratio, the lower would be the college attendance rate. As expected, X_5 has a negative sign, but the simple correlation coefficient between X_5 and Y is a weak –0.091.

X_6 measures the reciprocal of population density, i.e., a parish's land area divided by population (or, in effect, square miles per person). It would be expected, other things being equal, that the less densely populated a parish is—or, in general, the more rural and less urban it is—the lower would be its rate of college attendance. Thus, the expected sign of X_6 is negative. As shown in Table 1, the simple correlation coefficient between X_6 and

[5] It might be noted that there are 39 parishes [64 – (12 + 13)] which do not have an institution located within their borders but are contiguous to a parish in which a college or university is located.

Y is –0.364, which in absolute value is second only to that between X_1 and Y.

X_7 measures the ratio of female to total high school graduates. This variable was tested to see if the sex composition of high school graduates was an important determinant of college attendance rates, even though there was no strong *a priori* reason for expecting a particular result. In fact, while the sign is positive, the simple correlation coefficient between X_7 and Y is a rather low 0.126.

As noted earlier, it is the coefficient of determination (r^2), rather than the coefficient of correlation (r), that gives us the proportion of variation in Y that is "accounted for" by variations in the various X's. We can say, for example, that since the r^2 between X_1 and Y is 0.333, that roughly 33 per cent of the variation in Y is accounted for by X_1 alone. However, if we wish to know the proportion of the variation in Y that can be estimated by changes in all, or some combination of, the independent variables taken together, we need to compute the coefficient of multiple determination (R^2). Its square root is R, or the coefficient of multiple correlation.

It must be noted that R is *not* equal to the sum of the individual r's for whatever combinations of individual variables are considered (nor would it be even if all correlation coefficients had the same sign). The reason is that simple correlation is in reality *gross* correlation, since it merely measures the relationship between two variables without any adjustment by correlation techniques for the effects of other variables. The relationship between R and the various r's reported earlier is complex. However, it may be said for simple correlation coefficients having the same sign, the *less* the *duplication* in the independent variables (that is, the lower their positive or the higher their negative correlation), the higher will be the multiple correlation. As can be seen in Table 1, some of our independent variables are correlated to a degree, and thus to some extent duplicate one another.

Our best single explanatory variable, of course, is X_1. With this single variable the estimating equation is as follows:

$$Y = .540 + .187\ X_1 \qquad R^2 = 0.333$$
$$(.034)$$

The standard error of the regression coefficient is shown in parentheses. The regression coefficient is statistically significant at the .05 per cent level. The estimating equation is statistically significant at the .01 per cent level.

When we add additional variables X_3 and X_6 we increase the size of our R^2, but not by very much. (The addition of other independent variables adds almost nothing to the explanatory power of the equation and weakens its reliability in other respects.) Our expanded estimating equation is as follows:

$$Y = .489 + .158\ X_1 + .00004\ X_3 - .71584\ X_6$$
$$(.035) \quad (.00002) \quad (.519)$$
$$R^2 = .394$$

By the use of these three independent variables —the dummy variable for parishes with a college or university, per-capita personal income, and the reciprocal of population density—we have "accounted for" something over 39 per cent of the variation in Y. The regression equation is statistically significant at the .01 per cent level. Within the equation, the regression coefficients of X_1 and X_3 are statistically significant at the .05 per cent level, and while the regression coefficient for X_6 is not significant at that level it is statistically significant at the .10 per cent level.[6]

[6] It might be noted that X_3 is measured in dollars of per-capita personal income and X_6 measures square miles of land area divided by population.

CONCLUDING OBSERVATIONS

Our statistical results have been only modestly successful in that slightly over 60 per cent of the inter-parish variations in college attendance rates remain unexplained. One possible mitigating factor may be reporting errors in the underlying data; in fact, a few parishes have college attendance rates that appear quite unusual given their basic demographic and economic characteristics. It is also possible that the availability of data for new or "first time" freshmen would have led to better statistical results than were obtained with the use of data for total freshmen. At the same time it is likely that college attendance rates are affected by numerous cultural and sociological factors, many of which are peculiar to certain regions or areas of the State, and are thus difficult to isolate or quantify in a study of this type.

On the positive side, we have accounted for almost 40 per cent of the variation in attendance rates by the use of multivariate analysis involv-

ing three important independent variables. (Based on simple regression analysis, the respective r^2's would be 0.333 for X_1 and Y, 0.101 for X_3 and Y, and 0.133 for X_6 and Y.) Clearly, the location of an institution in a parish does have a significant impact on the percentage of high school graduates going on to college. To a lesser degree, so does a parish's per-capita income and its population density, even though many factors influencing college attendance are still unexplained.

APPENDIX

TABLE A-1

HIGH SCHOOL GRADUATES, 1968–69, AND FRESHMEN ENROLLED IN LOUISIANA INSTITUTIONS, 1969–70, BY PARISH

	High School Graduates, 1968–69					*College Freshmen, 1969–70*		
Parish	*White*	*Black*	*Male*	*Female*	*Total*	*Total Number*	*Percent of High School Graduates*	*Rank*
Acadia	596	134	370	360	730	466	63.8	15
Allen	242	77	171	148	319	205	64.3	14
Ascension	388	145	252	281	533	246	46.1	53
Assumption	161	65	95	131	226	148	65.5	11*
Avoyelles	418	133	264	287	551	336	61.0	20*
Beauregard	275	84	193	166	359	191	53.2	41
Bienville	142	167	166	143	309	134	43.4	57*
Bossier	642	224	403	463	866	474	54.7	36
Caddo	2,238	1,332	1,742	1,828	3,570	2,357	66.0	9
Calcasieu	1,559	448	951	1,056	2,007	1,489	74.2	6
Caldwell	94	46	83	57	140	68	48.6	49
Cameron	83	7	31	59	90	48	53.3	40
Catahoula	135	78	98	115	213	87	40.8	61*
Claiborne	124	127	126	125	251	133	53.0	42
Concordia	193	143	166	170	336	152	45.2	55
DeSoto	164	259	207	216	423	163	38.5	64
East Baton Rouge	3,147	1,266	2,129	2,284	4,413	3,192	72.3	8
East Carroll	82	118	90	110	200	100	50.0	47
East Feliciana	89	139	109	119	228	107	46.9	52
Evangeline	318	77	208	187	395	239	60.5	22
Franklin	249	168	215	202	417	208	49.9	48
Grant	163	71	104	130	234	107	45.7	54
Iberia	591	262	421	432	853	559	65.5	11*
Iberville	250	262	229	283	512	292	57.0	31
Jackson	176	95	119	152	271	148	54.6	37*
Jefferson	3,096	435	1,609	1,922	3,531	2,634	74.6	4
Jefferson Davis	404	106	235	275	510	290	56.9	32
Lafayette	1,151	334	711	774	1,485	1,222	82.3	3
Lafourche	706	75	380	401	781	472	60.4	23
LaSalle	186	25	96	115	211	121	57.3	30
Lincoln	252	172	199	225	424	371	87.5	2
Livingston	419	76	255	240	495	210	42.4	59
Madison	84	135	100	119	219	135	61.6	18*
Morehouse	256	258	243	271	514	298	58.0	28
Natchitoches	317	268	308	278	586	351	60.0	24
Orleans	5,020	3,011	3,731	4,300	8,031	5,228	65.1	13
Ouachita	1,001	416	680	737	1,417	1,636	115.5	1
Plaquemines	263	79	162	180	342	172	50.3	45
Pointe Coupee	186	205	192	199	391	196	50.1	46

TABLE A-1 (Cont'd)

Parish	High School Graduates, 1968–69					College Freshmen, 1969–70		
	White	Black	Male	Female	Total	Total Number	Percent of High School Graduates	Rank
Rapides	1,242	440	833	849	1,682	1,251	74.4	5
Red River	97	66	78	85	163	68	41.7	60
Richland	232	222	232	222	454	271	59.7	25
Sabine	206	81	144	143	287	117	40.8	61*
St. Bernard	655	22	340	337	677	355	52.4	43
St. Charles	260	94	171	183	354	216	61.0	20*
St. Helena	57	94	62	89	151	95	62.9	16
St. James	185	143	139	189	328	202	61.6	18*
St. John the Baptist	184	179	173	190	363	188	51.8	44
St. Landry	843	567	685	725	1,410	781	55.4	35
St. Martin	273	141	207	207	414	272	65.7	10
St. Mary	542	169	338	373	711	423	59.5	26
St. Tammany	663	180	423	420	843	460	54.6	37
Tangipahoa	620	326	410	536	946	555	58.7	27
Tensas	83	113	85	111	196	85	43.4	57*
Terrebonne	779	130	407	502	909	509	56.0	34
Union	206	129	179	156	335	161	48.1	50
Vermilion	505	67	312	260	572	323	56.5	33
Vernon	336	27	209	154	363	198	54.5	39
Washington	466	239	346	359	705	312	44.3	56
Webster	390	237	307	320	627	361	57.6	29
West Baton Rouge	130	85	105	110	215	134	62.3	17
West Carroll	150	42	81	111	192	92	47.9	51
West Feliciana	45	86	72	59	131	52	39.7	63
Winn	150	51	91	110	201	146	72.6	7
TOTAL	35,159	15,452	24,272	26,339	50,611	32,612	64.4	

* tie

Three Concepts of Higher Education Districts (Regions) In Louisiana

by
THOMAS R. BEARD AND JAN W. DUGGAR

There are several useful ways of delineating Higher Education "Districts" or "Regions" according to the parishes from which institutions draw their freshman students. Three alternative concepts are developed in this paper.

In defining districts or regions we have used the *average* of fall-term freshman enrollment by institution and parish for the two-year period, 1968–69 and 1969–70. Enrollment figures were collected by the Public Affairs Research Council (PAR) with some data corrections being made by us in the course of the study. PAR figures relate to resident degree-credit students only and are for total freshmen rather than new or first-time students. Both full and part-time freshmen are included. Home address of parent or student is used in determining the parish or state from which a student originates.[1]

According to our first concept, an institution's district includes only those parishes from which it attracts more freshman students than does any other single college or university. That is, a parish is placed in the district of the institution which has the *greatest drawing power* from that parish. This method results in all of the State's 64 parishes being placed in some district and no parish being in more than one district.

The second concept is a modification of the first. In addition to being placed in the district of that institution which has the greatest drawing power, a parish is also assigned to the district of any institution which draws more than 20 per cent of the college freshmen from that parish. Ths procedure results in several parishes being included in two districts (and one parish in three districts).

The third concept is quite different from the first two. In this case, a district is composed of all parishes from which an institution draws more than 1.0 per cent of its freshman students. That is, an institution's district is composed of all parishes from which it draws a significant percentage of its freshman enrollment, irrespective of how many or how few of the students from an included parish chose to attend other institutions. By this concept, some parishes—especially those with a large college-age population—may be included in a number of districts. Unlike the first two concepts, there is necessarily a district for each institution included in the study.

Each of the three concepts has both strengths and weaknesses. Each tends to emphasize a somewhat different, but important, aspect of the freshman population in the State's various institutions of higher learning.

[1] Enrollments for the following institutions are included in this study: (public) F. T. Nicholls, Grambling, LSU-A. LSU-BR, LSU-E, LSU-NO, LSU-S, Louisiana Tech, McNeese, Northeast, Northwestern, Southeastern, Southern-BR, Southern-NO, Southern-S, and Southwestern; (private) Centenary, Dillard, Louisiana College, Loyola, St. Mary's Dominican, Tulane, and Xavier. Enrollments for the following institutions have not been included: (public) Airline Community College, Delgado College, and St. Bernard Community College; (private) Baptist Christian College, New Orleans Baptist Theological Seminary, Notre Dame Seminary, Our Lady of Holy Cross, John Curtis Junior College, St. Charles College, and St. Joseph Seminary.

CONCEPT I

Higher Education Districts by Institution—Highest Percentage of College Freshmen From a Parish Choosing That Institution

According to the first concept, a parish is placed in the district or region of the institution which has the greatest drawing power from that parish. Thus, Louisiana can be divided into twelve districts as shown in Table 1 and the accompanying map. It should be noted that there is no district for four public institutions—Grambling, LSUE, Southern-NO, and Southern-S. Neither is there a

TABLE 1

HIGHER EDUCATION DISTRICTS BY INSTITUTION—HIGHEST PERCENTAGE OF COLLEGE FRESHMEN FROM A PARISH CHOOSING THAT INSTITUTION

F. T. Nicholls
Assumption 70.0%
*Lafourche 78.4
Plaquemines 26.3
St. Charles 36.4
St. James 43.6
St. Mary 38.4
Terrebonne 70.7

Grambling
(None)

LSU-A
Avoyelles 30.4%
*Rapides 41.5

LSU-BR
*E. Baton Rouge ..47.2%

LSU-E
(None)

LSU-NO
Jefferson 45.0%
*Orleans 41.9
St. Bernard 41.5

LSU-S
*Caddo 29.8%

La. Tech. (LPI)
Bienville 39.2%
Bossier 31.0
Claiborne 38.9
Jackson 49.0
*Lincoln 69.7
Union 53.5
Webster 35.8

McNeese
Allen 33.9%
Beauregard 38.3
*Calcasieu 79.2
Cameron 76.4
Jefferson Davis ...43.2

Northeast
Caldwell 66.2%
Catahoula 55.0
Concordia 43.1
E. Carroll 45.6
Franklin 56.1
LaSalle 41.9
Madison 40.2
Morehouse 63.4
*Ouachita 82.6
Richland 65.6
Tensas 39.4
W. Carroll 75.8

Northwestern
DeSoto 28.9%
Grant 34.6
*Natchitoches 78.7
Red River 55.9
Sabine 73.8
Vernon 60.8
Winn 40.1

Southeastern
Livingston 59.3%
St. Tammany 35.6
*Tangipahoa 64.9
Washington 39.3

Southern-BR
Ascension 27.4%
E. Feliciana 52.0
Iberville 42.7
Pointe Coupee 39.3
St. Helena 46.9
St. John 31.6
W. Baton Rouge ..31.6
W. Feliciana 49.1

Southern-NO
(None)

Southern-S
(None)

Southwestern (USL)
Acadia 54.5%
Evangeline 28.6
Iberia 68.1
*Lafayette 88.5
St. Landry 31.5
St. Martin 71.2
Vermilion 69.8

* Parish in which institution is located

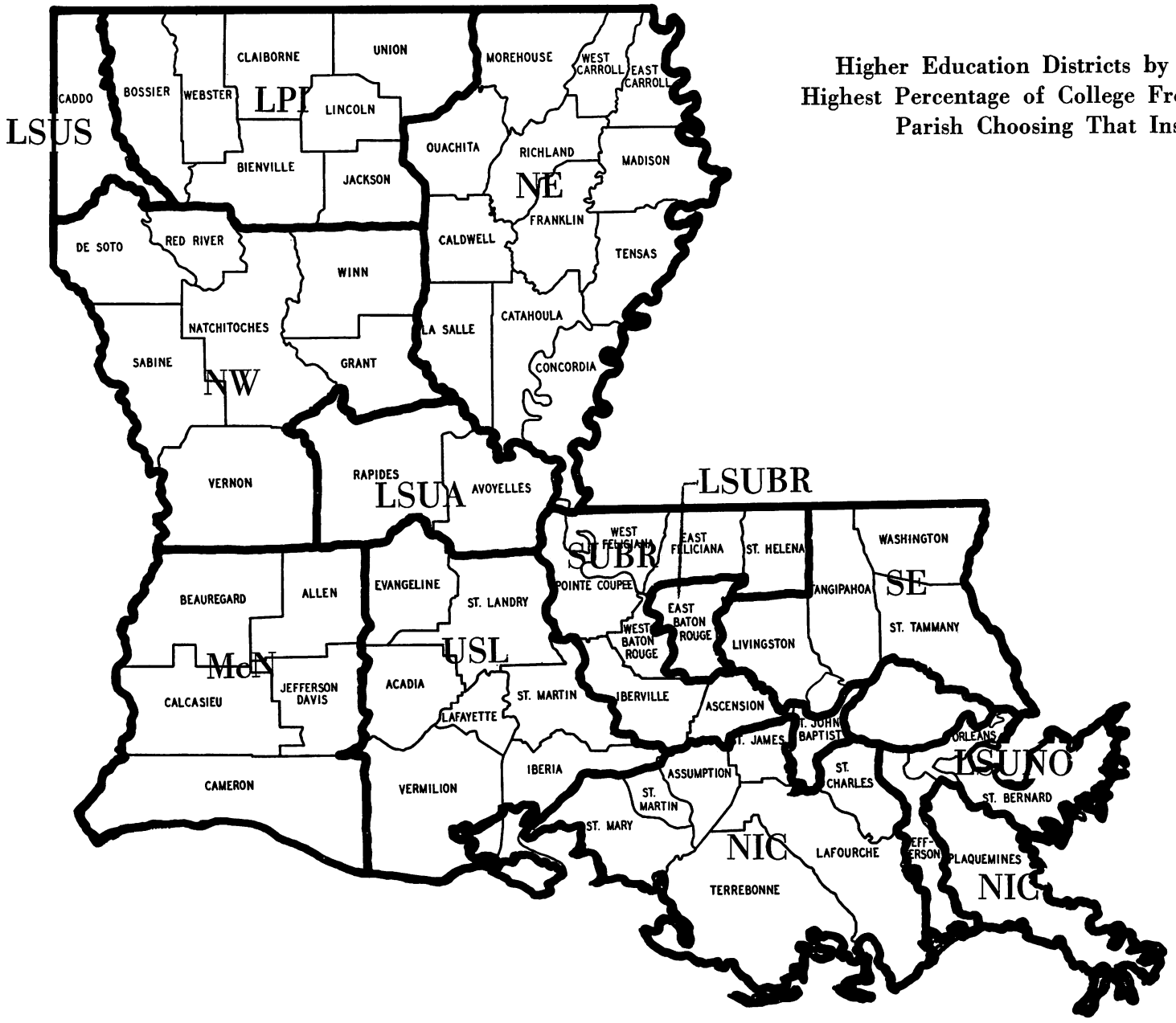
district for any of the State's private institutions, in part because of their generally larger concentration of out-of-state students and their wider geographical dispersion of in-state students. (The percentages of parish, out-of-state, and foreign freshmen drawn by each public and private institution are shown in Table A-1 in the Appendix, and the absolute numbers are shown in Table A-2. By definition, the sum of the percentages of a parish's freshman students enrolled in each of the 23 institutions included in this study must equal 100 per cent. That is, the percentage calculations exclude Louisiana residents attending college out of state or attending one of the generally smaller in-state institutions whose enrollments are not included.)

Several striking features of Concept I districts can be noted. First, there is the rather extraordinary division of the state along geographical lines. For example, Northeast is the "dominant" institution in a readily definable 12-parish area in the northeast part of the State; the McNeese district or region encompasses a 5-parish area in the extreme southwestern part of Louisiana; etc. With only one exception (Plaquemines parish in the F. T. Nicholls district), no institution has the greatest drawing power in a parish which is noncontiguous to all other parishes in its district.

The strong drawing power of institutions along geographical lines is further emphasized by the fact that LSUBR—the State's largest institution—is "dominant" in only a single parish, East Baton Rouge. While it attracts sizeable numbers of freshmen from throughout the State, and in this sense is clearly a "state-wide" institution (see Concept III), LSUBR does not have the single greatest drawing power in any other parish. Grambling, which also draws widely throughout the State, is not "dominant" in a single parish.

A second striking feature of Concept I districts, as can be seen in Table 1, is that a number of institutions draw an extraordinarily high percentage of all college freshmen from a particular parish. Most often, the parish is one in which the institution is located. Southwestern, for example, attracted 88.5 per cent of the freshmen attending college in Louisiana whose home address was listed as Lafayette Parish. Northeast attracted 82.6 per cent of the freshmen from Ouachita Parish; McNeese, 79.2 per cent from Calcasieu; Northwestern, 78.7 per cent from Natchitoches; and F. T. Nicholls, 78.4 per cent from Lafourche. In some cases an institution's drawing power from a neighboring parish was also quite high—e.g., F. T. Nicholls from Assumption and Terrebonne; McNeese from Cameron; Northeast from West Carroll; Northwestern from Sabine; and Southwestern from Iberia and Vermilion.

In contrast, none of the LSU campuses were nearly so "dominant" in a particular parish. LSUBR attracted 47.2 per cent of the freshmen from East Baton Rouge Parish, LSUNO drew 41.9 per cent from Orleans and 45.0 per cent from



Higher Education Districts by Institution—Highest Percentage of College Freshmen From A Parish Choosing That Institution

neighboring Jefferson, and LSUA attracted 41.5 per cent from Rapides. The newer institutions drew even smaller percentages—LSUS, 29.8 per cent from Caddo, and LSUE, 29.0 per cent from St. Landry (the latter figure being slightly lower than the percentage of St. Landry freshmen attending Southwestern).

Concept I districts are useful in pointing up the strong regional drawing power of many public institutions. In one sense, location seems to be an important factor in student choice. This is especially true of a number of State Board of Education institutions, as evidenced by the very high percentage of college freshmen from particular parishes who choose to go to the institution located in their own, or a neighboring, parish.

Concept I districts, however, do not tell the "whole story." While this concept has the obvious advantage of placing each parish in a single district or region, the underlying rationale for doing so is occasionally somewhat artificial. That is, it is one thing to consider Southwestern "dominant" in Lafayette Parish where it attracted 88.5 per cent of the freshman students (leaving the other 22 institutions combined with only 12.5 per cent), but perhaps another to imply that, say, Southern-BR is "dominant" in Ascension Parish where it draws 27.4 per cent of the freshman students. By concentrating on the institution with the greatest drawing power from a particular parish, Concept I districts overlook, in many cases, the substantial drawing power of those institutions which rank second, or even third.

CONCEPT II

Higher Education Districts by Institution—More than 20 Per Cent of College Freshmen From a Parish Choosing That Institution

Concept II districts often include a larger number of parishes than do Concept I districts, and some parishes show up in more than one district. In addition to being placed in the district of that institution which has the greatest drawing power, a parish is also assigned to the district of any institution which draws more than 20 per cent of the college freshmen from that parish. Of course, the figure of 20 per cent is an arbitrary choice; a lower percentage would result in larger districts and greater overlap among them in terms of included parishes. Such districts could be designated using the data in Table A-1 in the Appendix.

Using a 20 per cent cut-off figure, Concept II districts are shown in Table 2 and the accompanying three maps. Since Grambling drew more than 20 per cent of the freshmen from Bienville, Claiborne, and Lincoln Parishes, this institution is now represented by a Concept II district. The same is true for LSUE, which drew more than 20 per cent of the freshmen from Evangeline and St. Landry parishes. However, there are still no districts for Southern-S or Southern-NO or for any of the State's private institutions.

For a number of public institutions, Concept II districts are considerably larger than Concept I districts. In particular, one might note the case of LSUBR, whose district now includes Ascension, Livingston, St. Tammany, and West Baton Rouge, as well as East Baton Rouge. At the other extreme, the LSUA, LSUNO, McNeese, and Northeast districts are unchanged.

TABLE 2

HIGHER EDUCATION DISTRICTS BY INSTITUTION—MORE THAN 20 PER CENT OF COLLEGE FRESHMEN FROM A PARISH CHOOSING THAT INSTITUTION

F. T. Nicholls	
Ascension	20.8%
Assumption	70.0
*Lafourche	78.4
Plaquemines	26.3
St. Charles	36.4
St. James	43.6
St. John	20.1
St. Mary	38.4
Terrebonne	70.7
Grambling	
Bienville	23.0%
Claiborne	21.5
*Lincoln	21.5
LSU-A	
Avoyelles	30.4%
*Rapides	41.5
LSU-BR	
Ascension	27.0%
*E. Baton Rouge	47.2
Livingston	22.0
St. Tammany	23.8
W. Baton Rouge	28.3
LSU-E	
Evangeline	27.0%
*St. Landry	29.0
LSU-NO	
Jefferson	45.0%
*Orleans	41.9
St. Bernard	41.5
LSU-S	
Bossier	23.6%
*Caddo	29.8
La. Tech. (LPI)	
Bienville	39.2%
Bossier	31.0
Claiborne	38.9
Concordia	20.5
Jackson	49.0
*Lincoln	69.7
Union	53.5
Webster	35.8
McNeese	
Allen	33.9%
Beauregard	38.3
*Calcasieu	79.2
Cameron	76.4
Jefferson Davis	43.2
Northeast	
Caldwell	66.2%
Catahoula	55.0
Concordia	43.1
E. Carroll	45.6
Franklin	56.1
LaSalle	41.9
Madison	40.2
Morehouse	63.4
*Ouachita	82.6
Richland	65.6
Tensas	39.4
W. Carroll	75.8

* Parish in which institution is located

TABLE 2 (Cont'd)

Northwestern
- Beauregard 22.9%
- DeSoto 28.9
- Grant 34.6
- LaSalle 26.6
- *Natchitoches 78.7
- Red River 55.9
- Sabine 73.8
- Vernon 60.8
- Winn 40.1

Southeastern
- Livingston 59.3%
- St. Helena 30.0
- St. Tammany 35.6
- *Tangipahoa 64.9
- Washington 39.3

Southern-BR
- Ascension 27.4%
- *E. Baton Rouge ..26.6
- E. Feliciana 52.0
- Iberville 42.7
- Pointe Coupee 39.3
- St. Helena 46.9
- St. James 34.5
- St. John 31.6
- W. Baton Rouge ..31.6
- W. Feliciana 49.1

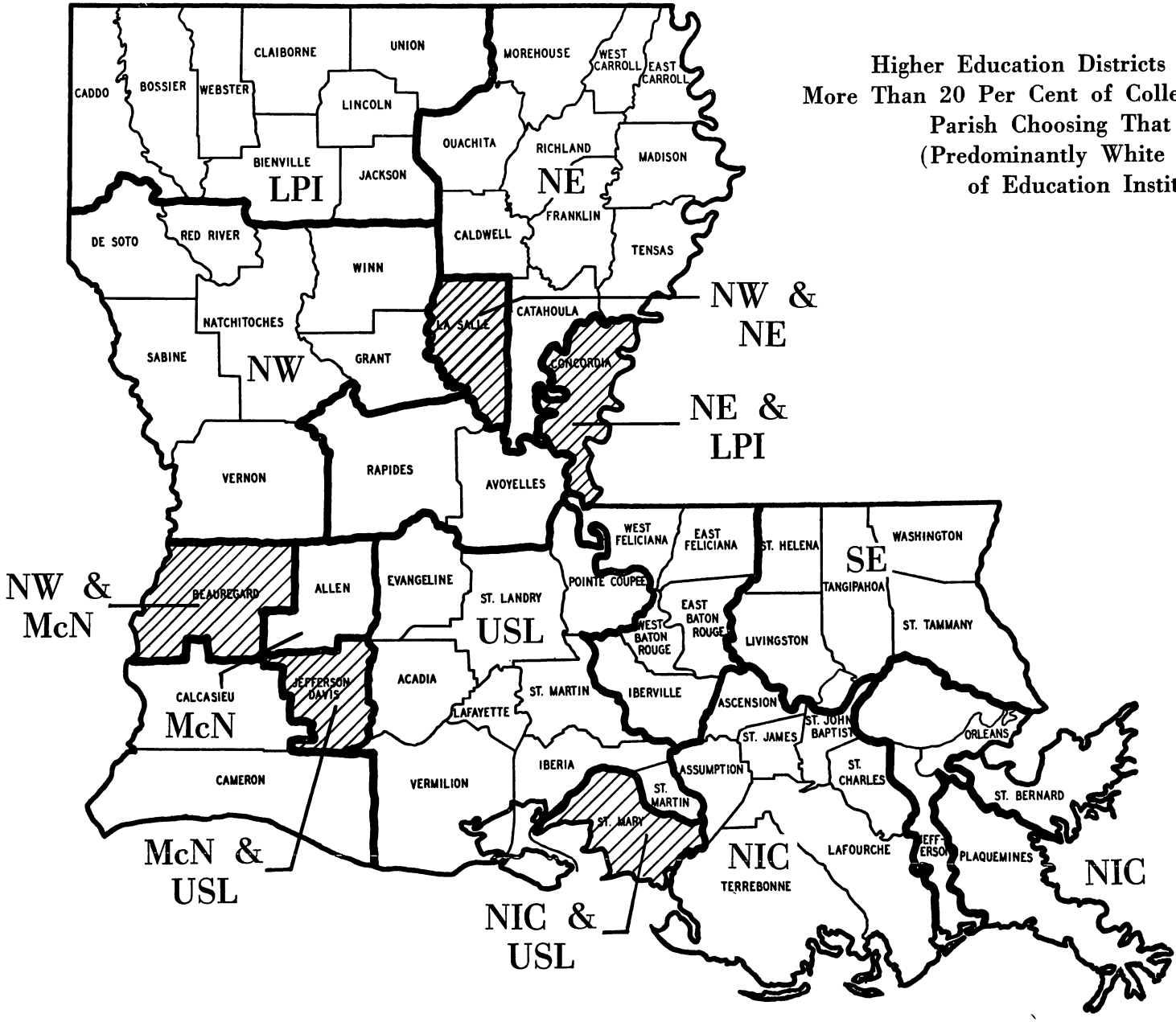
Southern-NO
- (None)

Southern-S
- (None)

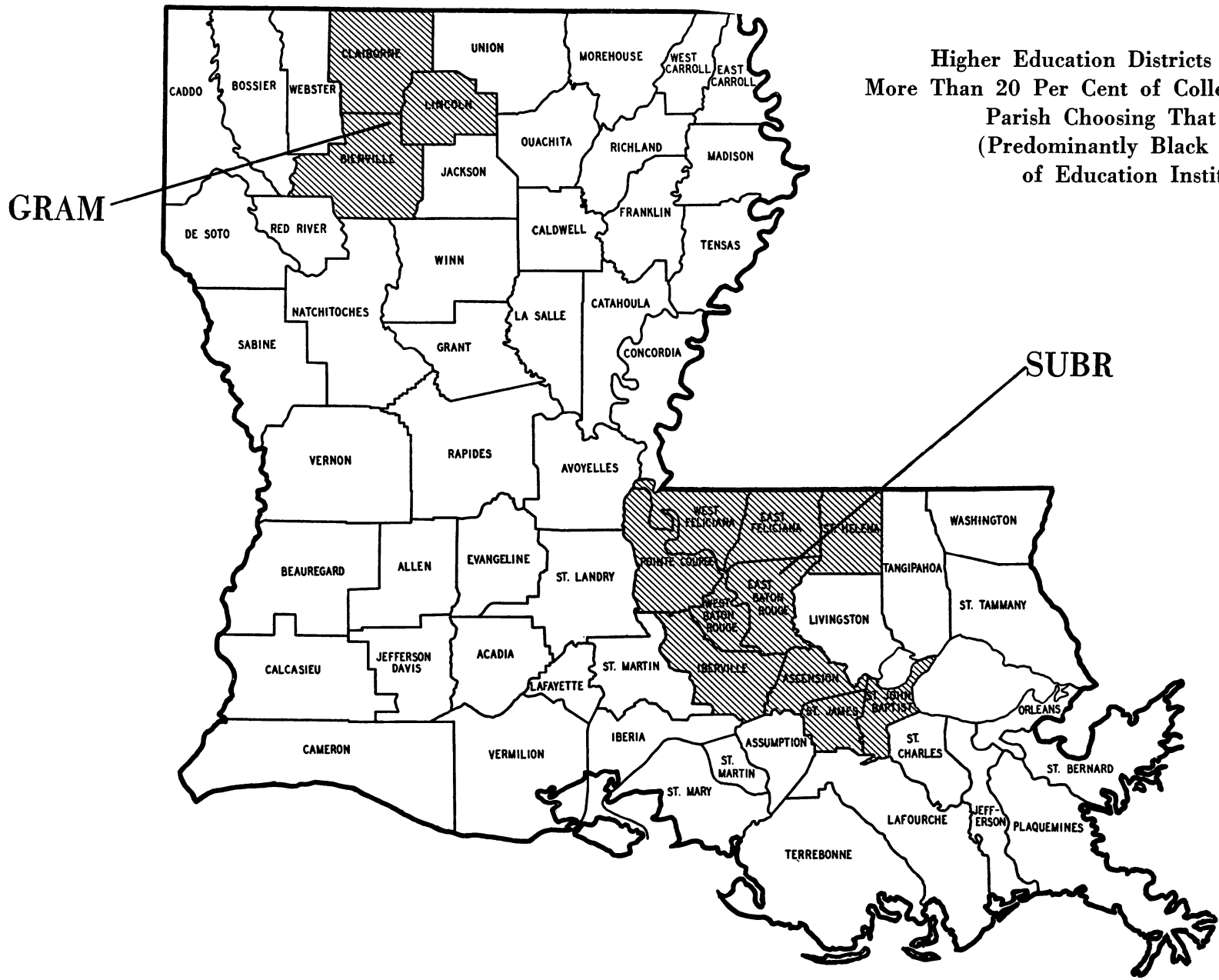
Southwestern (USL)
- Acadia 54.5%
- Evangeline 28.6
- Iberia 68.1
- Jefferson Davis ..24.3
- *Lafayette 88.5
- Pointe Coupee 25.8
- St. Bernard 21.6
- St. Landry 31.5
- St. Martin 71.2
- St. Mary 31.2
- Vermilion 69.8

* Parish in which institution is located

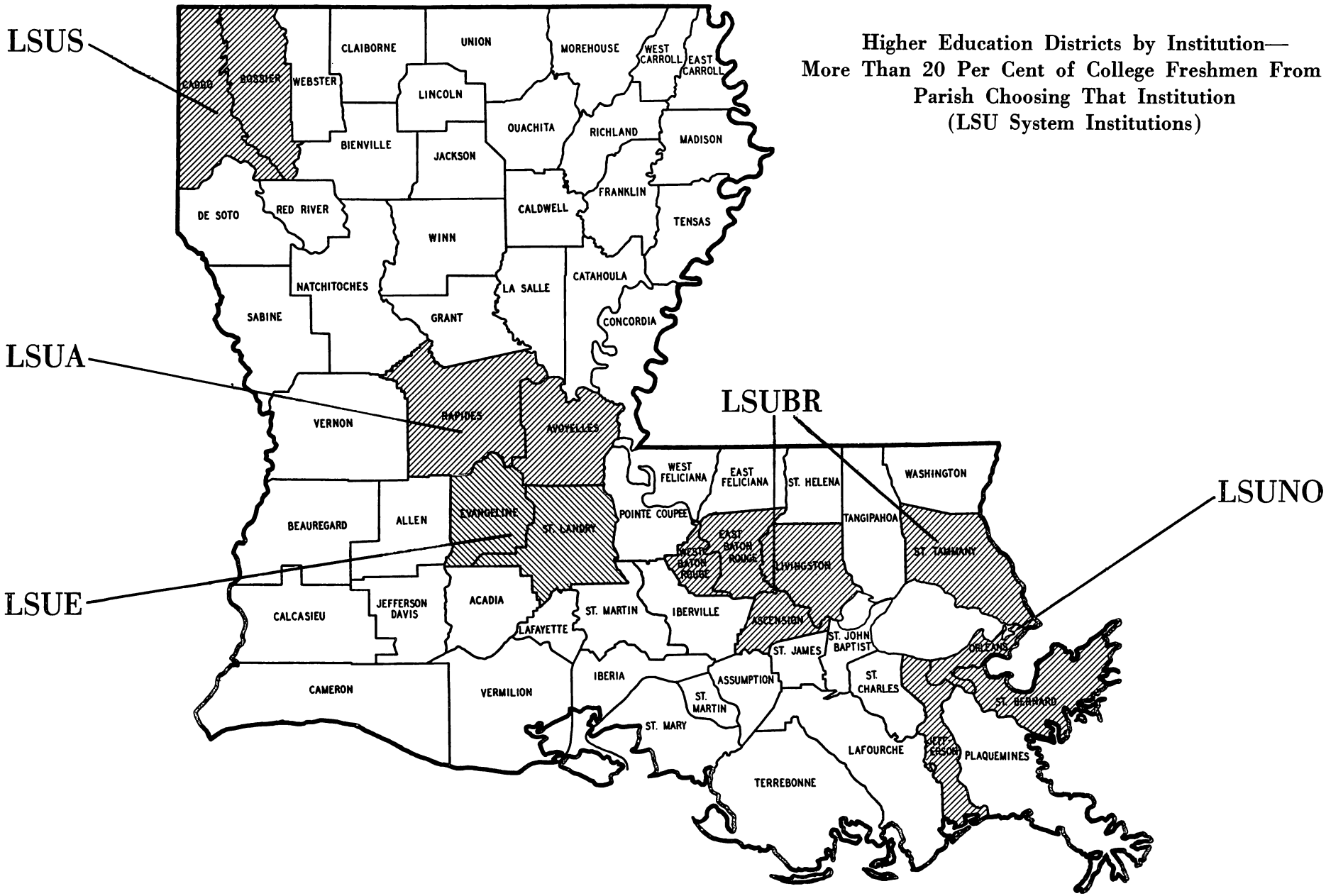
Twenty parishes are included in two different Concept II districts, while Ascension is included in three. In a few cases, the highest drawing institution is relatively "dominant"—e.g., Louisiana Tech's 69.7 per cent as compared with Grambling's 21.5 per cent in Lincoln Parish. In a number of cases—e.g., Ascension Parish (Southern-BR, LSUBR, F. T. Nicholls), Bossier (Louisiana Tech, LSUS), Evangeline (Southwestern, LSUE), St. Landry (Southwestern, LSUE), St. Mary (F. T. Nicholls, Southwestern), and West Baton Rouge (Southern-BR, LSUBR)—there is a substantial sharing of students from the parish.



Higher Education Districts by Institution—
More Than 20 Per Cent of College Freshmen From A
Parish Choosing That Institution
(Predominantly White State Board
of Education Institutions)



Higher Education Districts by Institution—
More Than 20 Per Cent of College Freshmen From A
Parish Choosing That Institution
(Predominantly Black State Board
of Education Institutions)



Higher Education Districts by Institution—
More Than 20 Per Cent of College Freshmen From A
Parish Choosing That Institution
(LSU System Institutions)

CONCEPT III

Higher Education Districts by Institution—Parishes From Which an Institution Draws More Than 1.0 Per Cent of Its Freshman Students

Concept III districts are constructed quite differently from Concepts I and II. In this case, we determine the percentage of an institution's freshman students that come from each of the State's 64 parishes, as well as the percentage that is foreign and from out-of-state. An institution's Concept III district is composed of all parishes from which an institution draws more than *1.0 per cent* of its total freshmen (the sum of the 66 categories being 100 per cent).

Each public and private institution included in the study necessarily has a Concept III district. Separate maps, including the relevant percentage computations, are shown for each institution at the end of this section.

Some parishes, because of their large populations, appear in a number of districts. This is as expected, since most institutions, whatever their location, are likely to draw more than 1.0 per cent of their freshman students from several of the large metropolitan areas of the State. Orleans Parish, for example, appears in 17 different Concept III districts; East Baton Rouge Parish is included in 13 and Caddo Parish in 11. Obviously, one of the major weaknesses of this concept is the great "overlap" among districts. One of the strengths of Concept III districts, however, is in pointing up the importance of large urban centers as a major source of freshman students throughout the State.

Concept III districts emphasize several interesting aspects of higher education in Louisiana. First, it is clear that most of the State's private institutions draw a substantial percentage of their students from outside of the State. Of the seven private colleges and universities considered in this study, only Louisiana College (88.7 per cent) and Xavier (73.2 per cent) were predominantly "in-state oriented." (Louisiana College drew rather widely from throughout the State, while Xavier drew 58.4 per cent from Orleans Parish alone.) Centenary (53.2 per cent in-state), Dillard (47.3 per cent), Loyola (53.0 per cent), and St. Mary's Dominican (42.2 per cent) were roughly balanced as between students from inside and outside Louisiana. At the other extreme, Tulane is clearly a sectional, or perhaps national, university rather than one serving primarily Louisiana citizens. Only 27.2 per cent of Tulane freshmen were from Louisiana, with 15.7 per cent from Orleans Parish.

Given this geographical pattern, plus limited enrollments, it is clear that the private institutions do not, and cannot be expected to, absorb a very significant portion of Louisiana's college freshmen. By way of contrast, however, the State's public institutions as a whole are geared very narrowly to in-state students. Only Grambling (12.4 per cent), LSUBR (14.9 per cent), and Louisiana Tech (10.5 per cent) drew as much as 10 per cent of their freshman students from outside the State's boundaries. Many public institutions attracted almost entirely instate freshmen.

A second aspect of Concept III districts is that they shed further light on the question of whether an institution is primarily regional or state-wide in character. In answering this question one should consider not only the number of parishes and percentage of freshmen from each parish in the district, but also the percentage of freshmen from "other" parishes since a high figure here indicates a wide geographical pattern of small numbers of students from many different parishes.

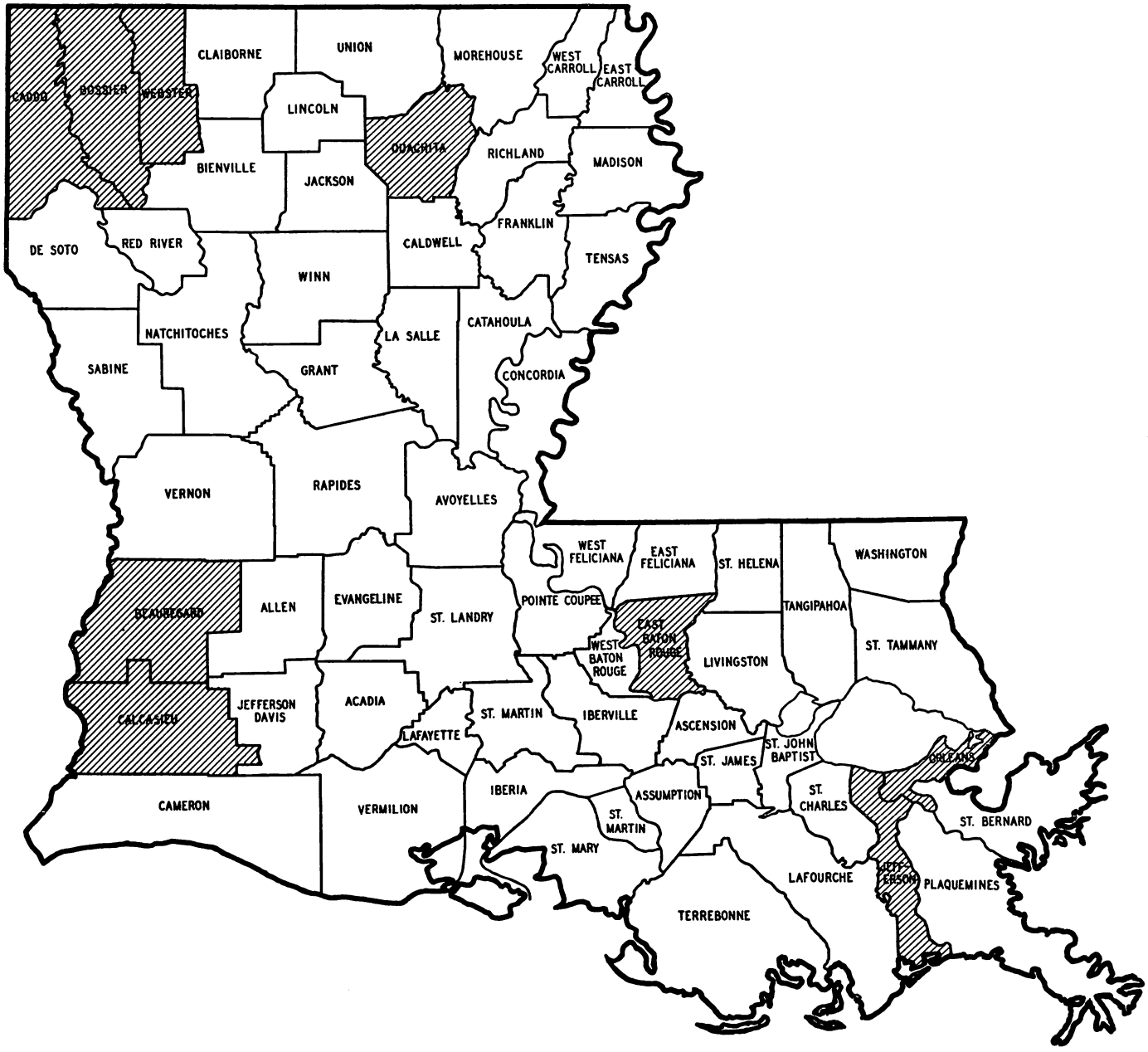
Based on Concept III districts, it appears that among state-supported institutions Grambling, LSUBR, Louisiana Tech, Northeast, Northwestern, and Southern-BR drew students over the widest geographical areas; at the other extreme, LSUA, LSUE, LSUS, Southern-NO, and Southern-S served only a few parishes and are primarily commuter-type institutions. Well over half of the freshmen in each of the latter institutions came from the parish in which the institution is located. Some 76.2 per cent of the freshmen at LSUA were from Rapides Parish; 60.9 per cent at LSUNO from Orleans (and 30.8 per cent from Jefferson); 76.8 per cent at LSUS from Caddo; 84.9 per cent at Southern-NO from Orleans; and 82.8 per cent at Southern-S from Caddo.

Of the institutions under the State Board of Education, F. T. Nicholls (South and Southeast Louisiana), McNeese (Southwest Louisiana), and Southeastern (Southeast Louisiana) attracted students from the most narrowly defined geographical regions. McNeese, in particular, showed a strong regional pattern, with 65.3 per cent of its freshmen from Calcasieu Parish alone.

PRIVATE INSTITUTIONS

Per Cent of Total Freshmen from Selected Parishes

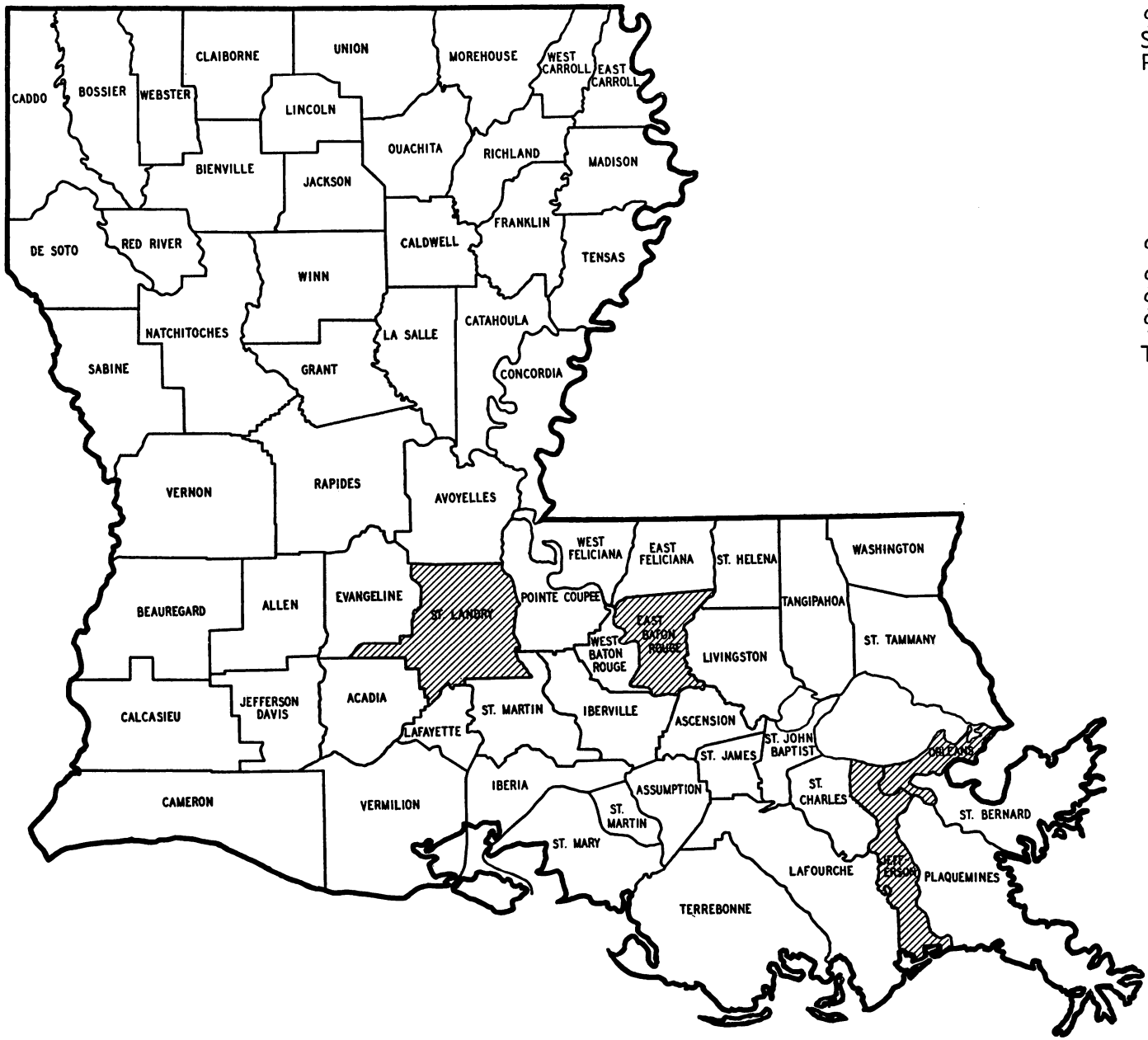
CENTENARY



% from Selected Parishes	
1. Caddo	26.8
2. Orleans	4.6
3. Bossier	3.5
4. Beauregard	2.0
5. Ouachita	2.0
6. Jefferson	1.7
7. Calcasieu	1.3
8. Webster	1.3
9. East Baton Rouge	1.1
	44.3
% from Other Parishes	8.9
% from Louisiana	53.2
% from Other States	43.7
% Foreign	3.1
Total	100.0

Per Cent of Total Freshmen from Selected Parishes

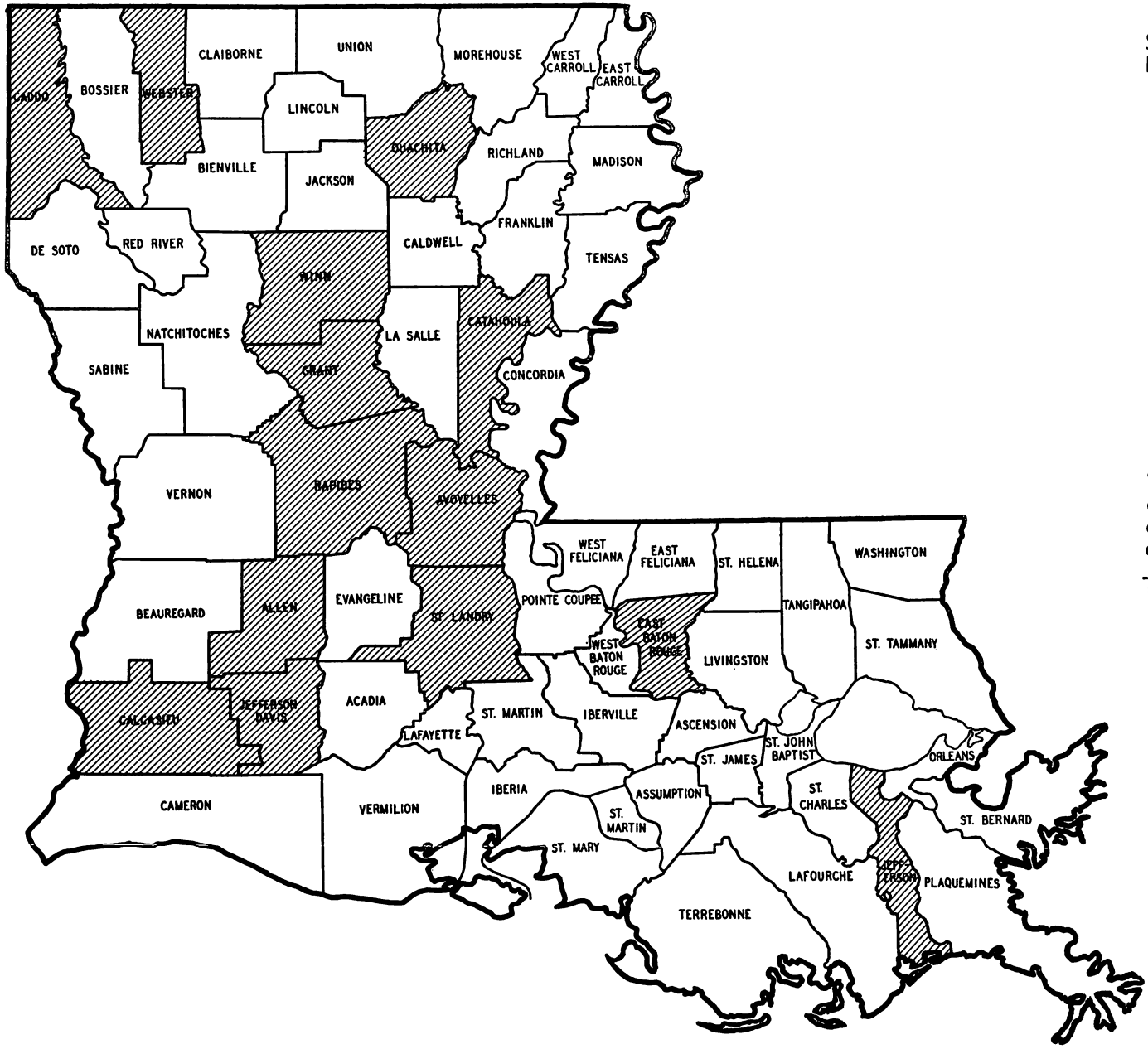
DILLARD



	% from Selected Parishes
1. Orleans	35.6
2. Jefferson	2.4
3. East Baton Rouge	2.2
4. St. Landry	1.0
	41.2
% from Other Parishes	6.1
% Louisiana	47.3
% from Other States	52.3
% Foreign	.4
Total	100.0

Per Cent of Total Freshmen from Selected Parishes

LOUISIANA COLLEGE



% from Selected Parishes	
1. Rapides	35.4
2. East Baton Rouge	7.7
3. Caddo	6.9
4. Grant	3.4
5. Avoyelles	2.8
6. Jefferson	2.6
7. Catahoula	2.2
8. Calcasieu	2.0
9. Ouachita	2.0
10. Allen	1.8
11. Jefferson Davis	1.6
12. Webster	1.4
13. St. Landry	1.2
14. Winn	1.2
	72.2
% from Other Parishes	16.5
% from Louisiana	88.7
% from Other States	9.7
% Foreign	1.6
Total	100.0

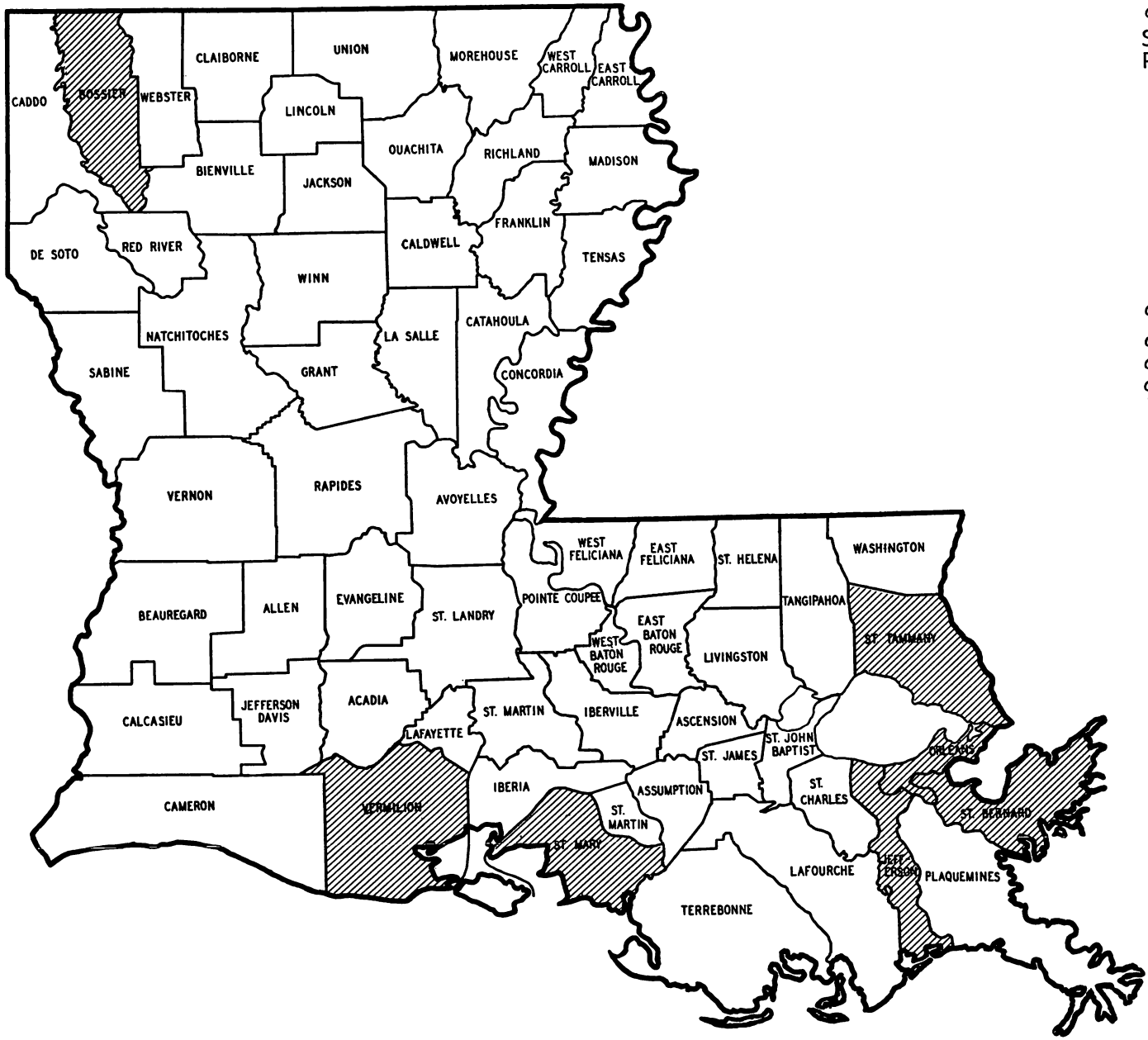
Per Cent of Total Freshmen from Selected Parishes

LOYOLA

% from Selected Parishes	
1. Orleans	38.3
2. Jefferson	9.5
3. St. Tammany	1.2
	49.0
% from Other Parishes	4.0
% from Louisiana	53.0
% from Other States	44.1
% Foreign	2.9
Total	100.0

Per Cent of Total Freshmen from Selected Parishes

ST. MARY'S DOMINICAN



% from Selected Parishes	
1. Orleans	20.3
2. Jefferson	8.8
3. St. Mary	2.8
4. Vermilion	2.0
5. Bossier	1.6
6. St. Bernard	1.2
7. St. Tammany	1.2
	37.9
% from Other Parishes	4.3
% from Louisiana	42.2
% from Other States	48.6
% Foreign	9.2
Total	100.0

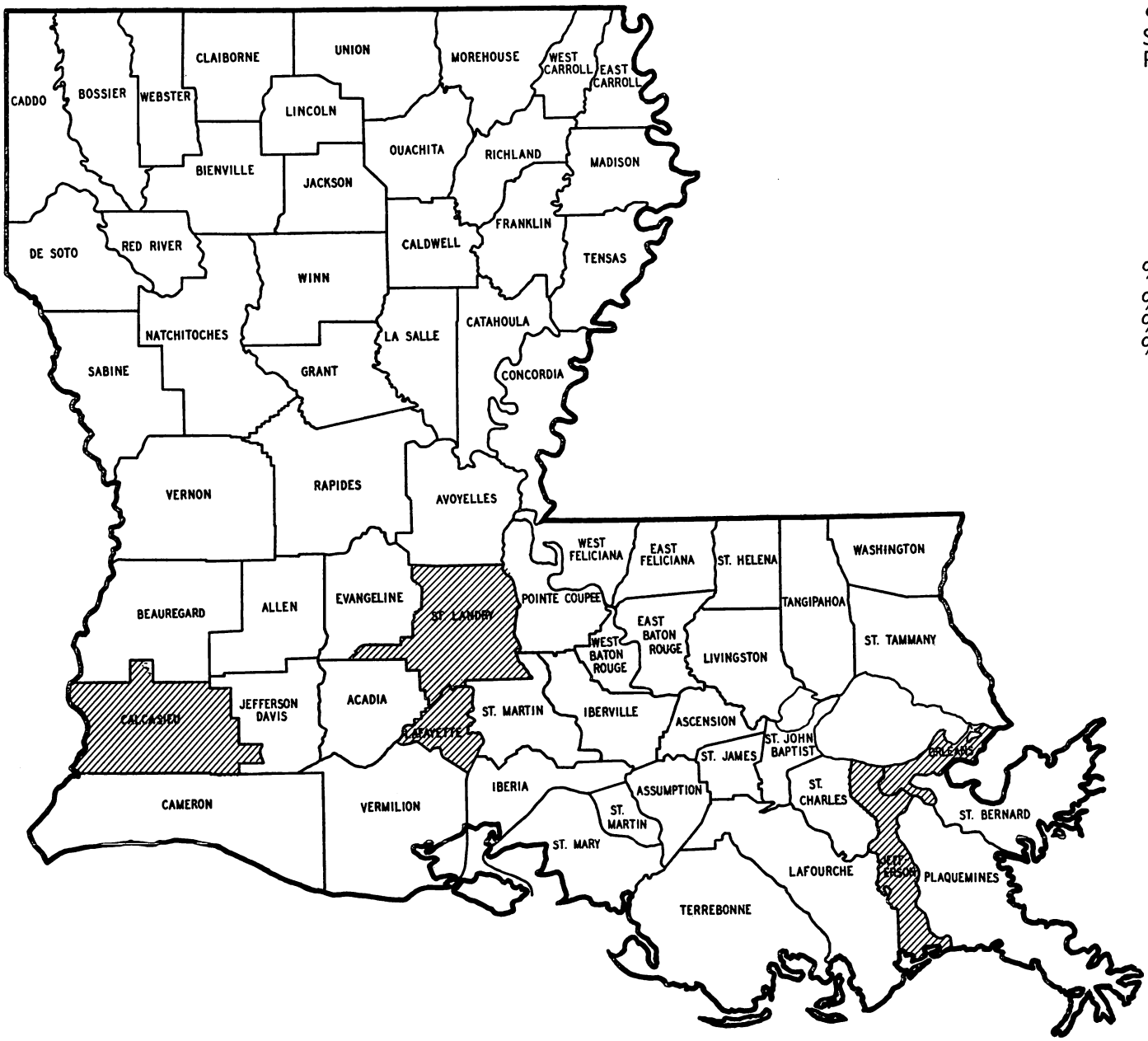
Per Cent of Total Freshmen from Selected Parishes

TULANE

% from Selected Parishes	
1. Orleans	15.7
2. Jefferson	3.7
3. East Baton Rouge	1.3
	20.7
% from Other Parishes	6.5
% from Louisiana	27.2
% from Other States	70.1
% Foreign	2.7
Total	100.0

Per Cent of Total Freshmen from Selected Parishes

XAVIER

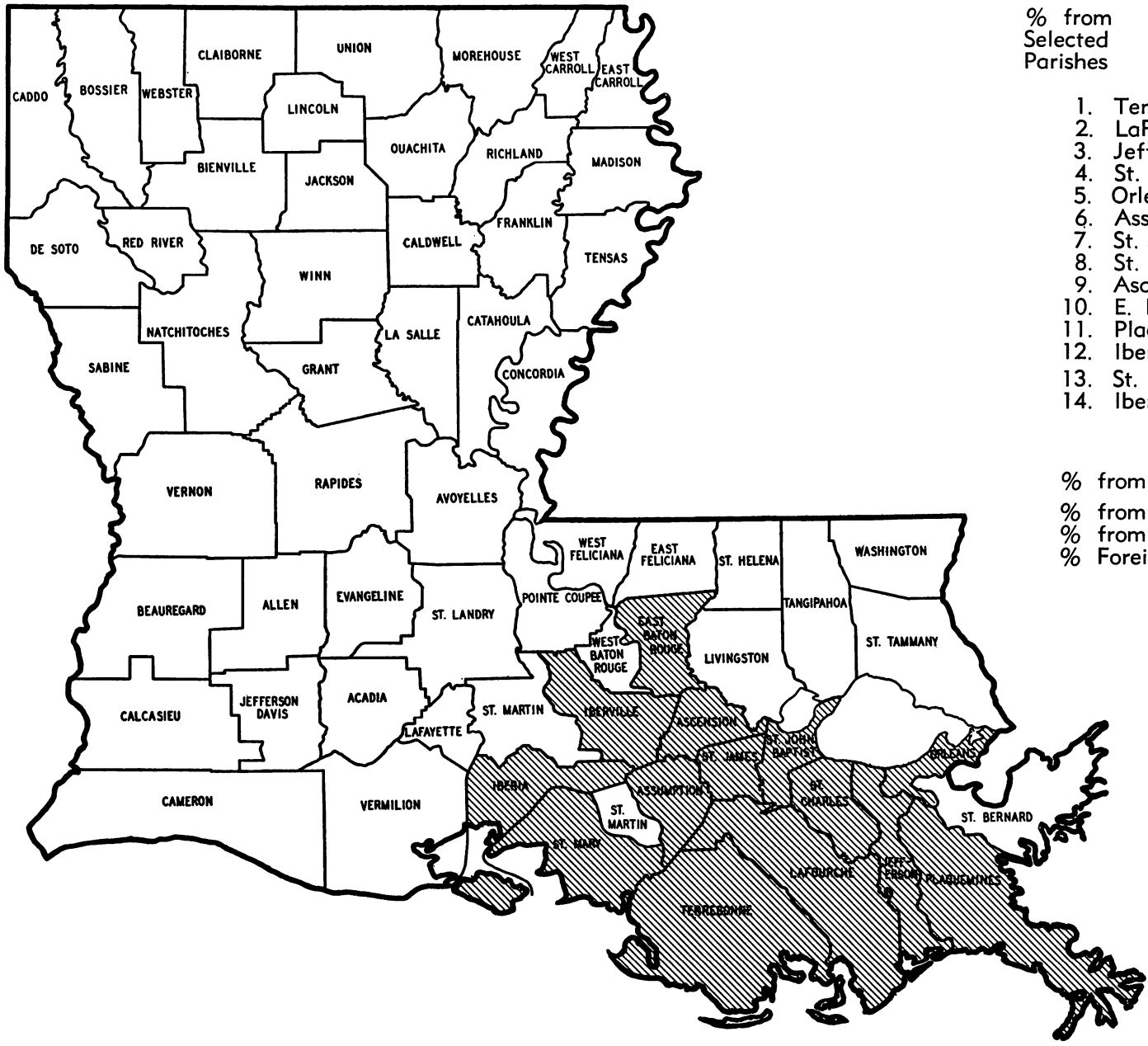


% from Selected Parishes	
1. Orleans	58.4
2. St. Landry	3.3
3. Jefferson	2.6
4. Calcasieu	2.0
5. Lafayette	1.3
	67.6
% from Other Parishes	5.6
% from Louisiana	73.2
% from Other States	25.5
% Foreign	1.3
Total	100.0

PUBLIC INSTITUTIONS

Per Cent of Total Freshmen from Selected Parishes

NICHOLLS

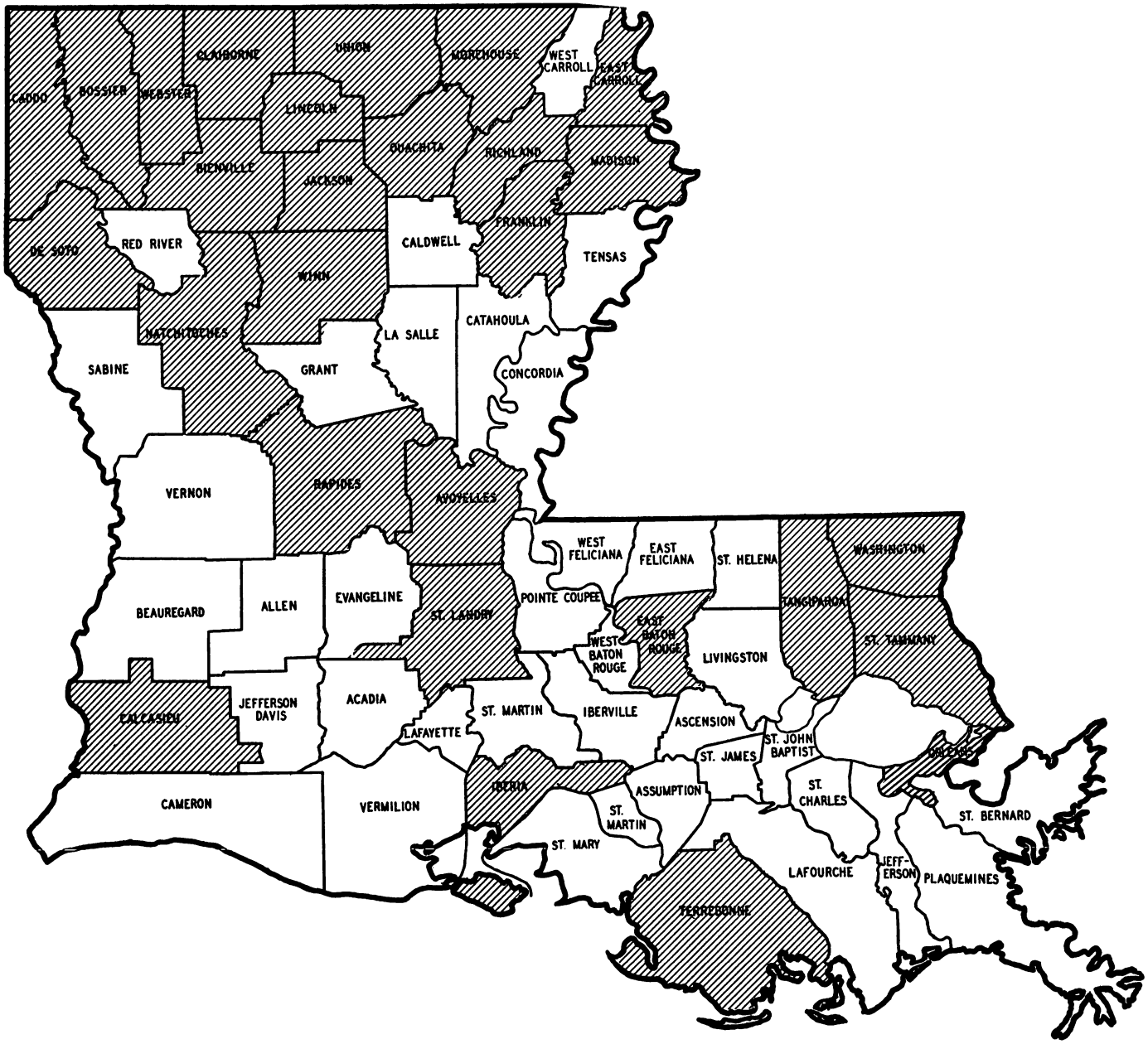


	% from Selected Parishes	
1.	Terrebonne	21.3
2.	LaFourche	20.8
3.	Jefferson	9.7
4.	St. Mary	8.8
5.	Orleans	7.1
6.	Assumption	4.9
7.	St. James	4.6
8.	St. Charles	4.1
9.	Ascension	2.8
10.	E. Baton Rouge	2.4
11.	Plaquemines	2.4
12.	Iberville	2.1
13.	St. John	2.0
14.	Iberia	1.0
		94.0
	% from Other Parishes	4.0
	% from Louisiana	98.0
	% from Other States	1.3
	% Foreign	0.7
	Total	100.0

91.0%

Per Cent of Total Freshmen from Selected Parishes

GRAMBLING

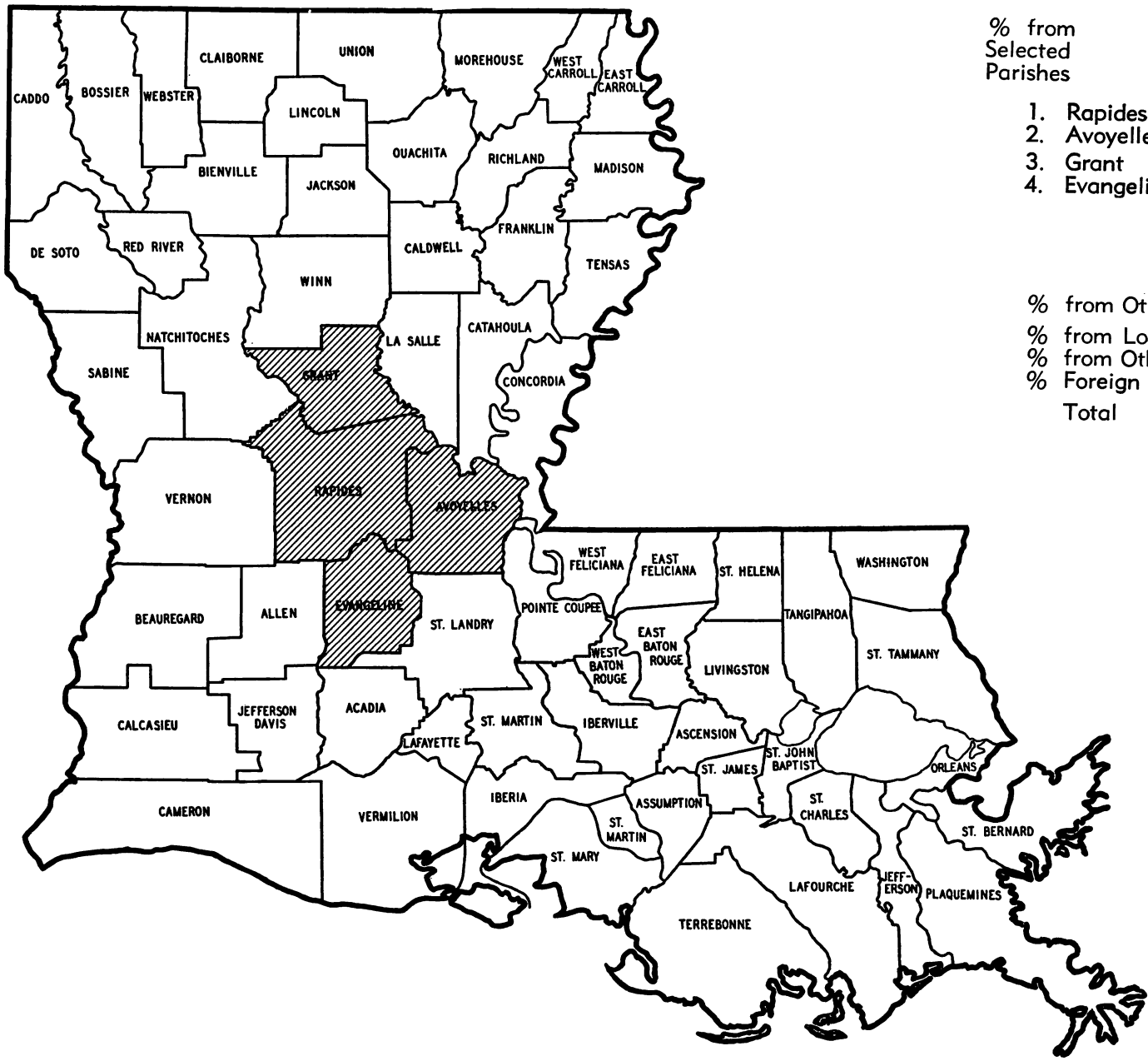


	% from Selected Parishes
1. Lincoln	7.0
2. Caddo	6.4
3. Ouachita	5.9
4. Rapides	4.7
5. Orleans	4.1
6. Morehouse	3.3
7. Webster	3.3
8. Bienville	2.8
9. De Soto	2.7
10. Iberia	2.7
11. Claiborne	2.6
12. Union	2.6
13. Natchitoches	2.3
14. St. Landry	2.0
15. East Baton Rouge	1.9
16. Washington	1.9
17. Calcasieu	1.7
18. East Carroll	1.7
19. Franklin	1.7
20. Madison	1.6
21. Jackson	1.5
22. Tangipahoa	1.5
23. Avoyelles	1.3
24. Terrebonne	1.3
25. Richland	1.2
26. Bossier	1.1
27. St. Tammany	1.1
28. Winn	1.0
	72.9

% from Other Parishes	14.7
% from Louisiana	87.6
% from Other States	12.4
% Foreign	0.0
Total	100.0

Per Cent of Total Freshmen from Selected Parishes

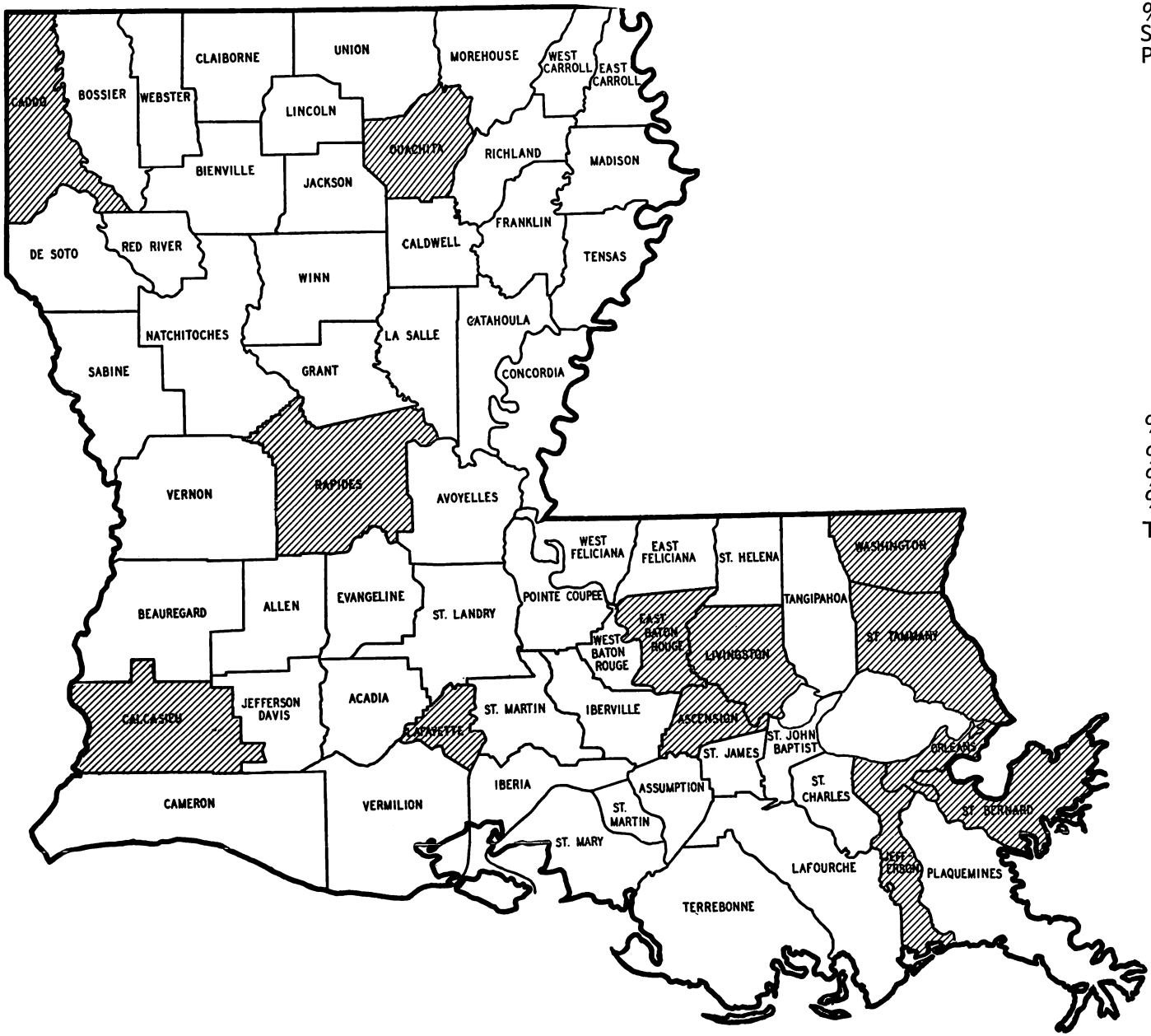
L.S.U. at ALEXANDRIA



	% from Selected Parishes	
1. Rapides	76.2	
2. Avoyelles	15.8	92.0%
3. Grant	2.3	
4. Evangeline	1.8	
	96.1	
% from Other Parishes	3.5	
% from Louisiana	99.6	
% from Other States	0.3	
% Foreign	0.1	
Total	100.0	

Per Cent of Total Freshmen from Selected Parishes

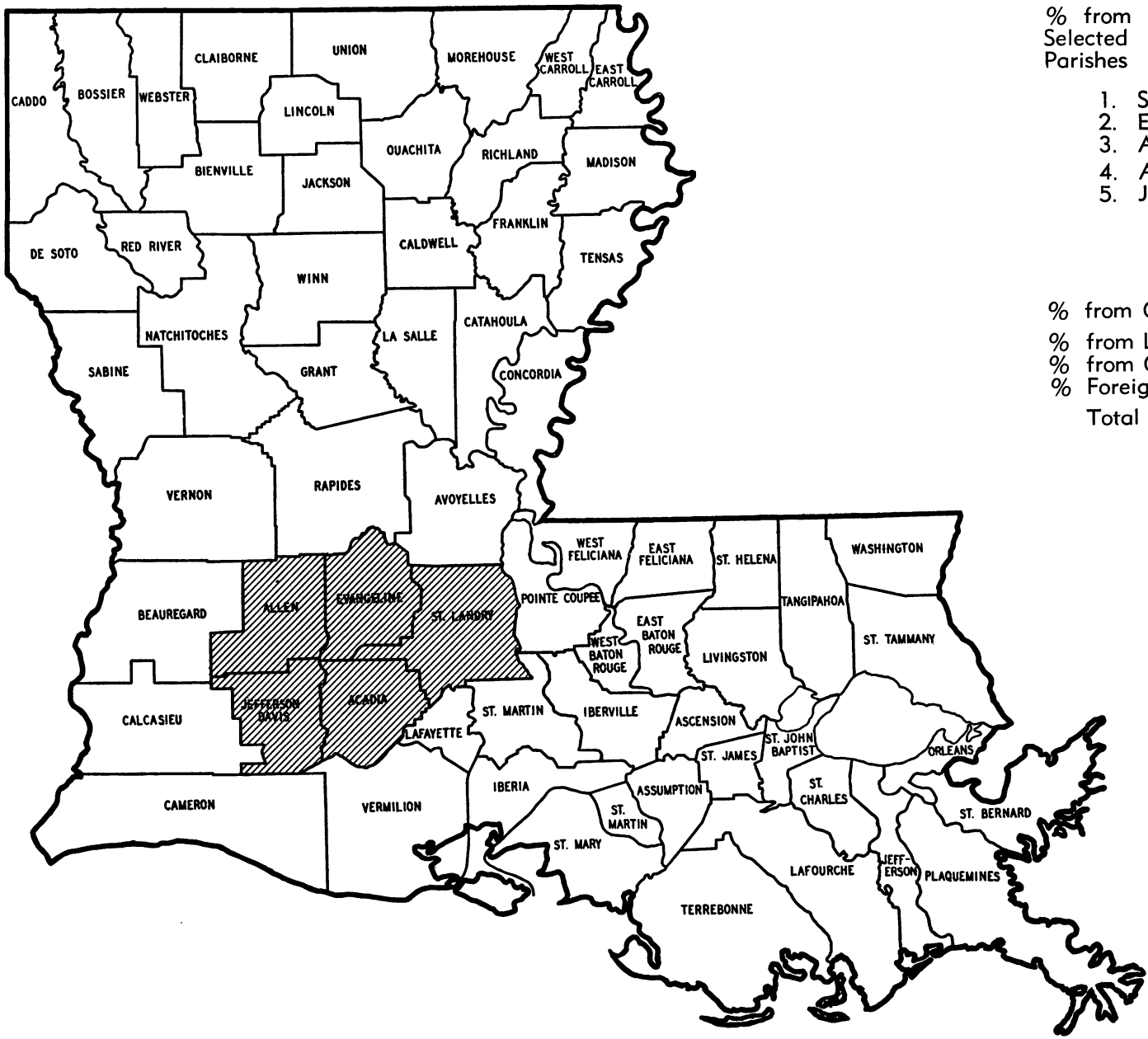
L.S.U at BATON ROUGE



% from Selected Parishes	
1. East Baton Rouge	32.5
2. Orleans	13.6
3. Jefferson	6.1
4. Caddo	3.9
5. St. Tammany	2.4
6. Calcasieu	1.5
7. Ascension	1.4
8. Washington	1.4
9. Lafayette	1.3
10. Livingston	1.1
11. Ouachita	1.1
12. Rapides	1.1
13. St. Bernard	1.0
	68.4
% from Other Parishes	16.7
% from Louisiana	85.1
% from Other States	12.3
% Foreign	2.6
Total	100.0

Per Cent of Total Freshmen from Selected Parishes

L.S.U. at EUNICE

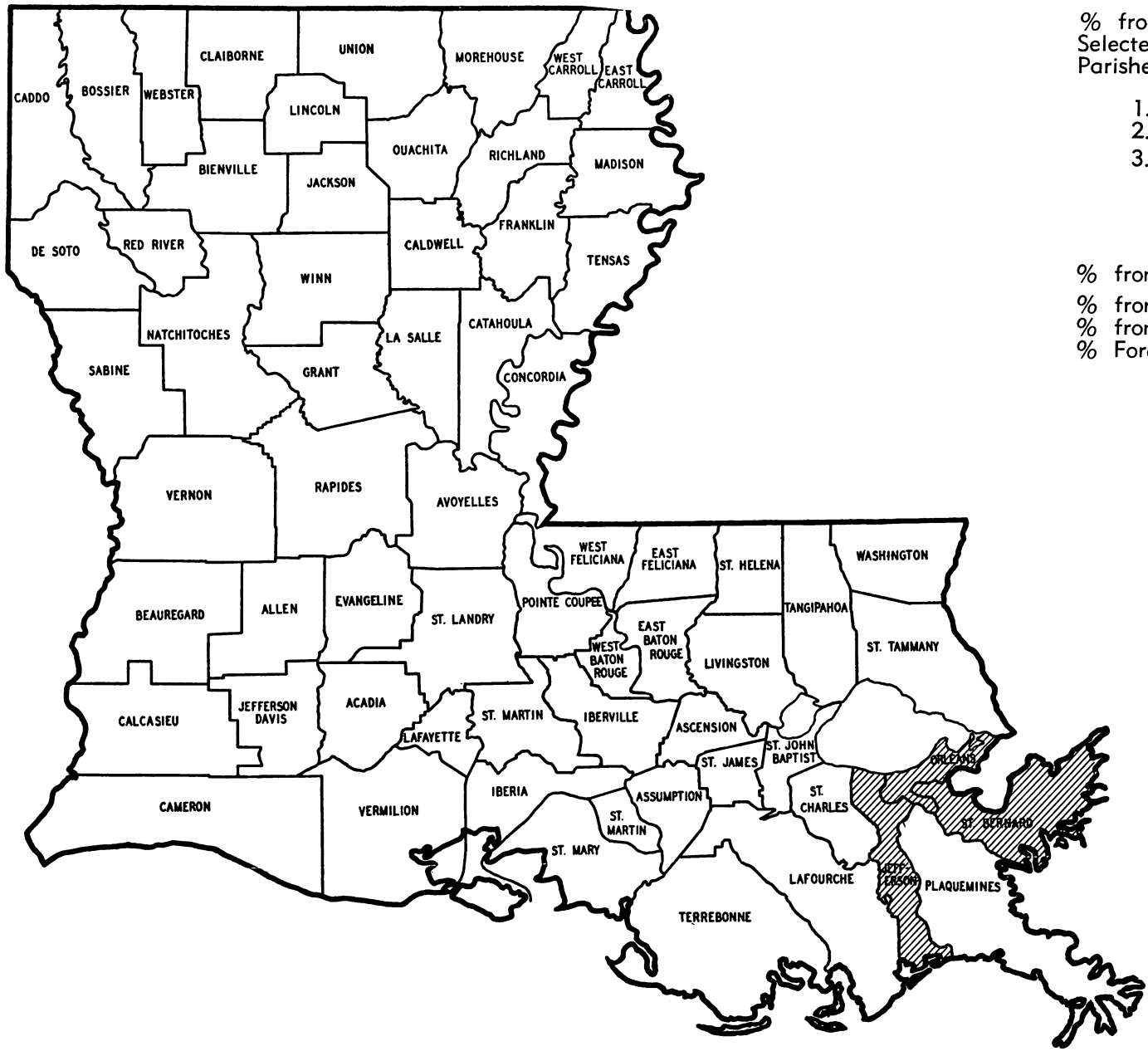


% from Selected Parishes			
1.	St. Landry	60.9	
2.	Evangeline	18.2	
3.	Acadia	15.0	94.1%
4.	Allen	2.3	
5.	Jeff. Davis	2.3	
		98.7	

%	from Other Parishes	1.1
%	from Louisiana	99.8
%	from Other States	0.1
%	Foreign	0.1
	Total	100.0

Per Cent of Total Freshmen from Selected Parishes

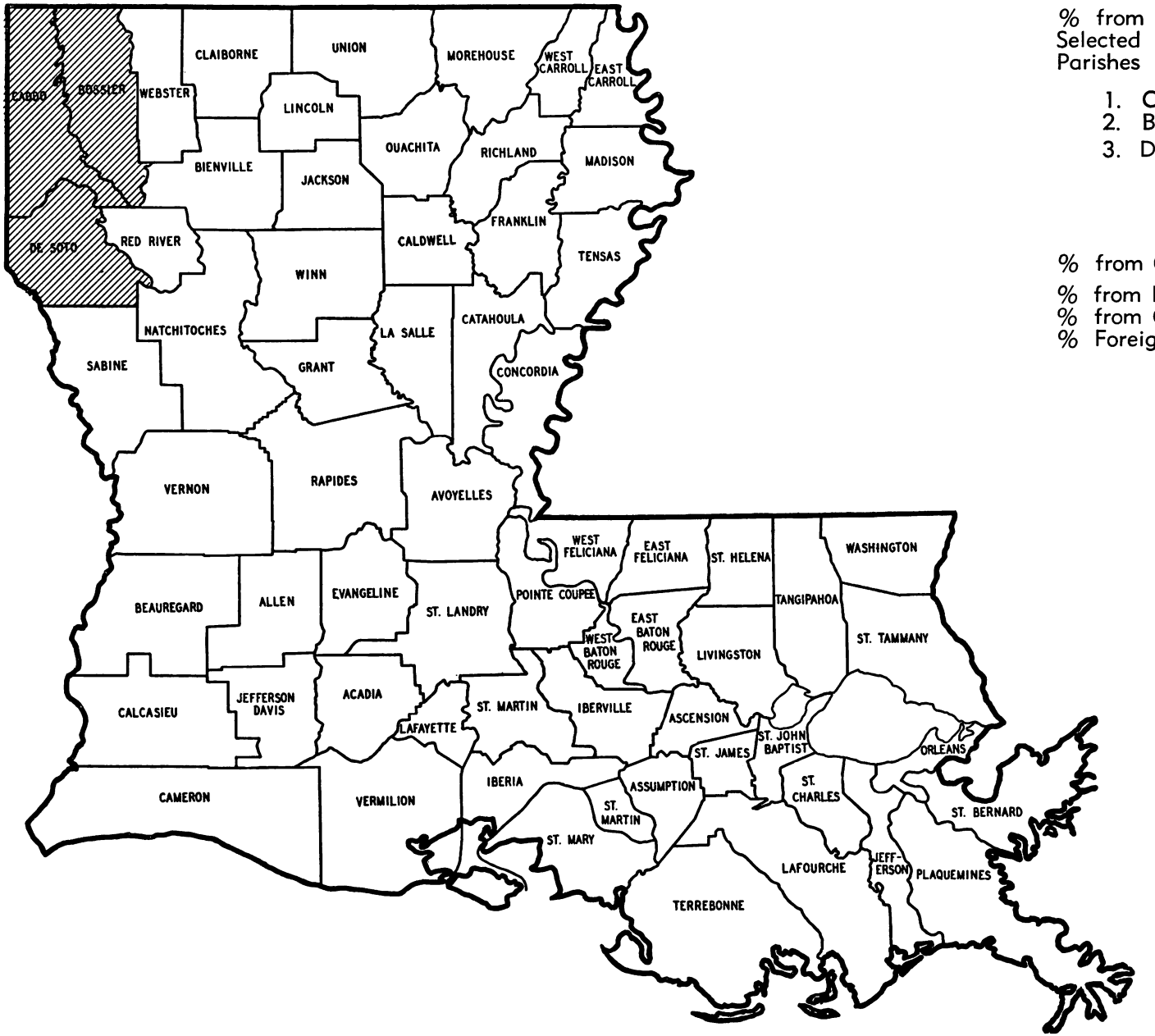
L.S.U. at NEW ORLEANS



% from Selected Parishes		
1. Orleans	60.6	
2. Jefferson	30.8	91.4%
3. St. Bernard	4.1	
	95.5	
% from Other Parishes	2.8	
% from Louisiana	98.3	
% from Other States	1.3	
% Foreign	0.4	
Total	100.0	

Per Cent of Total Freshmen from Selected Parishes

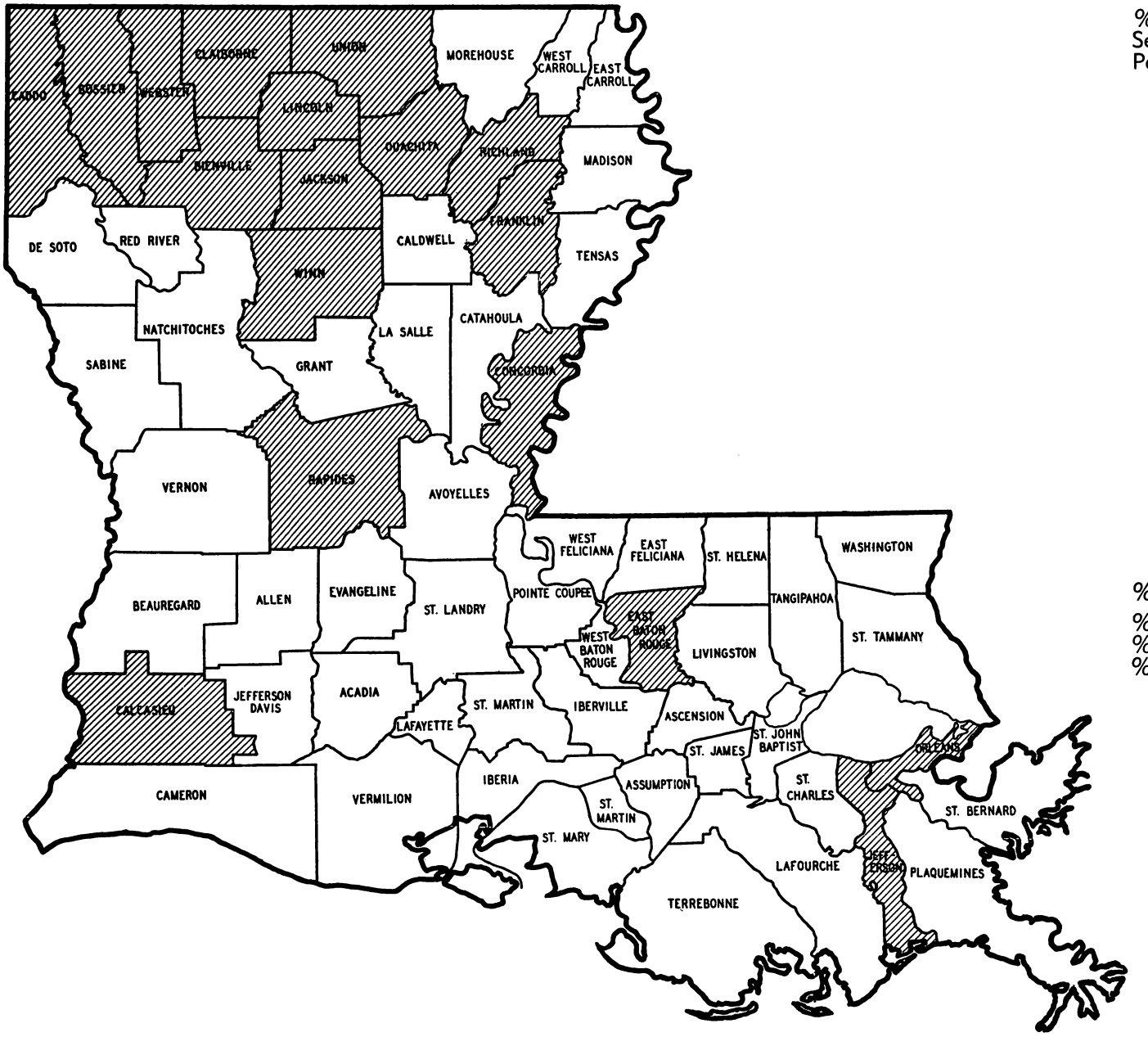
L.S.U. at SHREVEPORT



% from Selected Parishes		
1. Caddo	76.8	
2. Bossier	13.1	89.9%
3. De Soto	1.2	
	91.1	
% from Other Parishes	5.8	
% from Louisiana	96.9	
% from Other States	2.8	
% Foreign	0.3	
Total	100.0	

Per Cent of Total Freshmen from Selected Parishes

LOUISIANA TECH

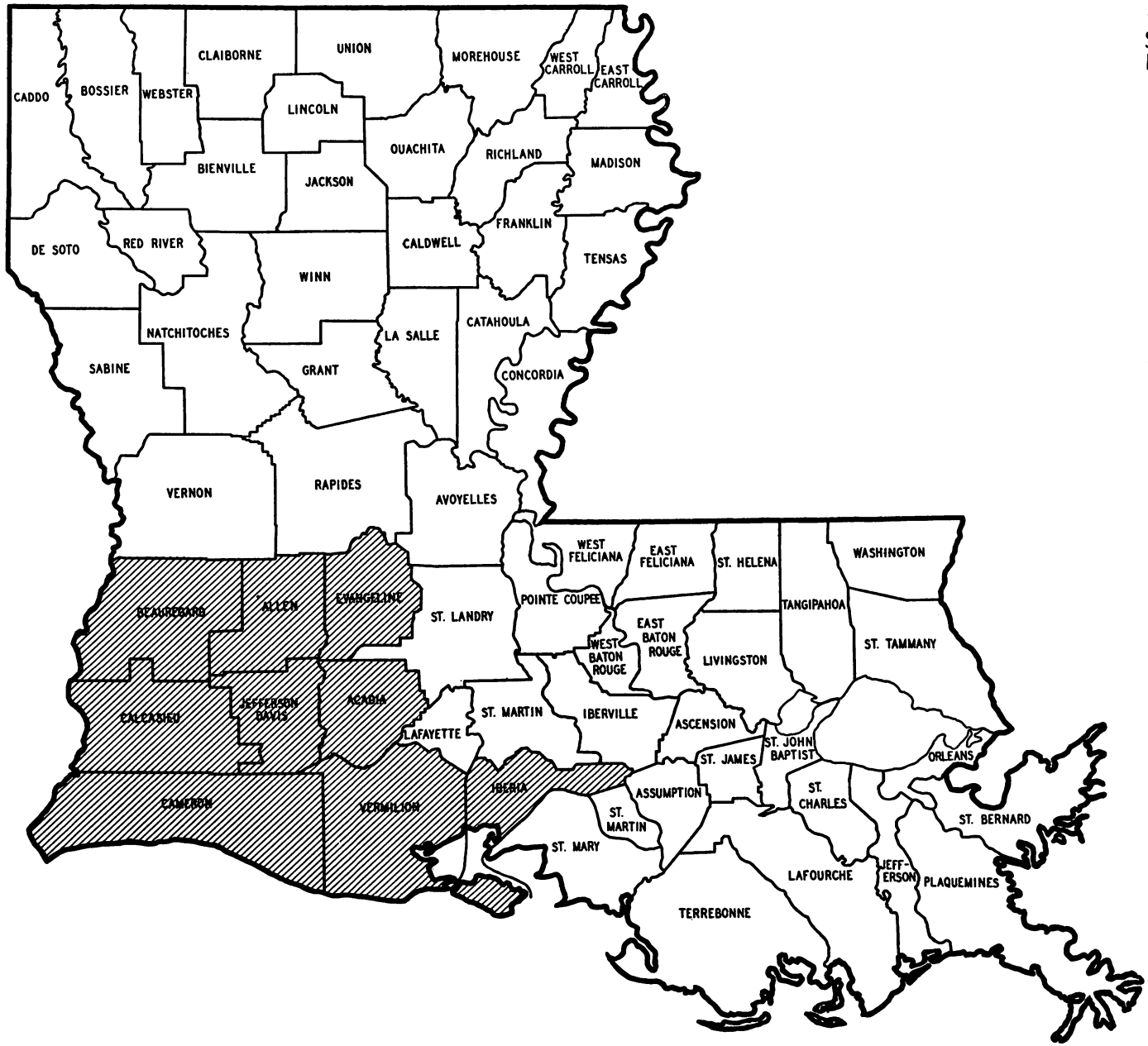


% from Selected Parishes	
1. Caddo	14.9
2. Lincoln	12.0
3. Bossier	6.9
4. Webster	5.5
5. East Baton Rouge	4.1
6. Union	3.9
7. Rapides	3.8
8. Ouachita	3.5
9. Jackson	3.1
10. Jefferson	2.7
11. Bienville	2.6
12. Claiborne	2.5
13. Orleans	2.5
14. Concordia	1.5
15. Richland	1.5
16. Calcasieu	1.4
17. Franklin	1.2
18. Winn	1.2
	74.8

% from Other Parishes	14.7
% from Louisiana	89.5
% from Other States	9.9
% Foreign	.6
Total	100.0

Per Cent of Total Freshmen from Selected Parishes

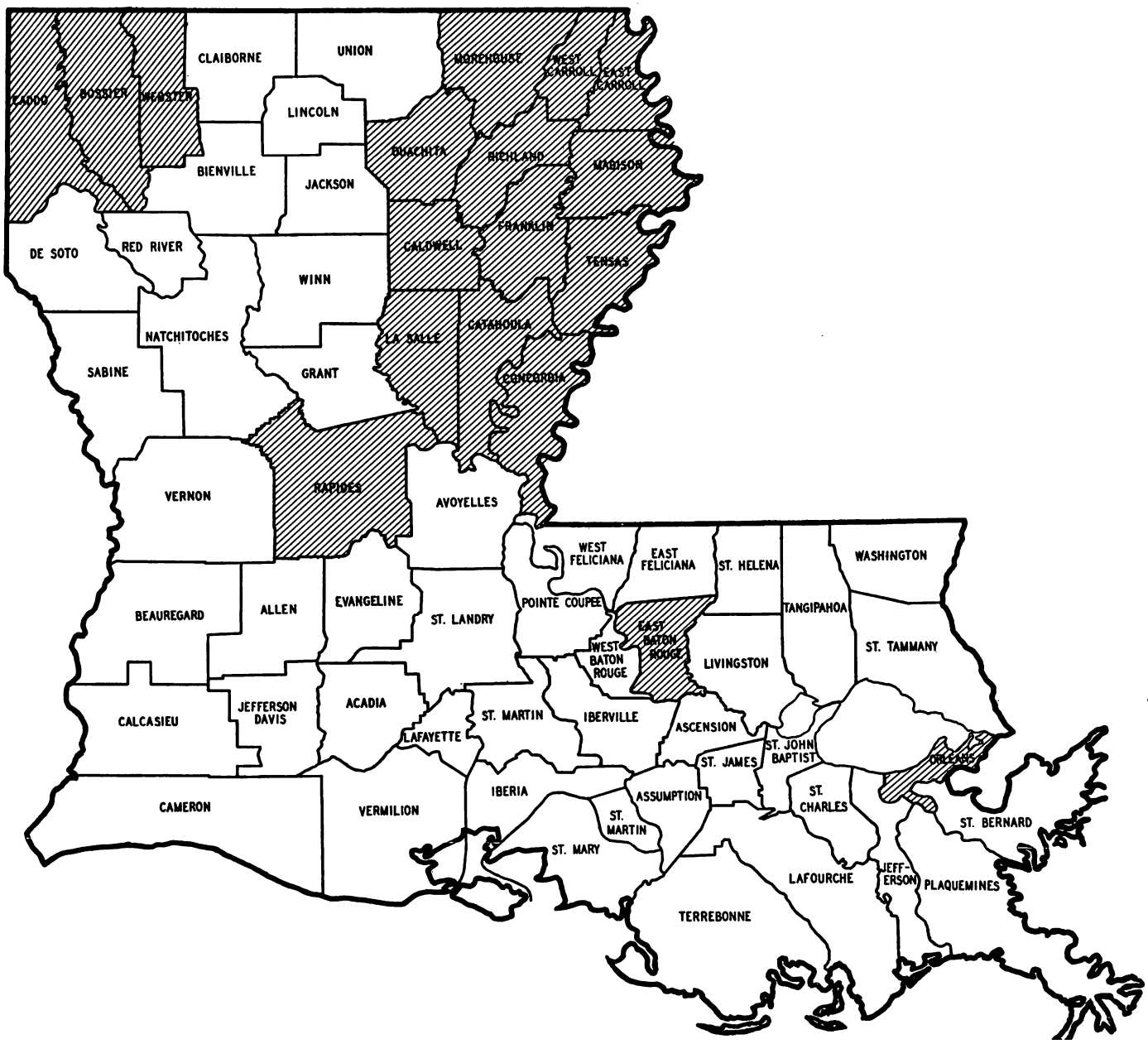
McNEESE



% from Selected Parishes	
1. Calcasieu	65.3
2. Jefferson Davis	6.2
3. Beauregard	3.8
4. Allen	3.4
5. Acadia	3.2
6. Cameron	2.3
7. Evangeline	1.6
8. Vermilion	1.5
9. Iberia	1.2
	88.5
% from Other Parishes	7.6
% from Louisiana	96.1
% from Other States	3.7
% Foreign	0.2
Total	100.0

Per Cent of Total Freshmen from Selected Parishes

NORTHEAST

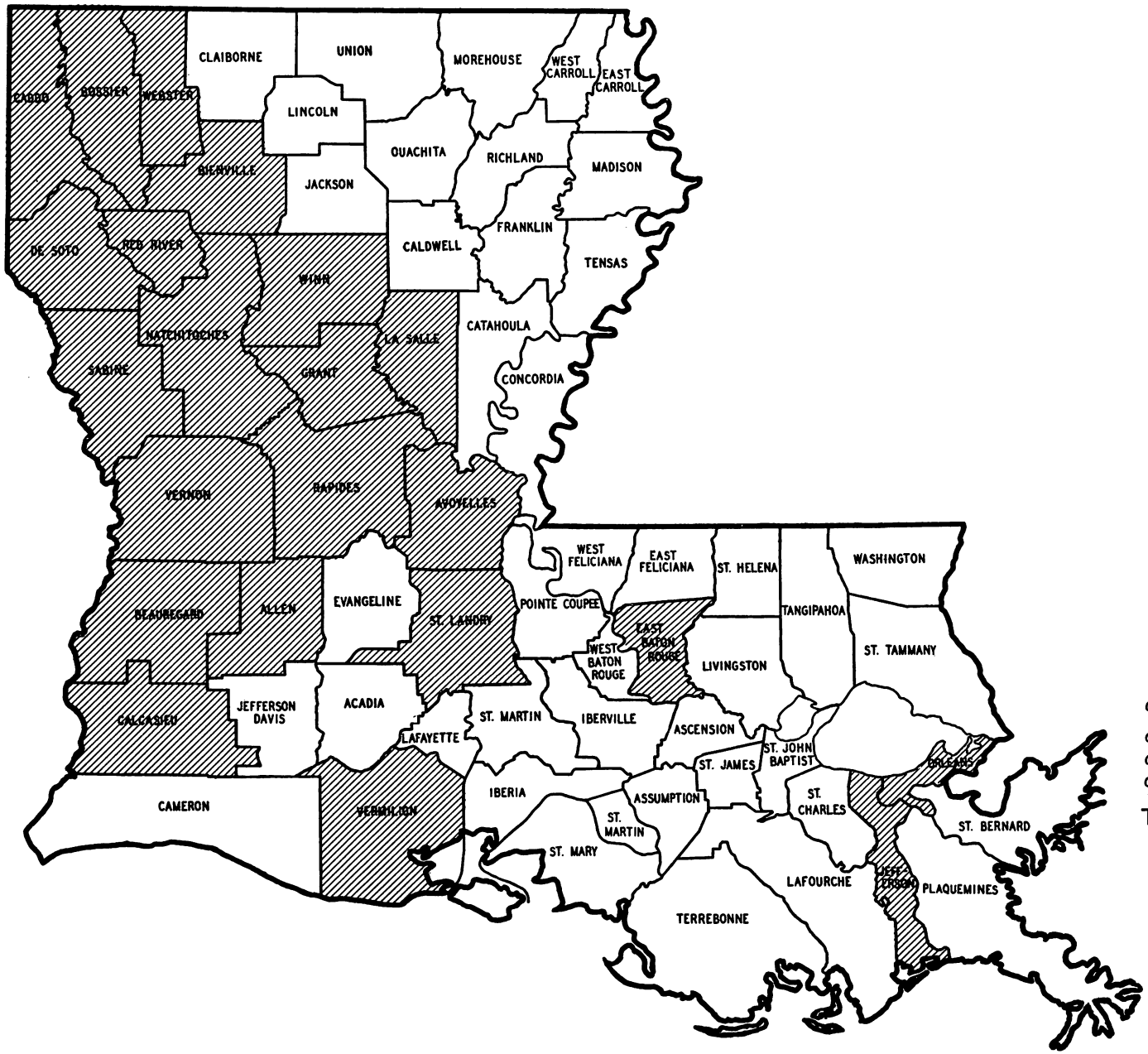


% from Selected Parishes	
1. Ouachita	39.3
2. Morehouse	5.7
3. Richland	4.8
4. Caddo	4.8
5. Franklin	3.4
6. Rapides	3.0
7. Concordia	2.3
8. W. Carroll	2.2
9. E. Baton Rouge	2.2
10. E. Carroll	1.6
11. Madison	1.6
12. Catahoula	1.5
13. Orleans	1.5
14. Caldwell	1.4
15. LaSalle	1.4
16. Webster	1.4
17. Bossier	1.2
18. Tensas	1.1
	80.4

% from Other Parishes	11.6
% from Louisiana	92.0
% from Other States	7.7
% Foreign	0.3
Total	100.0

Per Cent of Total Freshmen from Selected Parishes

NORTHWESTERN

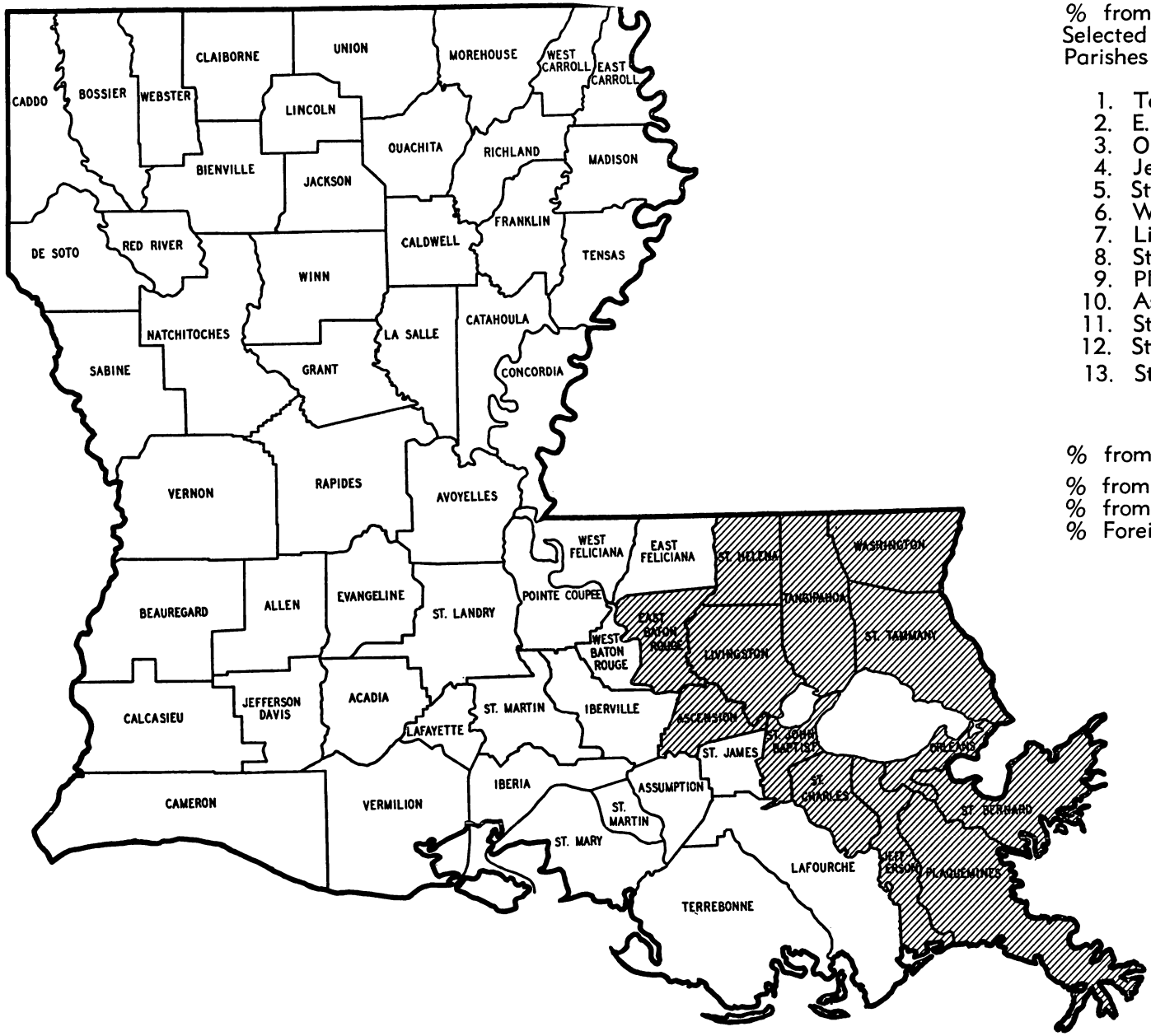


% from Selected Parishes	
1. Caddo	13.9
2. Natchitoches	13.7
3. Rapides	7.6
4. Vernon	5.5
5. Bossier	4.8
6. Sabine	4.6
7. E. Baton Rouge	4.2
8. Webster	3.2
9. Winn	3.0
10. DeSoto	2.6
11. Beauregard	2.2
12. Red River	2.1
13. Grant	1.8
14. Avoyelles	1.8
15. Allen	1.8
16. Calcasieu	1.7
17. LaSalle	1.5
18. Jefferson	1.4
19. St. Landry	1.3
20. Vermilion	1.3
21. Orleans	1.3
22. Bienville	1.1
	82.4

% from Other Parishes	10.8
% from Louisiana	93.2
% from Other States	6.4
% Foreign	0.4
Total	100.0

Per Cent of Total Freshmen from Selected Parishes

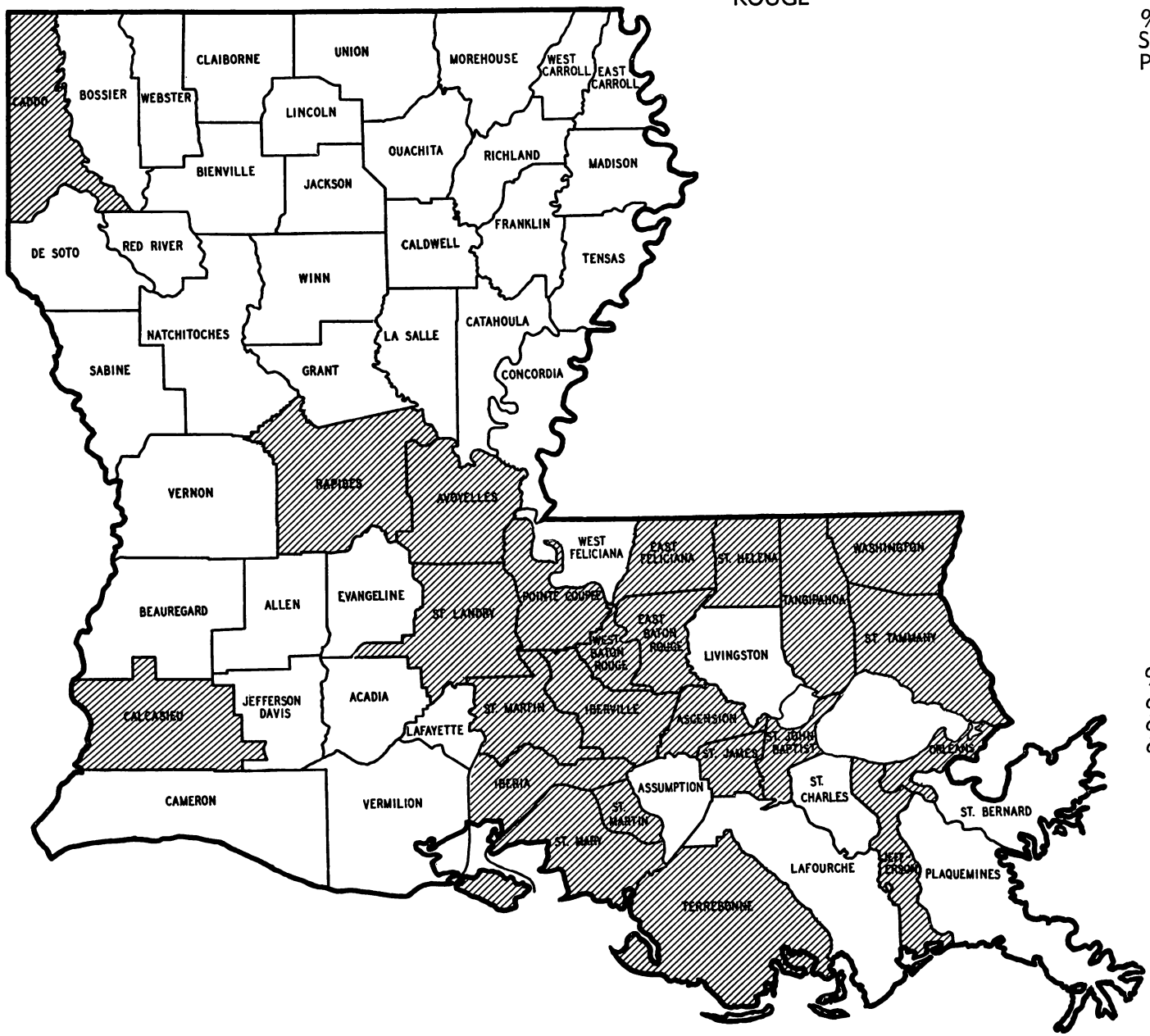
SOUTHEASTERN



	% from Selected Parishes		
1.	Tangipahoa	20.6	
2.	E. Baton Rouge	13.3	
3.	Orleans	12.7	
4.	Jefferson	11.7	
5.	St. Tammany	9.3	
6.	Washington	7.6	
7.	Livingston	7.4	
8.	St. Bernard	2.3	
9.	Plaquemines	1.6	
10.	Ascension	1.5	
11.	St. Helena	1.4	
12.	St. John	1.4	90.8%
13.	St. Charles	1.3	
		92.1	
	% from Other Parishes	4.3	
	% from Louisiana	96.4	
	% from Other States	1.9	
	% Foreign	1.7	
	Total	100.0	

Per Cent of Total Freshmen from Selected Parishes

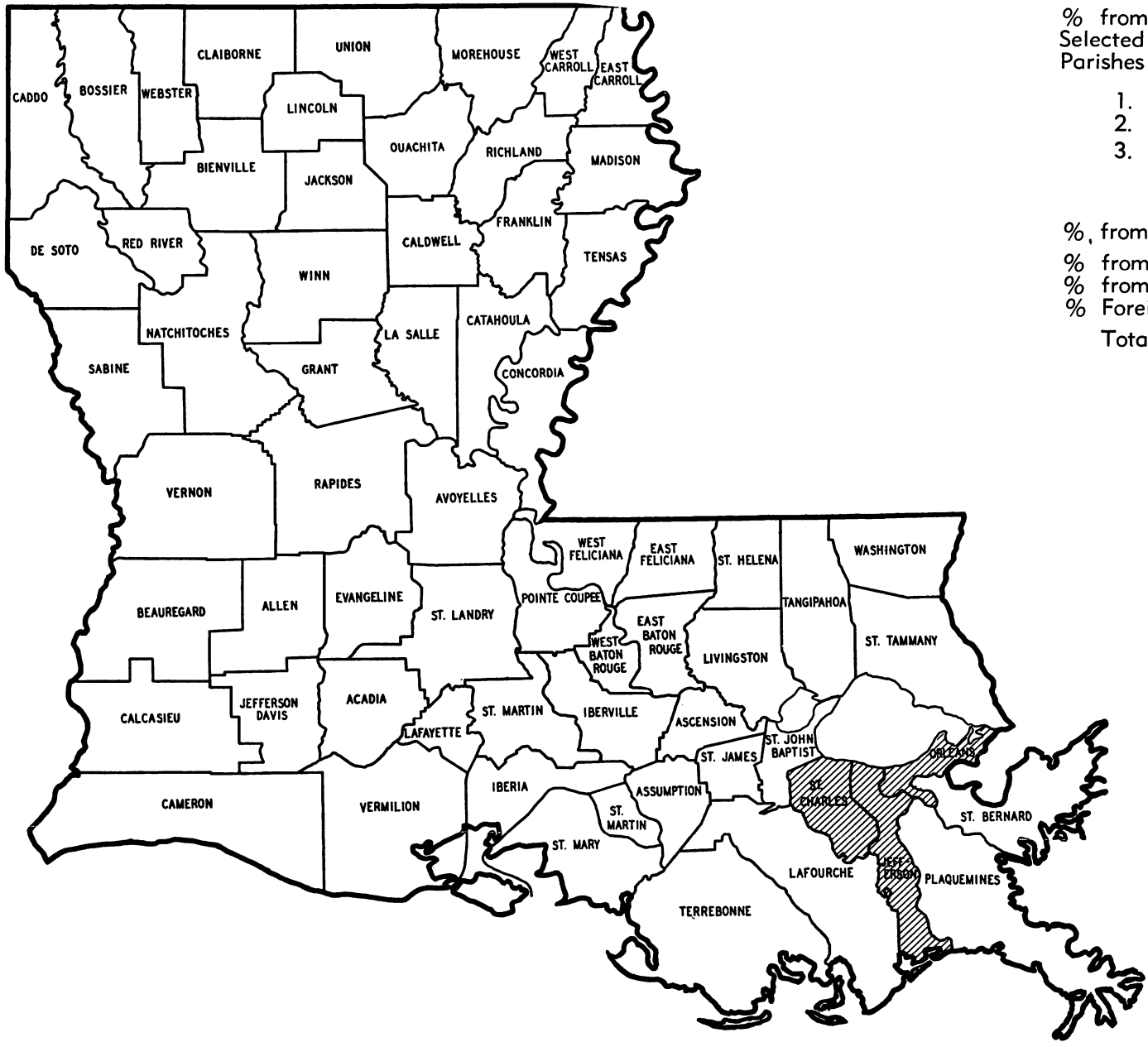
SOUTHERN at BATON ROUGE



	% from Selected Parishes
1. East Baton Rouge	28.1
2. Orleans	5.2
3. St. Landry	4.8
4. Iberville	3.9
5. Tangipahoa	3.7
6. Caddo	2.7
7. Pointe Coupee	2.4
8. Ascension	2.2
9. St. James	2.2
10. Washington	2.2
11. Rapides	2.1
12. St. John	1.9
13. East Feliciana	1.8
14. Calcasieu	1.8
15. West Baton Rouge	1.5
16. St. Martin	1.4
17. Iberia	1.3
18. St. Helena	1.3
19. Avoyelles	1.2
20. Jefferson	1.1
21. St. Mary	1.1
22. St. Tammany	1.0
23. Terrebonne	1.0
	75.9
% from Other Parishes	18.4
% from Louisiana	94.3
% from Other States	5.6
% Foreign	0.1
Total	100.0

Per Cent of Total Freshmen from Selected Parishes

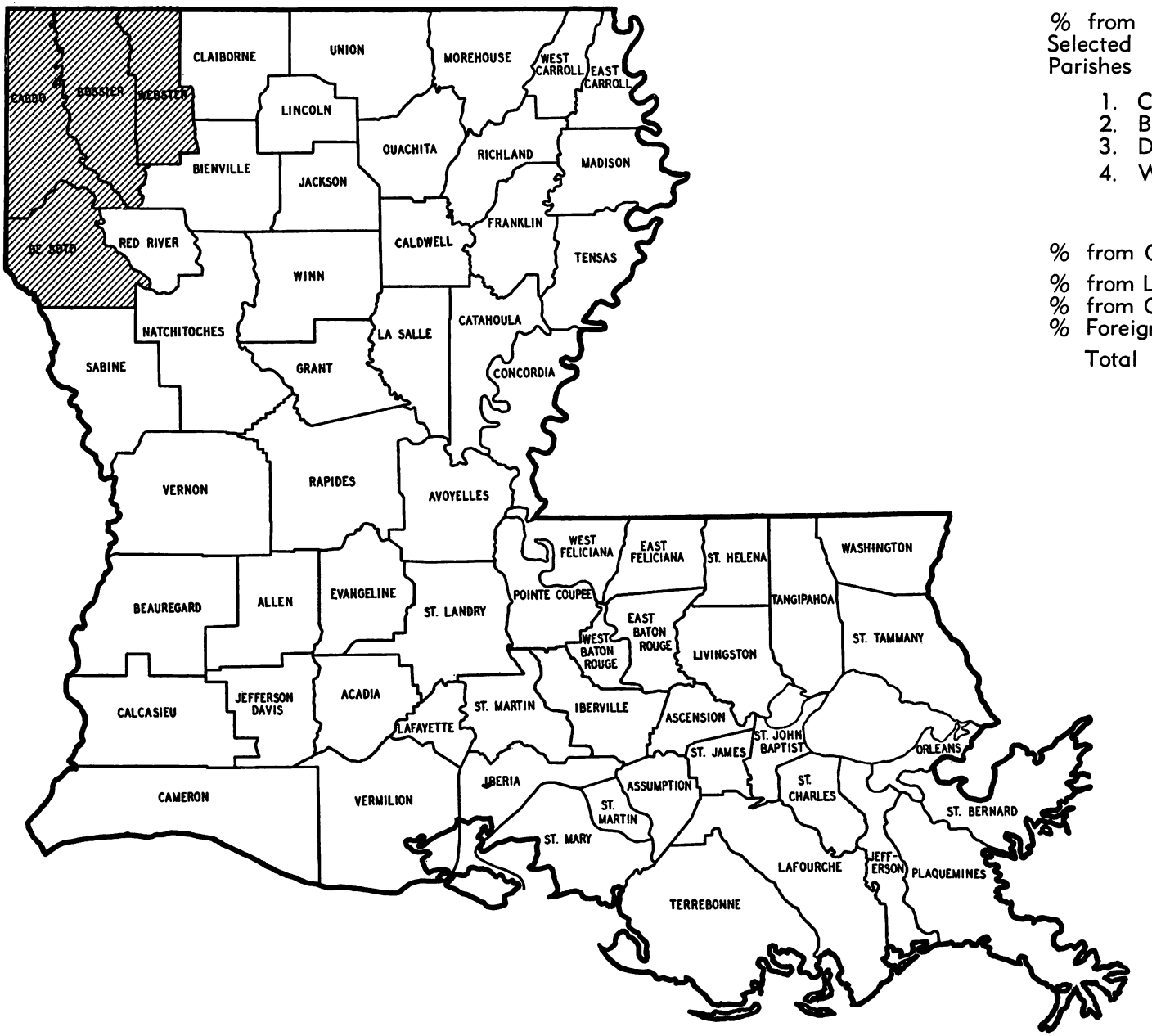
SOUTHERN at NEW ORLEANS



% from Selected Parishes		
1. Orleans	84.9	
2. Jefferson	8.6	93.5%
3. St. Charles	1.1	
	94.6	
% from Other Parishes	5.4	
% from Louisiana	100.0	
% from Other States	0.0	
% Foreign	0.0	
Total	100.0	

Per Cent of Total Freshmen from Selected Parishes

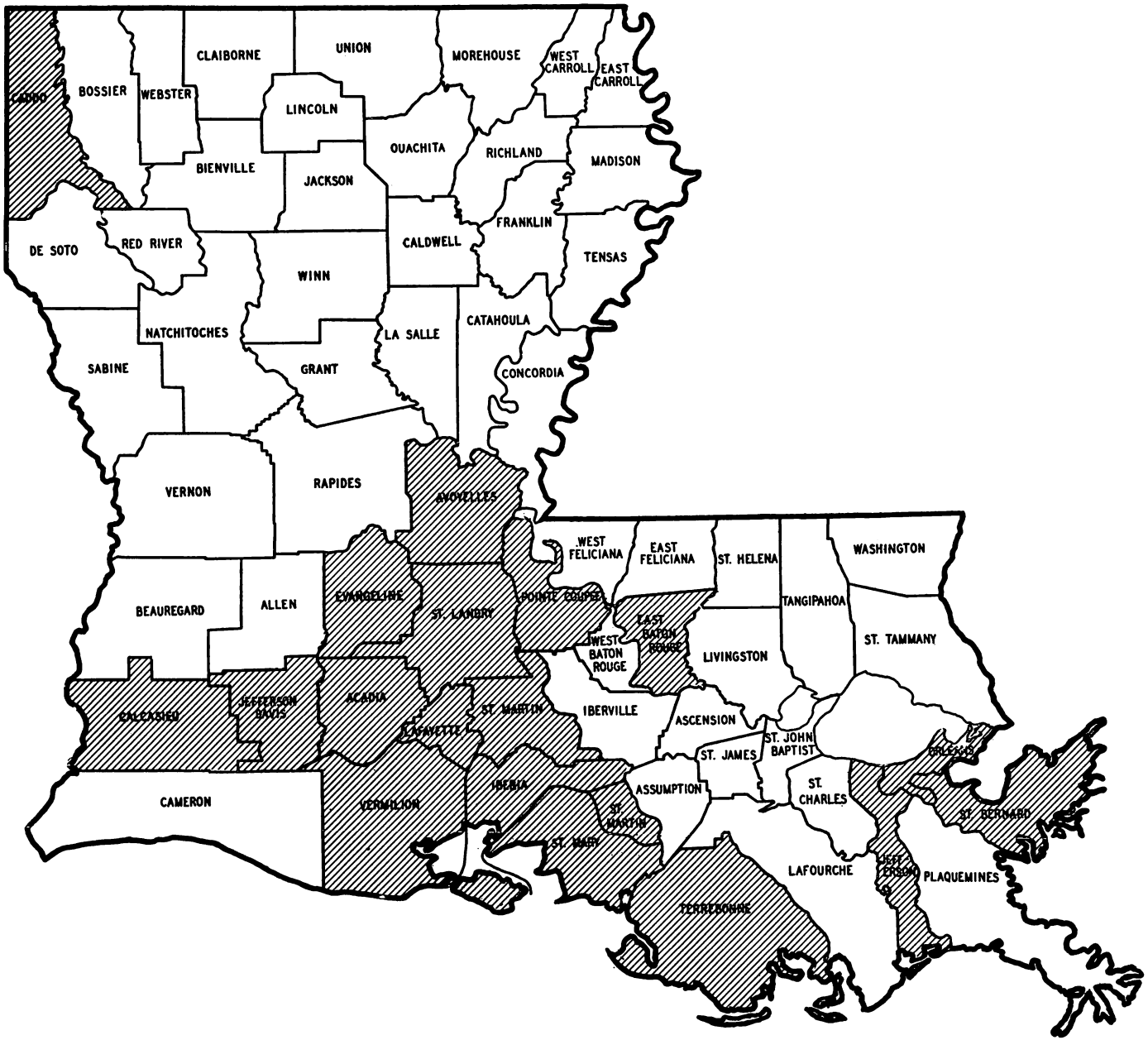
SOUTHERN at SHREVEPORT



% from Selected Parishes		
1. Caddo	82.8	
2. Bossier	5.4	
3. De Soto	3.3	91.5%
4. Webster	3.1	
	94.6	
% from Other Parishes	3.3	
% from Louisiana	97.9	
% from Other States	2.1	
% Foreign	0.0	
Total	100.0	

Per Cent of Total Freshmen from Selected Parishes

U. S. L.



% from Selected Parishes	
1. Lafayette	24.4
2. Iberia	8.4
3. Orleans	8.3
4. Jefferson	8.1
5. Acadia	5.8
6. St. Landry	5.5
7. Vermilion	5.2
8. East Baton Rouge	4.7
9. St. Martin	4.3
10. St. Mary	2.9
11. St. Bernard	1.8
12. Evangeline	1.6
13. Jefferson Davis	1.5
14. Avoyelles	1.4
15. Calcasieu	1.3
16. Terrebonne	1.1
17. Pointe Coupee	1.0
18. Caddo	1.0
	88.3
% from Other Parishes	8.4
% from Louisiana	96.7
% from Other States	2.4
% Foreign	0.9
Total	100.0

CONCLUDING OBSERVATIONS

In analyzing the relationship between an institution and a particular parish, it is important to consider the types of data underlying *both* Concept I (and II) and Concept III districts. Neither type of data by itself is sufficient. In some cases, concentration on only one type of district may be misleading. A few examples may help to clarify this point.

Consider the relationship, for example, between Louisiana Tech and Caddo Parish. Louisiana Tech's Concept I district includes 7 parishes, one of which is Lincoln where it attracted 69.7 per cent of the freshmen from that parish. Louisiana Tech is clearly "dominant" in Lincoln Parish. Caddo Parish, on the other hand, is not included in either Louisiana Tech's Concept I or II district, since that institution drew only 14.5 per cent of the freshmen from Caddo Parish. However, if we look at the composition of Louisiana Tech's freshman population by home parish—its Concept III district—we find that Louisiana Tech drew more freshmen from Caddo Parish (14.9 per cent of its total freshman enrollment) than from any other parish, including Lincoln (12.0 per cent) where it was the "dominant" institution. Of course, the "explanation" for this divergence in the concepts is the much greater college-age population of Caddo Parish.

To cite another example, LSUNO attracted from 41.5 to 45.0 per cent of the freshmen from each of three parishes—Orleans, Jefferson, and St. Bernard. Because of wide divergencies in college-age population, however, some 60.6 per cent of LSUNO's freshmen came from Orleans Parish, as compared with 30.8 per cent from Jefferson and only 4.1 per cent from St. Bernard.

Innumerable other examples could be given of the need to consider all of the district concepts in analyzing the relationship between an institution and a parish.

Procedures Used in Estimating College and University Enrollments

by

JAN W. DUGGAR

INTRODUCTION

The college and university enrollment projections represent an attempt to standardize enrollment projections for the major campuses in Louisiana. Prior to 1970 many campuses did not make long range enrollment projections, or if such projections were made, they did not allow for the interaction of one campus with other campuses in attracting Louisiana students.

The estimating procedure has been divided into two phases. Phase I provides estimates of the number of students graduating from high school by parish for 1969 through 1986. These estimates, in turn, are used in Phase II to determine (by parish) the number of students continuing to college. Phase II also estimates undergraduate class enrollments and graduate enrollments for twenty-three public and private colleges and universities for the 1972–1986 period.

The specific techniques used in making the projections were designed with the advice and assistance of Dr. James Firnberg of the Office of Institutional Research of Louisiana State University and Dr. Virgil Orr of the Louisiana Coordinating Council for Higher Education.

These enrollment projections have been made using accepted procedures and the best data available. Nevertheless, the estimates need to be treated as preliminary until the estimating procedure can be verified or modified and data errors corrected. All estimates of this nature should be revised annually to correct for changing conditions at Louisiana's colleges and universities and to update the computed ratios used in the estimating procedure. (The original enrollment estimates have been revised and up-dated by the Coordinating Council staff.)

PHASE I: ELEMENTARY AND SECONDARY SCHOOL ENROLLMENT PROJECTIONS BY PARISH, 1972-1986

This section describes the procedure used in estimating elementary and secondary school enrollment projections. The elementary and secondary school enrollment projections have been made to determine the number of students graduating from high school in each parish. These data, in turn, have been used in Phase II to project enrollments in colleges and universities in Louisiana. Although grade-by-grade enrollments are not a primary concern of the Coordinating Council it was felt that these projections would be of widespread interest and should be made available to the State Department of Education and parish school superintendents. (The estimates of elementary and secondary school enrollment are *not* attached to this report but are available from the Coordinating Council.)

Estimating Procedure

The procedure used in forecasting elementary and secondary school enrollments by parish is known as the cohort-survival, or grade-succession technique. The procedure begins with the computation of a ratio of first grade enrollments to live births for each parish. This ratio has been computed using actual first grade enrollments and data on live births in each parish, the latter six years previous to the actual school enrollment. The first grade to birth ratio has then been used to determine first grade enrollments simply by multiplying live births by this ratio.

The second step in the estimating procedure required that grade-to-grade attrition ratios be computed. These ratios represent three year averages of the percentage of students advancing from first grade to second grade, second grade to third, and so on. These attrition ratios, as one would suspect, vary considerably from parish-to-parish and grade-to-grade. The attrition ratios reflect a number of factors such as net in and out migration from the areas, drop-outs and withdrawals, deaths, population change, retentions,

and general cultural and social educational patterns.

The third and final step in the estimating procedure has been to estimate (by parish) the number of twelfth graders graduating from high school. This number has been estimated using a ratio derived from a four year average of the number of twelfth graders to high school graduates. All ratios, of course, have been computed separately for each parish.

Data Sources

The data have been obtained from two sources. Data on live births according to parish of the mother's residence have been taken from the *Annual Report* of the Bureau of Vital Statistics. Data on actual enrollments by grade for both public and private schools have been taken from the *Annual Report* of the State Department of Education.

PHASE II: COLLEGE AND UNIVERSITY ENROLLMENT PROJECTIONS, 1972-1986

This section describes the estimating procedure used in determining college and university drawing power by parish, enrollment by classification, and the data sources used. The study includes twenty-four colleges and universities within the state. The enrollment projections represent a head count of resident degree credit students—both full and part-time.

Estimating Procedure

The first step in determining college and university enrollments has been to estimate the number of graduating seniors continuing to college in one or another of the twenty-four Louisiana institutions included in this study. The procedure used required the computation for each parish of a two year average ratio of high school graduates to the freshmen enrollment of the following year. This ratio, in turn, was increased at a rate of ½ of 1 percent each year starting in 1973. It was believed that some adjustment other than a straight average was needed to reflect the expected increases in the percentage of high school graduates continuing to college in future years. This ratio was then multiplied by the estimated number of high school graduates by parish for each year for the 1972–1986 period to obtain the estimated number of students enrolling in college by parish.

Once the number of students continuing to college by parish was determined, these students were allocated to the various campuses on the basis of the average drawing power of the campus during the past two years. The procedure was repeated for each parish and each institution to give a total number of Louisiana freshmen in the twenty-three institutions equal to the estimated total high school graduates enrolling in college in Louisiana.

The next step in the procedure was to take the estimated freshmen classes and carry them through to graduation or into a graduate program. For each campus a two year average was computed to determine the grade-to-grade attrition ratios. These ratios multiplied by the respective grade classification gave the class-by-class enrollment projections. Master candidates were estimated on the basis of an average ratio of seniors to master candidates. Doctoral candidates and graduate specialists were estimated on the basis of an average ratio of master candidates to doctoral candidates and an average ratio of the number of masters candidates to graduate specialists. Unclassified undergraduates, nursing students, unclassified graduates, law students, social welfare students, and evening division enrollments were estimated on the basis of a two year average ratio with respect to the total undergraduate enrollment.

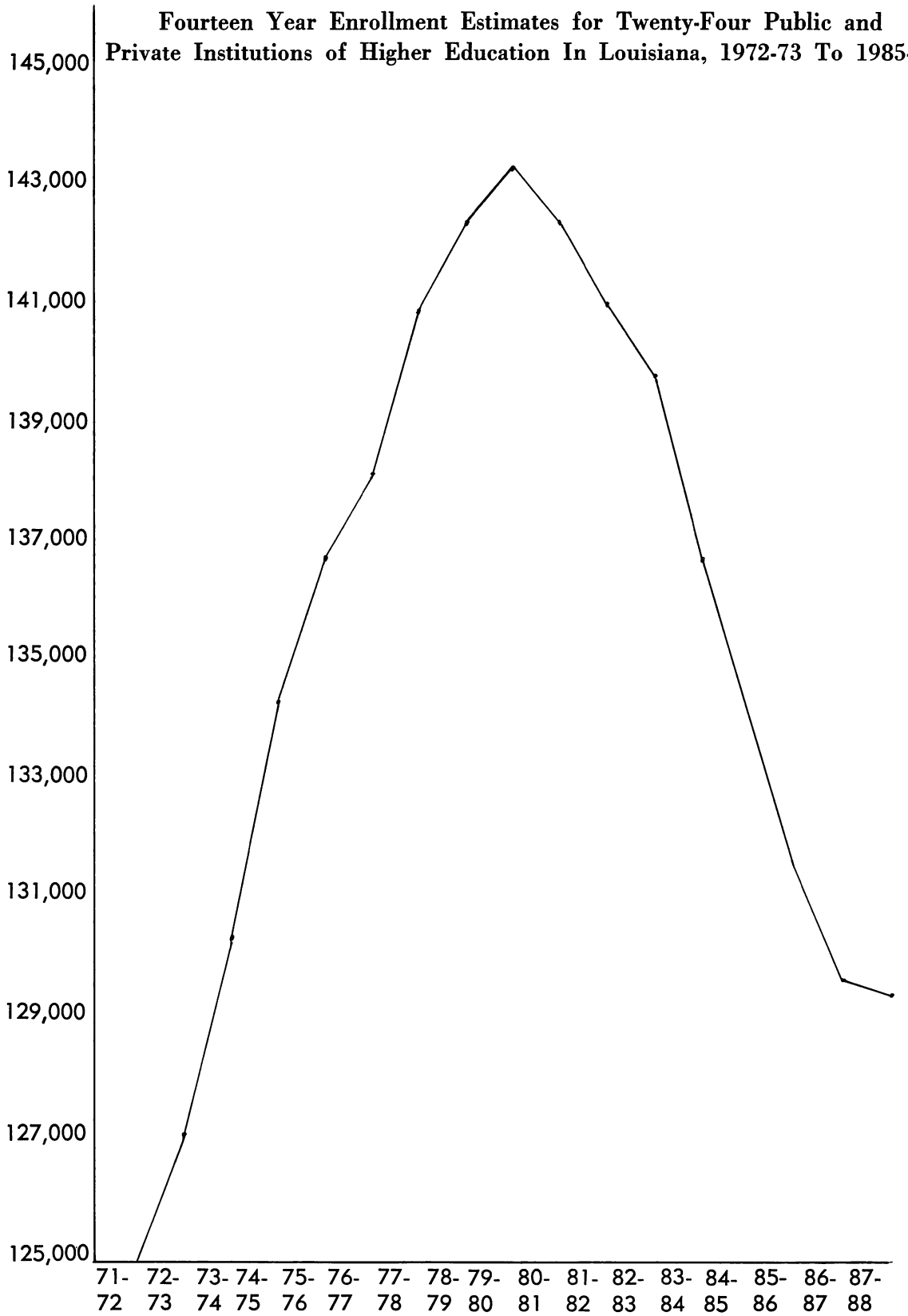
Data Sources

Data on freshmen enrollment by parish for 1966–1969 were supplied by the Public Affairs Research Council of Louisiana. The data represent total freshmen (not new or first time students), full and part-time, enrolled in the fall semester only. The data do not always agree with official reports as reporting dates occasionally vary thus introducing minor discrepancies. For purposes of determining the parish or state of residence, the home address of the parent (or student) was used. Out-of-state, foreign, or non-resident classifications include students who would have paid a non-resident fee if not exempted as well as those who paid a non-resident fee.

Fourteen Year Enrollment Estimates for Twenty-Four Public and Private Institutions of Higher Education in Louisiana, 1972-73 To 1985-86

Institutions	Actual	Estimates												
	1971–72	*72–73*	*73–74*	*74–75*	*75–76*	*76–77*	*77–78*	*78–79*	*79–80*	*80–81*	*81–82*	*82–83*	*83–84*	*84–85*	*85–86*
Public															
Delgado	4,724	4,498	4,644	4,837	4,919	4,926	5,028	5,023	4,959	4,877	4,735	4,655	4,697	4,700	4,546
Grambling	3,913	3,970	4,026	4,085	4,096	4,124	4,162	4,175	4,159	4,136	4,092	4,061	3,920	3,803	3,709
Louisiana Tech	8,135	8,237	8,520	8,689	8,785	8,845	8,975	9,077	9,097	9,110	9,082	8,996	8,719	8,472	8,264
LSU-A	1,012	948	894	981	1,005	1,003	1,004	1,016	1,018	999	995	986	948	900	900
LSU-BR	20,536	21,140	21,693	22,555	23,181	23,502	24,027	24,396	24,613	24,692	24,541	24,493	24,012	23,633	23,331
LSU-E	482	522	530	547	565	555	551	536	533	522	508	515	481	462	444
LSU-NO	12,985	13,486	13,954	14,631	14,921	14,961	15,358	15,485	15,500	15,494	15,245	14,996	15,028	14,899	14,668
LSU-S	1,686	1,619	1,611	1,653	1,696	1,691	1,731	1,764	1,753	1,758	1,751	1,684	1,572	1,481	1,475
McNeese	5,987	6,357	6,590	6,881	7,097	7,216	7,324	7,442	7,513	7,464	7,424	7,309	6,783	6,414	6,152
Nicholls	5,330	5,673	5,950	6,224	6,505	6,697	6,938	7,135	7,244	7,359	7,349	7,430	7,419	7,400	7,292
Northeast	8,810	9,101	9,406	9,380	9,574	9,519	9,509	9,437	9,468	9,387	9,112	9,076	8,762	8,574	8,400
Northwestern	6,268	6,108	6,143	6,294	6,480	6,499	6,593	6,679	6,640	6,600	6,610	6,509	6,208	6,015	5,900
Southeastern	5,790	5,610	5,673	5,837	5,963	6,056	6,240	6,394	6,465	6,508	6,461	6,490	6,451	6,427	6,425
Southern-BR	8,315	8,140	8,328	8,554	8,636	8,720	8,864	8,955	8,993	8,906	8,823	8,820	8,551	8,373	8,204
Southern-NO	2,134	2,083	2,187	2,302	2,258	2,265	2,302	2,280	2,264	2,216	2,154	2,114	2,074	2,030	1,978
Southern-S	744	924	994	1,019	1,029	1,023	1,041	1,063	1,058	1,059	1,054	1,024	944	877	865
Southwestern	10,364	10,905	11,258	11,597	11,920	12,278	12,647	12,807	12,937	12,970	12,851	12,803	12,569	12,299	12,025
TOTALS	107,215	109,321	112,401	116,066	118,630	119,880	122,294	123,664	124,214	124,057	122,787	121,961	119,138	116,759	114,578
Private															
Centenary	924	903	919	954	954	965	982	998	1,003	1,008	1,004	990	948	906	877
Dillard	984	1,063	1,108	1,143	1,125	1,130	1,146	1,136	1,127	1,107	1,075	1,050	1,026	1,005	976
Louisiana College	949	944	928	938	907	919	941	942	944	940	939	938	909	883	863
Loyola	4,883	5,007	5,047	5,077	4,907	4,938	5,053	5,121	5,130	5,128	5,082	4,993	4,956	4,900	4,812
St. Mary's	854	636	652	646	640	652	669	679	687	685	665	650	642	632	628
Tulane	7,813	7,845	7,921	8,097	8,182	8,230	8,347	8,386	8,395	8,318	8,157	8,031	7,878	7,739	7,567
Xavier	1,546	1,544	1,581	1,612	1,606	1,608	1,619	1,606	1,586	1,550	1,500	1,462	1,424	1,385	1,347
TOTALS	17,953	17,942	18,156	18,467	18,321	18,442	18,757	18,868	18,872	18,736	18,422	18,114	17,783	17,450	17,070
GRAND TOTALS	125,168	127,263	130,557	134,533	136,951	138,322	141,051	142,532	143,086	142,793	141,209	140,075	136,921	134,209	131,648

Fourteen Year Enrollment Estimates for Twenty-Four Public and Private Institutions of Higher Education In Louisiana, 1972-73 To 1985-86



Economic Profiles of State Planning Districts, SMSA's, and non-SMSA Parishes in Louisiana

by

THOMAS R. BEARD AND JAN W. DUGGAR

SECTION I

Geographic Regions

The profiles presented in this paper deal with three types of geographic regions. The first of these regions, and the most aggregative, divides Louisiana into eight State Planning Districts (LSPD's). Each of the State's sixty-four parishes is included in one of these districts. A map on the following page illustrates the location of these districts; their names and the parishes included in each are listed below:

Louisiana State Planning District	*Parishes*
1. Acadia	Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, St. Mary, and Vermilion.
2. Central	Avoyelles, Catahoula, Concordia, Grant, LaSalle, Rapides, Vernon, and Winn.
3. Florida	Ascension, East Baton Rouge, East Feliciana, Iberville, Livingston, Pointe Coupee, St. Helena, Tangipahoa, Washington, West Baton Rouge, and West Feliciana.
4. Metro	Jefferson, Orleans, Plaquemines, St. Bernard, and St. Tammany.
5. Northeast	Caldwell, East Carroll, Franklin, Jackson, Madison, Morehouse, Ouachita, Richland, Tensas, Union, and West Carroll.
6. Northwest	Bienville, Bossier, Caddo, Claiborne, DeSoto, Lincoln, Natchitoches, Red River, Sabine, and Webster.
7. Southwest	Allen, Beauregard, Calcasieu, Cameron, and Jefferson Davis.
8. Teche	Assumption, Lafourche, St. Charles, St. James, St. John the Baptist, and Terrebonne.

The Louisiana State Planning Districts do not necessarily coincide with the economic development districts incorporated under the Public Works and Economic Development Act of 1965.

In order to gain a more micro view of certain parts of the State, the profiles and data are further disaggregated into Standard Metropolitan Statistical Areas (SMSA's) and non-SMSA parishes. The reported SMSA's are delineated in accordance with the Bureau of the Budget's definition as published in 1967 and amended in 1968. The geographic definition of each SMSA has been held constant over the entire period, even though some parishes may not have been officially a part of the SMSA in earlier years. In Louisiana there are six SMSA's. Their designation and the parishes included in each are listed below:

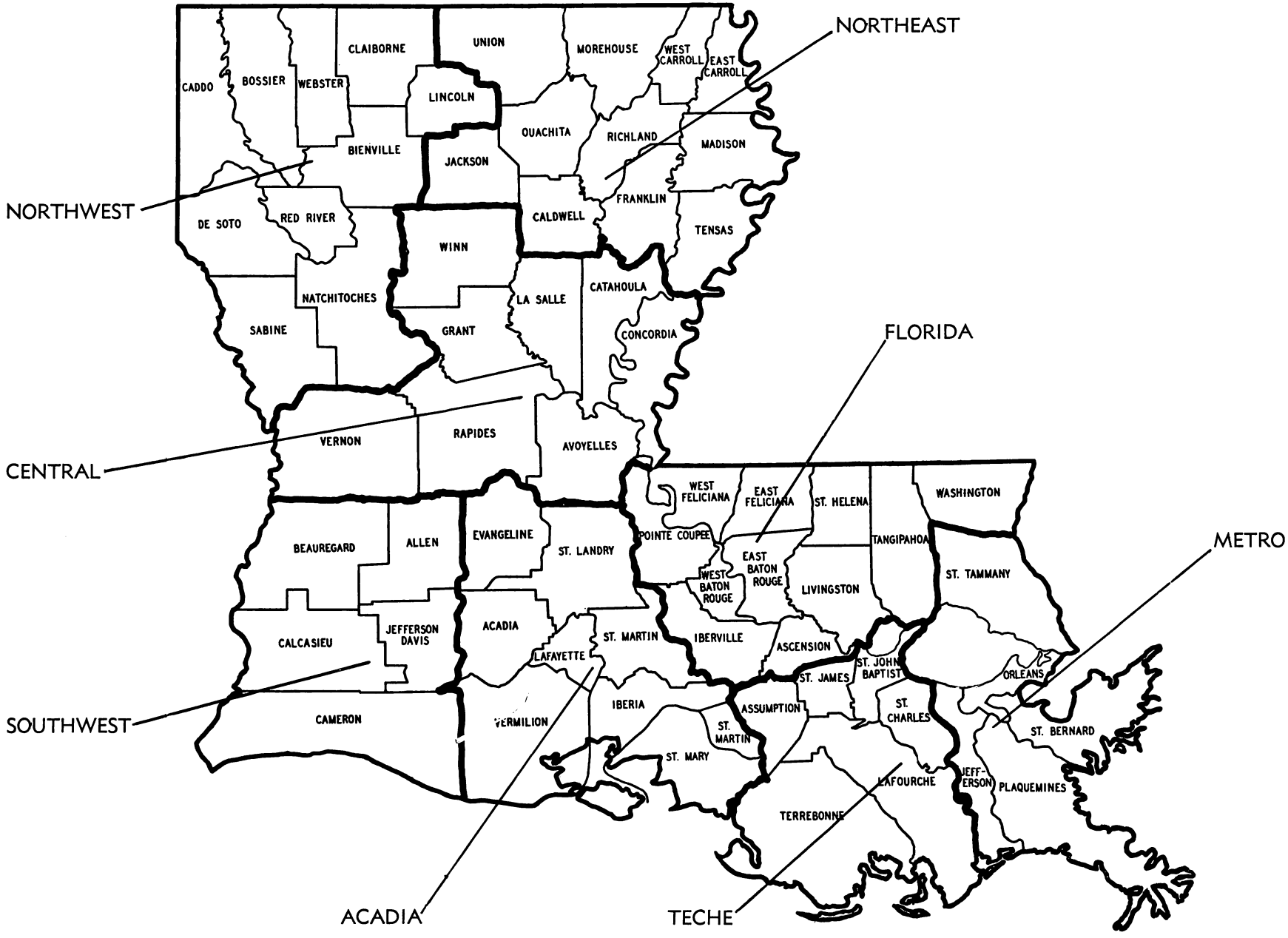
Standard Metropolitan Statistical Area	*Parishes*
1. Baton Rouge	East Baton Rouge.
2. Lafayette	Lafayette.
3. Lake Charles	Calcasieu.
4. Monroe	Ouachita.
5. New Orleans	Jefferson, Orleans, St. Bernard, and St. Tammany.
6. Shreveport	Bossier and Caddo.

There are three non-SMSA parishes—Livingston, Plaquemines, and St. John the Baptist—for which data were not available. Data are not available for these parishes because of the extensive commuting out of the parishes to places of employment in contiguous parishes. Income figures are not available for parishes where net commuting income is greater than 10 per cent of total personal income. However, data for these parishes are included in the aggregated Louisiana State Planning Districts.

Data Sources for Local Area Income

The estimates of personal income and earnings by industrial source covering all LSPD's, SMSA's,

Louisiana State Planning Districts



and non-SMSA parishes in Louisiana for select years 1929–68, were compiled by the Regional Economics Division of the Office of Business Economics, Department of Commerce.

The personal income data represent current income from all sources. It includes income received from business, federal, state, and local government, households, institutions, and foreign sources. It consists of wages and salaries, various types of supplementary earnings such as employers' contributions to pension and welfare funds, net incomes of owners of unincorporated businesses, net rental income, dividends, interest, and government and business transfer payments.

To measure income on a local area basis, criteria for allocating income to these areas must be established. In the case of labor and entrepreneurial income, the criteria used have been the place of work of the income recipient and place of residence. The difference between the two measures represents net commuters' income. This distinction, however, cannot be applied to other sources of income such as rent, interest, and royalties. Other sources of income therefore have been allocated on the basis of residence of the recipient. In the economic profiles and statistical tables of the appendices, personal income and its components are shown on a where-earned basis while per capita income is "residence adjusted" to reflect income on a where-received basis.

The Office of Business Economics derives its estimates of personal income from a wide variety of sources. Relatively little use is made of individuals' income tax reports. Instead, emphasis is placed on the records of business and government. The parish-by-parish estimates are closely tied to the official estimates of personal income for the State. That is, the State total is allocated to each parish in accordance with each parish's proportionate share. A parish's proportionate share, in turn, is determined from related series of data on components of income and wage and salary records. The allocation procedure has been carried out in great detail by the Office of Business Economics. The personal income figures represent the sum of more than 175 separately estimated income items.

The Economic Profiles

The second section of this monograph provides an economic profile for each individual geographic region or area. An effort was made to distill from the mass of data the most important information with regard to the economic make-up and economic changes which took place in the regions over the 1959–68 period. For more detailed information on a geographic area—including data for a much longer time span, 1929–68—the interested reader is referred to the statistical tables available in the Coordinating Council office. The following uniform three step procedure was employed in developing each profile.

Section A: This section begins with a listing of each area's population, personal income, and per-capita personal income for 1959 and 1968 as well as a ranking among its cohorts in each of these three categories. This information is followed by a brief discussion of how the area's rank in each category has behaved over time and the nature of its growth record in terms of personal income and per-capita personal income. Attention is given to the 1959–68 period, with some emphasis on the most recent subset of the time period, 1965–68.

Section B: This section focuses on earnings by broad industrial sector. It begins with figures for total earnings in 1959 and 1968 and a listing of the industrial sectors providing the major sources of earnings in each area. The industrial sectors included in the listing, along with the relevant percentage computations, represent only those sectors accounting for 10 per cent or more of the area's total earnings in either 1959 or 1968. The discussion portion of Section B involves a comparison of the area's 1959 industry mix (i.e., per cent of total earnings originating in each sector) with that in 1968. Any significant changes in the region's industrial make-up over the 1959–68 time period are noted in this section. If the changes occurred in any particular subset of this period, this change is also noted.

Section C: This section concentrates on the growth records of each area's individual industrial sectors, with primary emphasis on its most important sectors as listed in Section B. Unlike Sections A and B, however, attention is almost totally directed in Section C to the growth rate over the more recent 1965–68 period. The measure of growth that is observed is the annual percentage change in total earnings by industrial sector. While some judgment is applied in particular cases, in general a sector is described as having a "strong" or "good" growth record if its annual rate of increase significantly exceeds 10 per cent, and an "average" growth record normally refers to an annual growth rate in the range of 8 to 12 per cent.

Louisiana: An Overview

During the nine year interval 1959–1968, the population of Louisiana increased by 12.5 per cent. The level of total personal income increased dramatically, by 83.6 per cent, and per-capita income rose from the 1959 level of $1,666 to $2,645 in 1968. Total earnings during the same period increased by 81.8 per cent. The broad industrial sectors of the Louisiana economy changed in relative importance. In 1959 wholesale and retail trade was the leading source of private nonfarm earnings. By 1968 manufacturing had become the State's largest industrial source of income. The four leading industrial sectors with respect to growth records as sources of earnings were contract construction, total government, manufacturing, and services, which increased by 134.4, 106.9, 89.1 and 88.8 per cent, respectively, during the 1959–1968 period. Farming and mining as sources of earnings showed the lowest growth records, increasing by 57.4 and 48.9 per cent, respectively, over the nine years.

SECTION II—PROFILES

Economic Profiles of Louisiana State Planning Districts

LSPD-Acadia

A. Population and income—absolute figures and ranks among LSPD's, 1959 and 1968:

	1959		*1968*	
Population (thousands)	409.9	4th	476.2	4th
Personal Income (millions)	$509.8	4th	$996.1	4th
Per-Capita Income	$1,244	7th	$2,092	8th

The Acadia district's ranks in all three categories have remained relatively stable over the 1959-68 period, although it has fallen to the last position in terms of per-capita income. Acadia was one of the fastest growing districts in terms of percentage changes in both per-capita income and personal income over the 1959-68 period, but has been among the slowest growers more recently (1965-68).

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$403.2	$773.1
Trade	20%	18%
Mining	16%	16%
Government	13%	13%
(State and local)	(11%)	(11%)
Services	12%	12%
Farming	13%	12%

There is a noticeable lack of manufacturing in this district compared to the others. Further, mining as a source of earnings is more important in Acadia than in any other district. Very little change in industry mix has taken place since 1959. There has been a very small increase in the percent of total earnings originating in manufacturing and construction and small decreases in agriculture and wholesale and retail trade. For the most part, these changes took place over the 1959-62 period.

C. Contract construction has been a very good growth sector in this district since 1965. Government and services have steady, average growth records. No one sector has suffered any major set-backs recently, although wholesale and retail trade growth has been tapering off steadily.

LSPD-Central

A. Population and income—absolute figures and ranks among LSPD's, 1959 and 1968:

	1959		*1968*	
Population (thousands)	237.9	6th	309.4	5th
Personal Income (millions)	$293.2	7th	$695.6	5th
Per-Capita Income	$1,233	8th	$2,249	5th

Over the 1959-68 period, this district has moved up in the rankings in each category. Since 1965, Central has risen from last among the districts in per-capita income to 5th in 1968! It has been the fastest growing district in terms of personal income and per-capita income, both over the 1959-68 period as a whole and the more recent 1965-68 period.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$228.6	$557.2
Government	28%	51%
(State and local)	(14%)	(12%)
Trade	18%	11%
Services	12%	8%
Manufacturing	10%	8%

The Central district is clearly unique in its reliance on the government sector as a source of earnings. Over the 1959-68 period, there was a massive shift in industry mix to the government sector (federal-military) out of the other sectors. In 1959, the military accounted for only 8% of total earnings. This rose to 34% in 1968. This change can be largely attributed to the reactivation of the Fort Polk training facility commensurate with the Berlin and Cuban crises and the Viet Nam War. There is also an air force base located in this district.

C. As expected, the government sector has shown the greatest growth among the broad industrial sectors since 1959. However, there has been a marked reduction in the rate of growth of this sector for the last two years for which data are available (1967-68). The manufacturing, services, and finance sectors have had about average growth records recently.

LSPD-Florida

A. Population and income—absolute figures and ranks among LSPD's 1959 and 1968:

	1959		*1968*	
Population (thousands) ..	489.9	2nd	570.3	2nd
Personal Income (millions)	$784.0	2nd	$1,489.7	2nd
Per-Capita Income	$1,600	4th	$2,612	3rd

Florida's rank in population has been stable over the 1959-68 period. Its personal income rank was 3rd in 1962 but has been 2nd in more recent years. The Northwest and Florida districts have been alternately holding 3rd and 4th places in terms of per-capita income over the 1959-68 period. This district was the fourth fastest growing district over the 1959-68 period and the second fastest grower over 1965-68 in terms both of personal income and per-capita income. For the most part its growth has been steady and above average over the last three years. The 1959-62 period was a particularly poor growth period for this district.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$626.0	$1,194.7
Manufacturing	30%	24%
Construction	10%	18%
Government	16%	17%
(State and local)	(14%)	(15%)
Trade	17%	15%
Services	12%	12%

There is nothing particularly unusual about the industrial mix of this district, although a larger percentage of total earnings originated in construction in 1968 than was the case in other districts. Since 1959, there has been somewhat of a shift in industry mix from manufacturing into construction. The shift was generally gradual, although there was a marked jump in construction's share of total earnings in the 1962-65 period.

C. All of the major industrial sectors have shown good steady growth rates in the 1965-68 period. The construction sector in particular has grown well during this time.

LSPD-Metro

A. Population and income—absolute figures and ranks among LSPD's, 1959 and 1968:

	1959		*1968*	
Population (thousands)..	915.7	1st	1,091.2	1st
Personal Income (millions)	$1,969.8	1st	$3,544.1	1st
Per-Capita Income	$2,151	1st	$3,248	1st

This district, which includes the New Orleans SMSA, has consistently ranked first in all three categories. However, in terms of growth in personal income over the 1959–68 period, the Metro district was third poorest; its growth in per-capita income over this time span was the poorest of all districts. During the 1965–68 period, Metro was last in terms of growth in both personal income and per-capita income. No one year was particularly bad in this latter period—they were all below average.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$1,584.6	$2,825.5
Trade	22%	20%
Manufacturing	16%	17%
Services	14%	16%
Government	12%	13%
(State and local)	(7%)	(8%)
Transportation-public utilities ..	14%	13%

There is little that is unusual about the industrial mix of the Metro district. However, it does rely more heavily on the transportation-public utility sector, and slightly more heavily on the trade and service sectors, for its earnings than do other districts. In all probability the relatively high transportation earnings are due to the seaport facilities that exist in the

area. There have been only slight changes in industry mix in this district since 1959.

C. Among the major sectors in this district, government and services are the only ones with even average growth rates over the 1965-68 period. Manufacturing, in particular, has a lackluster growth record.

LSPD-Northeast

A. Population and income—absolute figures and ranks among LSPD's, 1959 and 1968:

	1959		*1968*	
Population (thousands)	280.3	5th	307.9	6th
Personal Income (millions)	$364.7	6th	$666.7	6th
Per-Capita Income	$1,301	5th	$2,165	7th

The Northeast district lost ground in both the population and per-capita income rankings over the 1959-68 period. It fell near the middle of the districts in terms of growth in personal income and per-capita income over both the 1959-68 period and the more recent 1965-68 period. 1967 and 1968 were below average performance years compared to most other districts.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$288.7	$513.5
Manufacturing	21%	19%
Farming	18%	18%
Trade	18%	16%
Government	14%	16%
(State and local)	(12%)	(13%)
Services	11%	11%

This district is somewhat unusual in that it relies more heavily on agriculture as a source of earnings than do the other districts. There has been little shift in industry mix since 1959.

C. The only sectors showing even average growth rates in the 1965-68 period are government and services. Most other sectors have registered below average performances. 1968 was a particularly bad year for all sectors except services.

LSPD-Northwest

A. Population and income—absolute figures and ranks among LSPD's, 1959 and 1968:

	1959		*1968*	
Population (thousands) ..	467.2	3rd	505.0	3rd
Personal Income (millions)	$773.0	3rd	$1,293.8	3rd
Per-Capita Income	$1,655	3rd	$2,562	4th

Until the late 1950's, this district ranked 2nd in population, personal income and per-capita income. It has now been displaced from those ranks by two other districts. Northwest was the second poorest performer among the districts in growth in personal income and per-capita income over the 1959–68 period. However, its growth record over 1965-68 was fourth best. Its growth over this latter period did not occur predominantly in any one year but was very evenly spread at about average growth rates.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$617.2	$1,015.5
Government	19%	21%
(State and local)	(10%)	(13%)
Manufacturing	13%	20%
Trade	18%	17%
Services	14%	14%
Transportation, Communications, Public Utilities	11%	8%

This district relies more heavily on government as a source of earnings than is usually the case. There are several state facilities located within this district such as mental hospitals, detention homes, and colleges and universities. There was a sizeable shift in industry mix from several of the other sectors into manufacturing between 1959 and 1968. This shift occurred gradually over the period.

C. Manufacturing has had a very good growth record during the 1965-68 period. The other major sectors in this district—government, trade, and services—have experienced steady upward trends in their growth rates. Only the relatively small mining sector has had a poor growth record during this period.

LSPD-Southwest

A. Population and income—absolute figures and ranks among LSPD's, 1959 and 1968:

	1959		*1968*	
Population (thousands)....	217.9	7th	219.6	8th
Personal Income (millions)	$387.8	5th	$610.9	7th
Per-Capita Income	$1,780	2nd	$2,782	2nd

Since 1959, Southwest has dropped from 5th in personal income and 7th in population to its present positions. Its per-capita income rank has remained the second highest over the 1959-68 period. However, it has been the slowest growing district over this period in terms of personal income and third slowest in terms of

per-capita income. Its performance over 1965-68 did improve to a rank of third best grower in personal income. Data suggest that this is due mainly to a very good year in 1967. 1968 was also slightly above average in growth.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$316.1	$480.3
Manufacturing	22%	25%
Construction	10%	14%
Trade	13%	13%
Government	20%	13%
(State and local)	(7%)	(11%)
Services	10%	11%

There is nothing particularly unusual about the industrial mix of this district, although its reliance on manufacturing and construction was relatively great in 1968. A marked reduction in the government-military share of total earnings took place over the 1959-68 period. The largest drop occurred between 1959-62 with another drop taking place between 1962-65. In all probability, this was due to the scaling down of an air base in the Lake Charles area. As a result, the share of total earnings originating in state and local government, manufacturing, and construction increased over this period.

C. Construction has been a big growth sector over the 1965-68 period. The other major sectors in this district had rather erratic, but about average, growth patterns. Only the relatively small mining sector has performed poorly during this period.

LSPD-Teche

A. Population and income—absolute figures and ranks among LSPD's, 1959 and 1968:

	1959		*1968*	
Population (thousands) ...	189.3	8th	230.5	7th
Personal Income (millions)	$261.3	8th	$514.4	8th
Per-Capita Income	$1,381	6th	$2,232	6th

Teche's personal income rank has remained constant since 1959. In the early 1960's it moved from last to 7th place in population. Its per-capita income rank has been rather erratic, having reached a peak of 5th in the mid 1960's, falling to 7th in 1967, and moving back up to 6th in 1968. Teche was the second fastest growing district from 1959-68 in terms of personal income and fifth in terms of per-capita income. Its more recent growth performance (1965-68) has been about average, having been marred by a very poor year in 1967. Its performance in 1968 was about average among the districts.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$210.7	$414.0
Manufacturing	23%	25%
Trade	16%	17%
Mining	20%	14%
Government	10%	10%
(State and local)	(8%)	(8%)

The most noteworthy aspect of Teche's industrial mix is the importance of mining as a source of earnings. Teche and Acadia are the only districts in which more than 10% of total earnings originated in mining in 1968. The Teche district also relies relatively heavily on manufacturing as a source of earnings. Changes in industry mix over the 1959-68 period were only minor, with the possible exception of the decline in importance of mining. There was some movement from mining to manufacturing, trade, and construction.

C. Over the 1965-68 period, trade and manufacturing were firm growth sectors in this district. Changes in construction are primarily responsible for Teche's impressive performance in the early 1960's and poor performance in 1967. Construction more than tripled from 1962-65 and was up 104% from 1965-66. Since then, construction activity has been cut almost in half.

Economic Profiles of SMSA's

SMSA-Baton Rouge

A. Population and income—absolute figures and ranks among SMSA's, 1959 and 1968:

	1959		*1968*	
Population (thousands) ...	226.6	3rd	274.5	3rd
Personal Income (millions)	$500.5	3rd	$941.3	2nd
Per-Capita Income	$2,121	2nd	$3,173	2nd

Over time, Baton Rouge has moved ahead of the previously second ranked Shreveport SMSA in terms of personal income and per-capita income. Its personal income growth rate was the second best of all SMSA's over the 1959-68 period, but its per-capita income growth rate was next to poorest. Over the more recent 1965-68 period, its personal in-

come growth rate was the best and its per-capita income growth rate was second best among the SMSA's. Its growth in 1967 and 1968 was particularly strong.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$406.9	$781.0
Manufacturing	32%	25%
Construction	12%	20%
Trade	17%	16%
Government	14%	15%
(State and local)	(12%)	(13%)
Services	13%	13%

There is nothing very unusual about the industrial mix of the Baton Rouge SMSA, although in 1968 the construction sector was a little more important as a source of earnings than in the other SMSA's. There has been a marked change in industry mix since 1959 out of manufacturing and into construction. This change occurred fairly gradually over time.

C. Over the 1965-68 period, the construction sector has been a very good, steady growth area. Most of the other sectors showed average and fairly steady growth rates. No one sector has had a particularly poor growth record.

SMSA-Lafayette

A. Population and income—absolute figures and ranks among SMSA's, 1959 and 1968:

	1959		*1968*	
Population (thousands) ...	83.4	6th	106.2	6th
Personal Income (millions)	$140.8	6th	$275.4	6th
Per-Capita Income	$1,676	5th	$2,573	6th

Lafayette's ranks in terms of personal income and population have remained stable since 1959—as they also appear to have been in earlier years. Since 1959, this SMSA has occupied both the 5th and 6th place ranks in terms of per-capita income. Over the 1959-68 period, Lafayette had the greatest growth in personal income among the SMSA's but was third in terms of growth in per-capita income. However, it has had a very poor growth record more recently, having the lowest growth rate in per-capita income over the 1965-68 period. Apparently, this was due to a very poor performance in 1966, as growth rates since then have been slightly above average.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$113.7	$219.6
Mining	20%	21%
Trade	21%	21%
Services	15%	16%
Government	12%	13%
(State and local)	(10%)	(11%)
Transportation, Communications, Public Utilities	10%	9%

Lafayette is the only SMSA in which mining is such an important source of earnings. It is also the only SMSA in which manufacturing does not account for as much as 10% of total earnings. There has been virtually no change in industry mix in this SMSA since 1959.

C. Lafayette has had no spectacular growth sector over the 1965-68 period. Most sectors showed a roughly average growth rate, although 1966 and 1967 were below average years in mining and manufacturing.

SMSA-Lake Charles

A. Population and income—absolute figures and ranks among SMSA's, 1959 and 1968:

	1959		*1968*	
Population (thousands) ...	143.3	4th	138.7	4th
Personal Income (millions)	$281.8	4th	$434.0	4th
Per-Capita Income	$1,969	3rd	$3,134	3rd

Since 1959, Lake Charles's ranks in population and personal income have been stable. Its per-capita income rank was 3rd in 1959, 4th in 1962, and 3rd once again in more recent years. This SMSA registered the poorest performance in terms of growth of personal income over the 1959-68 period. However, in terms of growth of per-capita income it was second best! It had the best per-capita income growth record among the SMSA's over both the 1962-65 and 1965-68 periods. 1967 in particular was a good year for Lake Charles.

B. Total earnings and sectors with greatest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$229.9	$342.0
Manufacturing	24%	29%
Construction	11%	17%
Trade	13%	13%
Services	10%	12%
Government	23%	11%
(State and local)	(6%)	(10%)

In 1968, manufacturing accounted for a greater percentage of earnings in the Lake Charles SMSA than was the case in any other SMSA.

Since 1959, there has been a large shift in industry mix out of government-military into the manufacturing and construction sectors. Most of this shift occurred over the 1959–65 period, during which time the operations of a local air force base were scaled down considerably.

C. During the 1965-68 period, the construction sector has been a very good growth industry for Lake Charles. The manufacturing, government (state and local), and service sectors have also performed well. The relatively small mining sector is the only sector with a poor growth record.

SMSA-Monroe

A. Population and income—absolute figures and ranks among SMSA's, 1959 and 1968:

	1959		*1968*	
Population (thousands)	100.1	5th	114.3	5th
Personal Income (millions)	$166.2	5th	$310.7	5th
Per-Capita Income	$1,654	6th	$2,708	5th

Monroe's population and personal income ranks remained stable since 1959, but since 1965, when it was ranked 6th, its per-capita income rank has improved to 5th. It was the fastest growing SMSA over 1959-68 in terms of per-capita income and second in terms of growth of personal income. 1966 was a particularly good year. Since that time, Monroe's growth has been about average.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$130.7	$245.4
Manufacturing	23%	21%
Trade	23%	20%
Services	16%	15%
Construction	11%	14%
Government	13%	14%
(State and local)	(11%)	(12%)

There is nothing particularly unusual about the industrial mix of this SMSA. The changes in industry mix which have occurred since 1959 have been fairly minor. There has been some slight movement in percentage share of total earnings from manufacturing and trade into construction.

C. Of the major industrial sector in the Monroe SMSA only government has shown steady average growth over the 1965-68 period. Growth in the other major sectors was rather erratic. Most sectors have poor performance records in 1967. The exceptional performance year for this SMSA in 1966 was probably due to a 47% increase in construction earnings at that time.

SMSA-Shreveport

A. Population and income—absolute figures and ranks among SMSA's, 1959 and 1968:

	1959		*1968*	
Population (thousands) ...	277.2	2nd	298.6	2nd
Personal Income (millions)	$544.2	2nd	$869.8	3rd
Per-Capita Income	$1,945	4th	$2,884	4th

The Shreveport SMSA has been the second most populous over the entire period since 1929. It also held the second position in personal income until 1967 when it was supplanted by Baton Rouge. Its per-capita income rank has fluctuated between 3rd and 4th place since 1959. Shreveport had the poorest growth in per-capita income among the SMSA's over the 1959-68 period. Its growth in personal income was second poorest. It has rallied in the latter part of this period (1965-68) to about an average growth rate among the SMSA's. No one year has stood out in importance, and growth has been steady and average in the most recent three years.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$439.9	$692.6
Trade	20%	19%
Government	18%	19%
(State and local)	(6%)	(9%)
Services	15%	16%
Manufacturing	10%	15%
Transportation-public utilities ..	12%	10%

The Shreveport SMSA relies more heavily on government as a source of earnings than do the other SMSA's. Transportation is also more important than is usually the case—although not as important as in the New Orleans SMSA. There has been a noticeable shift in industry mix into the manufacturing sector out of several of the other sectors. This shift has occurred gradually since 1959.

C. Manufacturing has been a good growth sector for Shreveport during the 1965-68 period, as has construction. The trade and service sectors attained good growth rates in 1968 after

average to poor performances in 1966-67. Government-military, which accounts for about 6% of total earnings, has proven to be a very volatile sector since 1959.

SMSA-New Orleans

A. Population and income—absolute figures and ranks among SMSA's, 1959 and 1968:

	1959		*1968*	
Population (thousands)	893.5	1st	1,063.9	1st
Personal Income (millions)	$1,905.9	1st	$3,458.5	1st
Per-Capita Income	$2,133	1st	$3,250	1st

The New Orleans SMSA has always ranked first in all categories since 1959—as it also did in most earlier years. It ranked near the middle among the SMSA's in growth in personal income and per-capita income over 1959-68. More recently (1965-68), its growth record has been one of the poorest. Its growth record from year to year over this latter period has been steady but consistently below average.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$1,526.5	$2,746.8
Trade	23%	20%
Manufacturing	16%	17%
Services	15%	17%
Government	12%	13%
(State and local)	(7%)	(8%)
Transportation-public utilities	15%	13%

It is unusual for the transportation-utilities sector to be an important source of earnings, as is the case in the New Orleans SMSA. This is undoubtedly due in part to the existence of New Orleans' port facilities. There has been very little change in industry mix in the New Orleans SMSA since 1959.

C. State and local government and services have been the only even average growth sectors over the 1965-68 period. Manufacturing and trade have had below average performance records, especially over the 1967-68 period. Construction has not grown at all since 1966.

Economic Profiles of Non-SMSA Parishes

Parish-Acadia

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	49.2	7th	53.3	9th
Personal Income (millions)	$54.1	10th	$98.6	11th
Per-Capita Income	$1,125	26th	$1,892	25th

These ranks have remained relatively stable over the 1959-68 period. The parish's growth rates in terms of percentage changes in personal income and per-capita income were also about average. This holds true for the more recent 1965-68 period also, although 1966 was a poor performance year.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 41.8	$ 72.6
Farming	22%	27%
Trade	21%	18%
Government	13%	15%
(State and local)	(10%)	(12%)
Services	12%	13%
Manufacturing	7%	10%

Since 1959, there has been a shift in industry mix from construction and trade toward agriculture and manufacturing. These changes occurred gradually over time.

C. Manufacturing was a strong growth sector in this parish over the 1965-68 period. The services, government, and agriculture sectors experienced roughly average growth records during this period, although the latter sector had a very rapid expansion in 1968. The mining and construction sectors, although relatively small, have suffered set-backs in this parish.

Parish-Allen

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	19.6	36th	21.5	32nd
Personal Income (millions)	$27.6	22nd	$43.4	26th
Per-Capita Income	$1,331	16th	$1,895	24th

Allen's population rank has increased slightly, while its personal income and per-capita income ranks have fallen. This parish had a growth record well below average among the non-SMSA parishes over the 1959–68 period

with a particularly poor record more recently (1965–68). This has been the case for both the growth rates of personal income and per-capita income. 1966 was a bad year. However, growth rates rose to average figures in 1968.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 23.2	$ 33.0
Manufacturing	33%	35%
Government	12%	17%
(State and local)	(10%)	(15%)
Farming	12%	15%
Trade	11%	11%
Transportation, Communication, Public Utilities	13%	7%

There has been a noticeable shift in industry mix since 1959 from mining and transportation-public utilities into agriculture and state and local government. Agriculture's percentage share of total earnings has fluctuated greatly. Most of the shifts in industry mix occurred over the 1959–65 period.

C. The important manufacturing and trade sectors had below average growth over the 1965–68 period. Agriculture is a particularly volatile sector, and mining, although a relatively small sector, has been deteriorating badly the last two years. There was a marked increase in construction in 1967.

Parish-Ascension

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	27.5	20th	34.6	18th
Personal Income (millions)	$27.3	19th	$96.9	10th
Per-Capita Income	$1,067	32nd	$3,035	4th

Although its population rank has remained relatively stable since 1959, there has been a marked improvement in Ascension's personal income and per-capita income rankings. It was the second fastest growing non-SMSA parish in terms of personal income over the 1959–68 period and third fastest in terms of per-capita income growth. In the 1965–68 period growth was particularly good. However, most of this expansion occurred in 1966 and 1967. Ascension's growth in 1968 was only about average.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 19.4	$ 73.7
Construction	3%	36%
Manufacturing	36%	28%
Trade	19%	11%
Government	18%	10%
(State and local)	(16%)	(8%)
Services	10%	5%

In 1968, a considerably larger percentage of earnings originated in the construction sector in Ascension parish than was the case in any other non-SMSA parish. Clearly, there has been a very pronounced shift in industry mix in this parish since 1959, with construction's share of total earnings up 33 percentage points. Percentage reductions occurred in the government, trade, service, and manufacturing sectors. Big shifts into construction took place from 1962–66.

C. Almost all sectors showed good growth over the 1965–68 period. The construction sector had extremely good growth years in 1966 (up 65%) and 1967 (up 48%), but tailed off considerably in 1968 (up 3%). Manufacturing was also a particularly good growth sector during this period.

Parish-Assumption

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	17.7	37th	20.1	33rd
Personal Income (millions)	$21.6	28th	$34.7	30th
Per-Capita Income	$1,241	20th	$1,758	29th

This parish's ranks in population and personal income have remained fairly stable since 1959, but it has lost some ground in the per-capita income rankings. Its growth record in terms of percentage changes in income and per-capita income have been well below average among the non-SMSA parishes over the 1959–68 period. Apparently, the 1959–62 period was acutely bad for Assumption. The more recent 1965–68 period was also slightly below average due principally to poor years in 1966 and 1967. 1968 was a very good year.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 18.2	$ 28.4
Manufacturing	55%	40%
Farming	9%	21%
Government	9%	11%
(State and local)	(7%)	(10%)

In 1968, only four other non-SMSA parishes relied more heavily on manufacturing as a percent of total earnings. However, there has been a significant shift in industry mix since 1959 out of manufacturing and into agriculture in Assumption parish. The biggest part of this shift occurred from 1959–62. Mining has also fallen in importance while construction has increased somewhat.

C. The construction and finance sectors, although relatively small, have been extremely volatile sectors in this parish over the 1965–68 period. Construction increased 125% in 1968, probably accounting for Assumption's above average growth performance in that year. Mining and government have been steady, average growth sectors, as has manufacturing over 1966–68.

Parish-Avoyelles

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	37.0	12th	42.5	11th
Personal Income (millions)	$34.5	16th	$59.6	20th
Per-Capita Income	$973	38th	$1,470	46th

There has been some deterioration in Avoyelles' personal income and per-capita income ranks since 1959. Its growth relative to the other non-SMSA parishes was below average over the 1959–68 period and somewhat below average over the more recent 1965–68 period. 1966 was an above average year, but Avoyelles' performance has been quite poor in 1967 and 1968 in terms of growth in personal income and per-capita income.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 26.3	$ 42.4
Government	20%	25%
(State and local)	(16%)	(20%)
Farming	19%	23%
Trade	17%	15%
Services	11%	12%
Construction	10%	6%

Since 1959, there has been a fairly sizable movement in industry mix out of mining and into government. Agriculture, services, and manufacturing also increased their shares slightly, with some decreases occurring in trade and construction. The big drop in mining occurred during the 1959–62 period.

C. Government and services were the only steady, average growth sectors in this parish over the 1965–68 period. Manufacturing activity fell in 1966 and 1967, but made a pronounced comeback in 1968. Mining has fallen absolutely since 1965. Agriculture had a very good year in 1966 (accounting for the parish's good showing that year), but has performed poorly since then.

Parish-Beauregard

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	18.9	32nd	22.6	31st
Personal Income (millions)	$23.9	24th	$34.8	29th
Per-Capita Income	$1,300	18th	$1,588	37th

While Beauregard's population rank has remained relatively stable, its personal income and per-capita income ranks have fallen over the 1959–68 period. In particular, its per-capita income rank has deteriorated badly. It had the second poorest growth record among the non-SMSA parishes over the 1959–68 period in terms of per-capita income. 1959–65 was a particularly bad period, but a fairly good recovery was made over 1965–68. This recovery, however, was due mainly to a good year in 1967, as 1966 and 1968 were very poor years.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 18.6	$ 25.8
Government	17%	25%
(State and local)	(14%)	(21%)
Trade	16%	20%
Services	13%	15%
Manufacturing	17%	12%
Transportation, Communications, Public Utilities	12%	9%

There has been a fairly large shift to state and local government in this parish since 1959. Manufacturing and mining lost ground, relatively speaking, over this period. Primarily, this shift occurred over the 1959–65 period.

C. The major sectors in this parish showed about average growth rates over the 1965–68 period, although all were down somewhat in 1968. Manufacturing, in particular, was down 37% in 1968, probably accounting for the parish's poor performance in that year. The mining and farm sectors, although relatively small, tend to be very volatile. The one good year the parish experienced recently—1967—was one in which manufacturing earnings increased some 67%.

Parish-Bienville

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	16.5	39th	17.7	39th
Personal Income (millions)	$16.7	38th	$24.8	42nd
Per-Capita Income	$1,031	34th	$1,424	47th

Since 1959, Bienville's population position has remained stable, but its personal income and per-capita income positions have deteriorated, the latter rather sharply. Bienville's growth record has been well below average for both the 1959–68 period and, more recently, the 1965–68 period. This has been the case with respect to both personal income and per-capita income. There has been some recovery in 1968 up to a roughly average growth rate.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 12.3	$ 17.2
Government	22%	30%
(State and local)	(18%)	(26%)
Manufacturing	22%	27%
Trade	12%	13%
Services	10%	11%
Construction	13%	4%
Farming	14%	4%

Since 1959, there has been a substantial shift in industry mix from agriculture and construction into government and manufacturing. Primarily, this shift occurred in the 1959–65 period.

C. Government has been the only consistent growth sector for Bienville over the 1965–68 period. The service and trade sectors have improved in 1967–68, but the important manufacturing sector has been fairly votatile, suffering an especially bad year in 1967.

Parish-Caldwell

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	8.9	53rd	9.8	52nd
Personal Income (millions)	$8.5	48th	$15.4	50th
Per-Capita Income	$990	37th	$1,618	35th

Since 1959, Caldwell's rankings have remained fairly constant, although there has been some year-to-year fluctuation in its per-capita income position. This parish had a roughly average growth record over the 1959–68 period, but this was due in large measure to a very exceptional year in 1966. From 1959–65 this parish enjoyed mediocre growth at best in terms of both personal income and per-capita income. It also had a very poor year in 1968.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 6.4	$ 10.7
Government	24%	29%
(State and local)	(19%)	(22%)
Farming	27%	27%
Services	7%	13%
Trade	13%	11%
Construction	12%	5%

Since 1959, there has been a movement in industry mix from mining and construction into government and services. Yearly data indicate that the relative shares of these four sectors were quite volatile over the 1959–68 period.

C. Most of the sectors showed a good growth rate in 1966, and construction was up 161% which accounts for Caldwell's excellent performance that year. However, in 1967 and 1968 all major sectors except government had very poor growth records. In 1968, manufacturing, construction, and mining all fell absolutely.

Parish-Cameron

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	6.8	54th	7.3	54th
Personal Income (millions)	$11.5	46th	$24.3	47th
Per-Capita Income	$1,533	4th	$3,003	5th

Cameron's rank in all three categories has remained reasonably stable over the 1959–68 period. This parish is somewhat unique in that despite its very small population it has maintained one of the highest per-capita incomes among non-SMSA parishes. Its per-capita income rank rose to 1st in 1965, but has since declined to its 1968 level of 5th. Cameron's growth rate relative to the other non-SMSA parishes has been well above average over both the 1959–68 and 1965–68 periods. However, 1966 was a very poor year from which the parish rallied with an excellent growth record in 1967. 1968 was above average also in terms of both personal income and per-capita income.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 9.5	$ 20.3
Mining	15%	39%
Government	15%	14%
(State and local)	(13%)	(12%)
Manufacturing	6%	10%
Farming	24%	10%
Construction	16%	6%

Since 1959, there has been a massive shift in industry mix into mining from the agricultural and construction sectors. Manufacturing's share has increased somewhat also, while trade has lost some ground. Mining's big jump in share of total earnings occurred mainly from 1959–62. Mining appears to be a very volatile sector. Agriculture's position deteriorated primarily over the 1962–65 period.

C. Cameron's poor showing in 1966 appears to be due to poor performances in the mining and agricultural sectors, both of which were down absolutely. Almost every sector except government shows very erratic growth over the 1965–68 period.

Parish-Catahoula

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	11.2	50th	12.8	48th
Personal Income (millions)	$9.3	47th	$21.4	46th
Per-Capita Income	$850	46th	$1,714	31st

Since 1959, Catahoula's population and personal income ranks have changed little, but there has been a considerable improvement in its per-capita income position. Catahoula had the seventh best growth in per-capita income and the eighth best personal income growth record among the parishes from 1959–68. The 1965–68 period was especially good, with relatively high growth records in each year.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 7.1	$ 16.2
Farming	29%	47%
Government	24%	22%
(State and local)	(20%)	(17%)
Trade	18%	12%

Catahoula is a highly agricultural parish. In 1968, only one other non-SMSA parish received a higher percentage of total earnings from farming. There has been a very large shift in industry mix since 1959 toward farming, with the trade and government sectors falling in relative importance. Large increases in farming's share of total earnings took place in 1966 and 1968. The deterioration in the trade and government positions has been fairly gradual.

C. The farm sector appears very volatile. It has the characteristics of a "feast or famine"-type industry. The government sector is a steady growth sector, but the trade sector has recorded only a mediocre growth record over the 1965–68 period. Most of the other sectors are very small.

Parish-Claiborne

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	19.1	31st	17.5	40th
Personal Income (millions)	$22.4	25th	$33.3	32nd
Per-Capita Income	$1,215	22nd	$1,976	23rd

Since 1959, Claiborne's population and personal income positions have declined, while its per-capita income position has been somewhat volatile—in 1959, it ranked 22nd in per-capita income, in 1965 it was 14th, and has fallen to 23rd in 1968. Its growth record in terms of per-capita income has been about average over the 1959–68 period, but was very consistently poor over the more recent 1965–68 period. In terms of growth in per-

sonal income, its performance was below average over 1959–68 and especially poor over the 1965–68 period.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968.

	1959	*1968*
Total earnings (millions)	$ 17.1	$ 23.6
Government	18%	25%
(State and local)	(15%)	(22%)
Manufacturing	6%	18%
Trade	14%	14%
Mining	20%	13%
Services	11%	12%
Transportation, Communications, Public Utilities	16%	8%

There have been some significant changes in Claiborne's industry mix since 1959. Manufacturing and government have increased their share of total earnings significantly, while farming, mining, and transportation-public utilities have lost ground. Substantial changes occurred in manufacturing and transportation over the 1959–62 period.

C. Claiborne parish has had no good growth sector in the recent 1965-68 period. The mining and construction sectors have been falling absolutely for three years, and with the exception of government, all the other major sectors have erratic, usually poor, growth records.

Parish-Concordia

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	20.2	28th	24.6	27th
Personal Income (millions)	$23.6	23rd	$35.3	27th
Per-Capita Income	$1,297	19th	$1,601	36th

Since 1959, Concordia's population and personal income ranks have remained fairly stable but its per-capita income rank has deteriorated badly. It had a very poor growth record over the 1959–68 and 1965–68 periods both in terms of personal income and per-capita income. It was the third poorest grower among the non-SMSA parishes in terms of per-capita income from 1959–68. The parish experienced an above average year in 1966, but deteriorated badly in 1968. Both personal income and per-capita income declined in the latter year.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 18.7	$ 25.8
Government	14%	20%
(State and local)	(10%)	(17%)
Transportation-public utilities ..	11%	16%
Trade	11%	15%
Mining	12%	11%
Construction	25%	10%
Farming	10%	8%

Concordia is one of the few parishes in which transportation-public utilities is a major source of earnings. There has been a large shift in industry mix out of construction into the government and transportation sectors since 1959. Farming's share of total earnings is extremely volatile. For example, it was 9% in 1962, 18% in 1965, 23% in 1966, 19% in 1967, and 8% in 1968. The big decrease in construction's share occurred mainly over the 1959–62 period. The transportation sector also appears quite volatile.

C. The farming sector has deteriorated since 1966. Government was the only major steady growth sector during the 1965–68 period. The others are subject to very wide fluctuations in growth. The one good growth year the parish experienced in 1966 was probably due to a good performance in construction and a 50% increase in farm earnings.

Parish-DeSoto

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	23.9	23rd	24.3	28th
Personal Income (millions)	$26.2	21st	$37.8	28th
Per-Capita Income	$1,112	27th	$1,579	38th

De Soto has lost ground in all three categories since 1959. Its growth record over 1959–68 in terms of personal income was the second poorest among the non-SMSA parishes. Its record with regard to per-capita income growth over that period was also poor. This general evaluation extends to the 1965–68 period as well, during which time growth was poor but relatively steady.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 20.2	$ 27.4
Manufacturing	23%	26%
Government	16%	24%
(State and local)	(13%)	(20%)

	1959	1968
Trade	14%	15%
Services	10%	11%
Farming	17%	11%

There has been a sizable shift in industry mix since 1959 out of farming into government. This shift occurred primarily over the 1962–65 period.

C. The important manufacturing sector has had an erratic, lackluster growth record over the 1965–68 period. Only the government sector has shown steady, average growth, although the service sector has done fairly well in 1967 and 1968. The relatively small mining and construction sectors have deteriorated badly.

Parish-East Carroll

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	14.2	44th	14.8	47th
Personal Income (millions)	$20.6	31st	$31.3	36th
Per-Capita Income	$1,450	8th	$2,113	15th

East Carroll's ranks have declined over the 1959–68 period in all three categories. The per-capita income rank has been subject to rather wide variations, e.g., it fell to 20th in 1965, rose to 8th in 1966, and then declined to 15th in 1968. East Carroll had a below average growth rate over the 1959–68 period in terms of both personal income and per-capita income. Its performance over the more recent 1965–68 period was about average, but this improvement was due primarily to a very good year in 1966. Its 1967 record was average, and its 1968 performance was the worst of all non-SMSA parishes (per-capita income was down 12%).

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 17.8	$ 25.3
Farming	52%	42%
Government	11%	15%
(State and local)	(9%)	(13%)
Trade	9%	12%
Construction	14%	12%

Farming is relatively important in East Carroll. A comparison of the 1959 and 1968 industry mixes suggests a movement from farming into government and trade. However, this movement appears to be due to a very poor year in farming in 1968, since in all other years since 1959 more than 50% of total earnings originated in that sector.

C. The farm sector had a very good year in 1966 (earnings up 55%) and a very bad year in 1968 (earnings down 32%) which, because of its importance in this parish, probably was responsible for the wide variations in East Carroll's growth performance in those years. Most of the other sectors were also fairly volatile. Only the government sector showed steady, average growth over the 1965–68 period.

Parish-East Feliciana

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	19.9	29th	20.1	34th
Personal Income (millions)	$16.1	41st	$26.1	40th
Per-Capita Income	$823	48th	$1,318	50th

East Feliciana's rankings have remained fairly stable since 1959, except for a noticeable deterioration in population position. Over the 1959–68 period it experienced a roughly average growth rate in per-capita income and a below average growth rate in personal income. During the recent 1965–68 period, it was one of the poorest performers among the non-SMSA parishes primarily due to very poor years in 1966 and 1967.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 13.7	$ 20.3
Government	44%	61%
(State and local)	(42%)	(59%)
Services	8%	10%
Construction	11%	1%

East Feliciana relies more heavily on state and local government as a percentage of total earnings than does any other non-SMSA parish. Since 1959, there has been a very large shift in industry mix into government out of several of the other sectors. For the most part this shift took place gradually.

C. Government and the relatively minor manufacturing sector experienced good growth rates over the 1965–68 period. The other sectors had very poor records, with several suffering absolute reductions in earnings over

this time period. 1968 appeared to be a year of recovery, however, for most sectors except construction.

Parish-Evangeline

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	31.2	15th	34.9	17th
Personal Income (millions)	$26.7	20th	$50.4	22nd
Per-Capita Income	$878	45th	$1,487	44th

Evangeline's ranks in all three categories have remained relatively stable since 1959. Evangeline's growth record over the 1959–68, and more recently 1965–68, periods was average to slightly above average compared to other parishes in terms of both personal income and per-capita income. Above average years occurred in 1966 and 1968, with 1967 being a little below average.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 20.4	$ 35.9
Farming	39%	37%
Government	19%	21%
(State and local)	(15%)	(18%)
Trade	15%	14%
Services	10%	9%

Evangeline relies fairly heavily on farm earnings as a percent of total earnings. There has been no significant change in industry mix in this parish since 1959.

C. The major sectors in this parish—government, farming, and trade—experienced about average growth rates over the 1965–68 period, although farming was off somewhat in 1967. Growth in the other sectors was fairly erratic and appeared to fluctuate with the farm sector.

Parish-Franklin

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	25.7	22nd	26.1	24th
Personal Income (millions)	$22.9	26th	$51.5	21st
Per-Capita Income	$904	43rd	$2,010	19th

Franklin's population rank has been fairly stable since 1959, while there has been an improvement in its personal income position and a marked improvement in its per-capita income rank. Over the 1959–68 period Franklin had an excellent growth record, achieving the fourth best per-capita income and ninth best personal income growth records. The parish's 1965–68 record was also well above average, but this was almost totally due to a very good year in 1966, as 1967 and 1968 were only average in terms of growth.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 18.0	$ 39.7
Farming	40%	45%
Government	19%	17%
(State and local)	(15%)	(13%)
Trade	17%	11%
Construction	7%	10%

Only two other parishes received a higher percentage of total earnings from farming in 1968. Since 1959, there has been a shift in Franklin's industry mix into farming, construction, and manufacturing and out of trade and government. Pronounced shifts in construction's and farming's share of total earnings occurred in 1967–68. Farming appears to be a very volatile sector.

C. The government sector has been the only steady, average growing sector for Franklin over the 1965–68 period. The important farm sector's growth has been volatile and particularly poor the last two years (1967–68), which accounts for the parish's poor overall performance in those years. Construction has had excellent growth the last two years, with a 124% increase in 1968.

Parish-Grant

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	13.1	46th	14.9	46th
Personal Income (millions)	$13.1	43rd	$21.0	45th
Per-Capita Income	$1,098	29th	$1,565	40th

Although Grant's population and personal income positions have remained fairly stable, its per-capita income rank has deteriorated badly since 1959. Its growth record over both the 1959–68 and 1965–68 periods has been

below average. 1967 was particularly poor, with 1968 being below average in terms of growth in both personal income and per-capita income.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 9.6	$ 14.5
Government	38%	50%
(State and local)	(23%)	(39%)
Farming	18%	14%
Trade	12%	9%
Transportation, Communications, Public Utilities	11%	6%

There has been a substantial shift into the government sector out of several of the other sectors since 1959. The shift occurred fairly gradually over time. In 1968, only two other non-SMSA parishes relied more heavily on government as a percent of total earnings.

C. The farm sector is a very volatile area experiencing wide fluctuations in growth. It was up 49% in 1966, accounting for the parish's good showing in that year. Government has had an average growth record over the 1965–68 period, with the relatively small service sector doing well also. All other sectors have had mediocre to poor records.

Parish-Iberia

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	50.9	6th	59.1	8th
Personal Income (millions)	$69.1	7th	$133.3	6th
Per-Capita Income	$1,402	12th	$2,336	11th

Iberia's ranks in population and personal income have remained relatively stable over the 1959–68 period. Its per-capita income rank has fluctuated more, reaching a high of 6th in 1962 and a low of 15th in 1967. Its growth record over the 1959–68 period was slightly above average relative to other non-SMSA parishes. However, over the more recent period (1965–68) its record has been erratic and slightly below average in terms of both personal income and per-capita income. 1966 was a very bad year, 1967 was below average, and 1968 was very good in terms of growth.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 53.1	$103.7
Mining	23%	17%
Construction	5%	17%
Trade	22%	17%
Manufacturing	9%	11%
Services	13%	11%
Government	13%	11%
(State and local)	(8%)	(9%)

Compared to most non-SMSA parishes, Iberia received a relatively high percentage of total earnings from both mining and construction in 1968. However, there has been a large shift into the construction sector out of mining and trade since 1959. The increase in construction's share occurred mainly in 1967–68. Mining's share of total earnings has been decreasing gradually over time.

C. Construction has been an excellent growth sector for this parish over the 1965–68 period. Its growth rate was up dramatically in 1968 (141%). The government sector has experienced steady, average growth while most of the sectors' performances have been mediocre. Mining has been deteriorating badly over this period.

Parish-Iberville

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	29.5	16th	31.9	19th
Personal Income (millions)	$32.1	18th	$76.9	15th
Per-Capita Income	$1,155	23rd	$2,567	8th

This parish's population rank has fluctuated only mildly since 1959. Its personal income rank has improved slightly over this period while its per-capita income rank has improved dramatically. Iberville's growth record over both the 1959–68 and 1965–68 periods was one of the best of all the parishes. Its growth performance in 1967 and 1968 has been particularly strong, both in terms of personal income and per-capita income.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 24.4	$ 60.5
Manufacturing	22%	27%
Construction	17%	25%
Government	20%	15%
(State and local)	(10%)	(9%)
Trade	13%	10%
Services	11%	8%

In 1968, Iberville parish received an unusually high percentage of total earnings from the construction sector. There has been a fairly large shift into construction and a shift into manufacturing out of the other sectors since 1959. There was a big jump in construction's share of total earnings in 1967.

C. Construction has been an extremely good growth sector for this parish over the 1965–68 period. All the other sectors, except the relatively small mining sector, have experienced good to very good growth records over this time period.

Parish-Jackson

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	15.6	42nd	17.5	41st
Personal Income (millions)	$22.2	29th	$35.0	31st
Per-Capita Income	$1,414	11th	$1,983	22nd

Jackson's population and personal income positions have remained fairly stable over time, but its per-capita income rank has deteriorated from a position of 11th in 1959 (and 7th in 1962). Its growth record over the 1959–68 period has been well below average, and more recently (1965–68) it has been the fourth slowest growing parish in terms of both personal income and per-capita income. Every year over this latter time span was a poor one in terms of growth.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 17.1	$ 26.2
Manufacturing	48%	53%
Government	14%	18%
(State and local)	(11%)	(15%)
Trade	14%	10%

Manufacturing is unusually important as a source of earnings in Jackson parish. There has been a noticeable shift in industry mix out of farming and trade and into manufacturing and government since 1959. Farming's share of total earnings dropped markedly during the 1962–65 period.

C. The government sector is the only one with even an average growth record over the recent 1965–68. The important manufacturing sector has had a below average growth record, and all other sectors have performed very poorly. Several have declined absolutely since 1966.

Parish-Jefferson Davis

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	29.4	17th	29.5	22nd
Personal Income (millions)	$43.1	13th	$74.4	17th
Per-Capita Income	$1,494	6th	$2,570	7th

There have been only minor changes in this parish's ranks since 1959, although small declines have been registered in all three categories. Jefferson Davis's growth record over 1959-68 was a little better than average in terms of percentage change in per-capita income and slightly below average with regard to personal income. Its performance more recently (1965-68) has been about average compared to other parishes. Its performance in this latter period has varied from a very poor year in 1966 to an excellent year in 1968.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 34.9	$ 59.3
Farming	25%	36%
Trade	17%	13%
Government	10%	12%
(State and local)	(8%)	(11%)
Services	10%	10%

Farming is relatively important as a source of earnings in Jefferson Davis parish. There has been a large increase in farming's share of total earnings since 1959, with manufacturing also gaining somewhat. Farming's increase occurred primarily in two big jumps—1959-62 and 1967-68. Reductions were spread about evenly over several sectors during the 1959-68 period.

C. Farming, manufacturing and construction had very good growth records over the 1965-68 period. The government sector had a steady, average growth record over this period. The trade sector performed poorly as did the relatively small mining sector.

Parish-Lafourche

A. Population and income—absolute figures and

ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands) ...	54.5	5th	66.7	5th
Personal Income (millions)	$77.5	3rd	$128.9	7th
Per-Capita Income	$1,504	5th	$2,056	18th

This parish's population rank has remained stable over the 1959-68 period, while its personal income and per-capita ranks have deteriorated. It was one of the poorest growth performers over the 1959-68 period with regard to per-capita income and below average with regard to personal income. More recently (1965-68) its growth record has been steady and about average compared to other parishes.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 62.6	$102.7
Mining	29%	17%
Trade	16%	17%
Transportation-public utilities ..	11%	16%
Manufacturing	11%	14%
Government	10%	12%
(State and local)	(8%)	(11%)

Both mining and transportation-public utilities were relatively more important in Lafourche than in most other parishes in 1968. However, there has been a shift in industry mix away from mining since 1959. There has also been a increase in the share of total earnings attributable to manufacturing, transportation-public utilities, and government over this period. The big reduction in mining's share of total earnings took place mainly from 1959-65.

C. This parish has had no good growth sector over the 1965–68 period, with the possible exception of government which registered a steady, average performance. Most other important sectors had erratic and below average growth records.

Parish-LaSalle

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	12.8	47th	15.4	45th
Personal Income (millions)	$17.1	39th	$24.6	43rd
Per-Capita Income	$1,317	17th	$1,575	39th

While its population and personal income positions have remained fairly stable over the 1959-68 period, LaSalle's per-capita income rank has deteriorated sharply. It had the poorest per-capita income growth record and second poorest personal income growth record among the non-SMSA parishes over the 1959-68 period. Its performance more recently (1965-68) has also been very poor. In 1968, it did rally to about an average growth rate.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 13.4	$ 18.2
Mining	31%	26%
Government	13%	19%
(State and local)	(11%)	(17%)
Manufacturing	17%	17%
Trade	13%	13%

Only one other parish relied more heavily on mining as a percent of total earnings in 1968. Since 1959, there has been a noticeable, gradual shift in industry mix from mining to government.

C. The only even average growth sector over the 1965-68 period has been government. The important mining, trade, and manufacturing sectors have had very poor growth records, although the latter did have a good rally (earnings up 29%) in 1968.

Parish-Lincoln

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	28.1	19th	35.6	16th
Personal Income (millions)	$37.3	14th	$70.4	18th
Per-Capita Income	$1,336	15th	$1,990	21st

There has been some slight improvement in Lincoln's population position and a deterioration in its personal income and per-capita income positions since 1959. Its growth rate relative to the other non-SMSA parishes over both the 1959-68 and 1965-68 periods has been about average in terms of personal income and per-capita income.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 29.5	$ 55.2
Government	36%	40%
(State and local)	(34%)	(37%)

	1959	1968
Services	13%	14%
Trade	15%	14%
Construction	9%	10%

Lincoln parish relies relatively heavily on government earnings, which are mainly state and local. There has been a gradual shift in industry mix since 1959 out of farming and into government and other sectors.

C. Growth in Lincoln's major sectors has been about average over the 1965-68 period, although construction has been rather erratic.

Parish-Madison

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	16.2	40th	18.0	38th
Personal Income (millions)	$17.7	37th	$30.5	37th
Per-Capita Income	$1,094	30th	$1,704	32nd

Madison's ranking in all three categories has been fairly stable since 1959, although its per-capita income rank rose to 24th in 1966 before declining to its 1968 position of 32nd. Its growth in personal income and per-capita income over both the 1959-68 and 1965-68 periods has been about average. However, beginning in 1967 its growth has fallen off drastically. In 1968, personal income did not grow at all and per-capita income was down 2%.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 14.3	$ 23.0
Farming	37%	43%
Government	15%	18%
(State and local)	(12%)	(16%)
Trade	18%	13%
Manufacturing	13%	8%

Madison parish relies relatively heavily on farm earnings. Since 1959, its industry mix shifted out of manufacturing and trade into agriculture and government. The farm sector appears to be a very volatile one.

C. The important farm sector has fallen off badly in 1967 and 1968, after earnings rose 53% in 1966. Government is the only steady, average growth sector over the 1965-68 period. Trade has a poor record recently as do most of the other sectors.

Parish-Morehouse

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	33.2	14th	35.7	15th
Personal Income (millions)	$44.5	12th	$77.0	16th
Per-Capita Income	$1,359	14th	$2,187	14th

Relatively little change has taken place in Morehouse's rankings since 1959. The parish's growth in personal income and per-capita income over both the 1959-68 and 1965-68 periods was about average compared to other non-SMSA parishes. Growth in 1966 and 1967 was excellent, but 1968 was very bad with per-capita income declining 3%.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 36.0	$ 58.7
Farming	17%	22%
Government	11%	14%
Trade	11%	10%

(Note: Apparently, manufacturing is very important in this parish, but the data have been suppressed and are not available.) There appears to have been a small shift in industry mix since 1959 out of manufacturing into farming. The agricultural sector's share of total earnings is very volatile over time.

C. Over the 1965-68 period, government has been the only steady, average growth sector in the parish according to the data available (none on manufacturing). The farm sector is quite volatile and a reduction in farm earnings of 14% in 1968 is probably the reason for the parish's poor performance that year.

Parish-Natchitoches

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	35.1	13th	37.3	14th
Personal Income (millions)	$35.0	17th	$65.5	19th
Per-Capita Income	$1,005	36th	$1,771	28th

Although its population and personal income ranks have remained fairly stable over the 1959-68 period, Natchitoches' per-capita in-

come rank has improved considerably. Over the same period growth in per-capita income was above average and growth in personal income was about average relative to other non-SMSA parishes. Growth over the more recent 1965-68 period has been about average and consistent from year to year.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 26.8	$ 48.8
Government	33%	37%
(State and local)	(28%)	(33%)
Farming	22%	17%
Trade	14%	15%
Services	10%	10%

There has been a small change in industry mix since 1959 out of farming into manufacturing and government. Farming's share of total earnings tended to be very volatile.

C. The farm sector had a very volatile growth record over the 1965–68 period. Farm earnings were up 50% in 1966, down 2% in 1967, and up 21% in 1968. The other major sectors in this parish—trade, services, and government—had about average growth records. Manufacturing, although relatively small, had an excellent growth record over the 1965–68 period.

Parish-Pointe Coupee

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	22.2	25th	23.7	29th
Personal Income (millions)	$17.6	34th	$31.6	34th
Per-Capita Income	$835	47th	$1,405	48th

Pointe Coupee's ranks in all categories have been relatively stable over the 1959-68 period. This parish's growth rate has been about average relative to the other non-SMSA parishes over both the 1959-68 and 1965-68 periods. During the latter time period, its growth rates of both personal income and per-capita income have been consistently at the average level from year to year.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 13.0	$ 22.3
Farming	29%	31%
Government	22%	26%
(State and local)	(17%)	(20%)
Trade	16%	12%
Manufacturing	10%	7%

There have been some small changes in the industry mix of this parish since 1959. Small shifts have occurred out of trade and manufacturing into farming and government.

C. The important farm sector had a very volatile growth record over the 1965-68 period, alternating between very good and very bad years. The trade sector was also quite volatile. Only the government sector showed a steady, average growth pattern. Manufacturing and finance did well in 1967 and 1968.

Parish-Rapides

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	109.7	1st	121.6	1st
Personal Income (millions)	$159.5	1st	$280.6	1st
Per-Capita Income	$1,438	10th	$2,278	12th

This parish has always been first in population and personal income, but its per-capita income rank has deteriorated over time (in 1950, in fact, Rapides ranked 6th in this respect). Its growth record in terms of both personal income and per-capita income over the 1959–68 and 1965–68 periods was about average relative to other non-SMSA parishes. Its performance over 1965-68 was fairly consistent from year to year, but a little under par in 1966.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$127.1	$220.3
Government	32%	31%
(State and local)	(13%)	(15%)
Trade	19%	18%
Services	14%	14%
Manufacturing	11%	11%

There has been no significant change in industry mix in this parish since 1959.

C. The relatively small construction sector was the only superior growth sector over the 1965-68 period. Growth in earnings in this parish's major sectors was fairly erratic, but about average for the period as a whole.

Parish-Red River

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	9.8	51st	10.4	51st
Personal Income (millions)	$8.4	49th	$17.4	49th
Per-Capita Income	$891	44th	$1,750	30th

Although its population and personal income ranks have remained relatively steady, this parish's per-capita income rank has improved significantly over the 1959–68 period. This improvement has been rather recent, since Red River ranked as low as 47th in per-capita income in 1965. Red River's growth record was well above average over both the 1959-68 and 1965-68 periods. Its growth was excellent in 1966 and 1967 and about average in 1968, both in terms of personal income and per-capita income.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 6.3	$ 12.8
Farming	39%	31%
Government	26%	25%
(State and local)	(22%)	(21%)
Manufacturing	3%	13%
Trade	14%	11%
Services	8%	11%

There has been a major shift in industry mix from farming into manufacturing since 1959. Manufacturing's share of total earnings increased substantially over the 1965-67 period.

C. The important farm sector was very volatile over the 1965-68 period. Farm earnings rose 46% in 1966, fell 5% in 1967, and rose 41% in 1968. A marked growth record was evident in services over the 1965-68 period. Government was a steady, average growth sector. Most sectors—with the exceptions of trade, services, and farming—were down badly in 1968.

Parish-Richland

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	23.5	24th	25.2	26th
Personal Income (millions)	$21.3	30th	$47.2	24th
Per-Capita Income	$911	42nd	$1,883	26th

Since 1959, this parish's population rank has changed little while considerable improvement has been registered in its personal income and per-capita income rankings. Richland was the seventh fastest growing parish over the 1959–68 period in terms of per-capita income. Its performance over 1965-68 was well above average also, but this was due primarily to a very good year in 1966. 1967 was only average and 1968 was a poor year.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 16.4	$ 35.4
Farming	38%	42%
Trade	21%	16%
Government	17%	15%
(State and local)	(14%)	(13%)

Since 1959, the industry mix of Richland parish has changed only slightly, although farming's share of total earnings has expanded while that of the trade sector has declined. Farming's share of total earnings was very volatile from year to year. In 1968, only four other non-SMSA parishes earned a larger percentage of total earnings from the farm sector.

C. The important farm sector had a very good year in 1966 (earnings up 65%), but since then its growth has been below average. The government sector was a steady, average grower, with trade having a below average performance over the 1965-68 period. The relatively small manufacturing sector had a very good growth record over this time period.

Parish-Sabine

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	18.3	33rd	21.6	35th
Personal Income (millions)	$19.8	33rd	$31.2	35th
Per-Capita Income	$1,112	28th	$1,484	45th

While there has been little change in Sabine's population and personal income ranks since 1959, its per-capita income rank has deteriorated badly. It has been one of the poorest growing non-SMSA parishes over both the 1959-68 and 1965-68 periods. The poor record in this latter period was due primarily to a very bad year in 1967 (per-capita income down

9%), since 1966 and 1968 were years of above average growth performance.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 14.7	$ 22.0
Manufacturing	18%	30%
Government	21%	28%
(State and local)	(17%)	(24%)
Trade	15%	14%
Services	13%	13%
Farming	17%	2%

There has been a massive shift in industry mix since 1959 out of farming and into manufacturing and government. Farming's share of total earnings dropped dramatically over the 1962-65 period. The share of earnings going to manufacturing was unusually volatile over the 1965-68 period.

C. Farming and manufacturing had very volatile growth records over the 1965-68 period. Almost every sector in this parish except government suffered a large set-back in 1967. Government was the only steady, average growth sector in Sabine parish.

Parish-St. Charles

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	20.9	27th	26.6	25th
Personal Income (millions)	$37.0	15th	$87.3	13th
Per-Capita Income	$1,788	1st	$3,325	3rd

Between 1950 and 1959, this parish jumped from a population rank of 45th to 27th and also improved its personal income and per-capita income ranks. These ranks have remained fairly stable over the 1959–68 period, although St. Charles has lost its position as the first ranked non-SMSA parish in terms of per-capita income. St. Charles' personal income growth record over 1959–68 was sixth best among the non-SMSA parishes and its per-capita income growth record was also quite good. Its record over the more recent 1965–68 period was also superior, even though its 1967 record was slightly below average. 1966 was a particularly good year.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 30.8	$ 75.0
Manufacturing	44%	38%
Trade	7%	19%
Construction	11%	18%
Transportation-public utilities	13%	10%
Mining	10%	2%

Since 1959, there have been substantial increases in the percentage of total earnings attributable to trade and construction. Decreasing shares occurred for manufacturing, transportation-public utilities, and especially mining. The percentage of earnings attributable to trade expanded significantly over the 1966–68 period. Construction's share of total earnings was very volatile—for example, it was 6% in 1962, rose to 34% in 1966, and fell to 18% in 1968. Nevertheless, in 1968 only two non-SMSA parishes registered a larger percentage of total earnings in the construction sector.

C. Manufacturing, trade, transportation-public utilities and services have all been excellent growth sectors over the 1965–68 period. Construction has been declining absolutely, following an increase in earnings of 13% in 1966.

Parish-St. Helena

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	9.0	52nd	9.3	53rd
Personal Income (millions)	$6.7	51st	$13.7	51st
Per-Capita Income	$759	49th	$1,494	43rd

Since 1959, there has been little change in St. Helena's ranks except for some improvement in its per-capita income position. It has one of the better growth records among the non-SMSA parishes over both the 1959–68 and 1965–68 periods. Both 1966 and 1967 were particularly good, but 1968 was a very bad year for the parish in terms of growth in personal income and per-capita income.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 4.7	$ 9.4
Government	44%	44%
(State and local)	(39%)	(21%)
Farming	38%	25%
Construction	2%	10%

There has been a large shift in industry mix out of farming since 1959. As a result, several of the other sectors increased their share of total earnings. In 1968, only three other non-SMSA parishes received a larger share of total earnings from the government sector. The farm sector experienced an important decline in relative importance over the 1959–65 period.

C. Over the recent 1965–68 period, farming has been a steady, but below average, growth sector. Government has also been a steady growth area but at roughly an average rate. The construction sector has been quite volatile, with earnings increasing 176% and 1967 and falling 36% in 1968.

Parish-St. James

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	18.1	35th	20.1	36th
Personal Income (millions)	$21.9	27th	$48.0	23rd
Per-Capita Income	$1,235	21st	$2,444	10th

St. James' 1968 personal income and per-capita income ranks show considerable improvement over those in 1959. The improvement has not been steady, however, By 1966, St. James' personal income rank had risen to 17th and its per-capita income rank to 2nd; these ranks declined in each of the following two years to their 1968 positions of 23rd and 10th, respectively. Over the 1959–68 period St. James was one of the fastest growing parishes, but this was due solely to a very good period from 1962–65. Over the more recent 1965–68 period it was one of the slowest growing parishes with per-capita falling 18% and 2% in 1967 and 1968, respectively. In 1966, it was the fastest growing non-SMSA parish in terms of both personal income and per-capita income.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 17.9	$ 39.0
Manufacturing	49%	54%
Farming	14%	12%
Government	11%	10%
Trade	10%	8%

Since 1959, there has been little change in industry mix for this parish, although manufacturing's share of total earnings has risen somewhat. Only one other non-SMSA parish received a larger share of total earnings from the manufacturing sector in 1968.

C. The key to the strange growth behavior of this parish over the 1965–68 period was construction. Construction earnings were up 205% in 1966, but down 60% in 1967 and 67% in 1968. Manufacturing was a strong growth sector for the parish. The government sector was steady and average in growth.

Parish-St. Landry

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	80.3	2nd	86.5	2nd
Personal Income (millions)	$71.9	4th	$132.0	8th
Per-Capita Income	$911	41st	$1,554	41st

St. Landry's rank in all three categories has remained fairly stable since 1959, with some decline in its personal income position taking place. However, its growth record was average to slightly above average over both the 1959–68 and 1965–68 periods. Its growth rates of both personal income and per-capita income have been above average, but declining each year, over the 1965–68 period.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 57.1	$ 98.5
Trade	24%	21%
Government	16%	18%
Farming	14%	16%
Services	11%	11%
Mining	14%	10%
Construction	6%	10%

Those shifts that have occurred in the industrial mix of this parish since 1959 have been fairly moderate. A slightly larger percentage of total earnings originated in the trade sector in 1968 than is the case in the great majority of non-SMSA parishes.

C. The mining and trade sectors have had very good growth records over the 1965–68 period. Manufacturing, although relatively small, has also performed well. The government sector has experienced steady, average growth. Farming tended to have a very volatile growth record during this period.

Parish-St. Martin

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	28.6	18th	33.1	20th
Personal Income (millions)	$19.4	32nd	$39.5	25th
Per-Capita Income	$717	51st	$1,265	51st

These rankings have been fairly stable over the 1959–68 period, with some increase in St. Martin's personal income position. It was one of the fastest growing parishes over the 1959–68 period; however, this was due primarily to very good performances from 1959–65 since over the recent 1965-68 period it was the second poorest performer among the parishes in terms of both personal income and per-capita income growth. Both 1966 and 1967 were very poor growth years, with 1968's rate being just below average.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 14.3	$ 27.0
Government	21%	22%
(State and local)	(17%)	(18%)
Farming	18%	16%
Trade	17%	14%
Manufacturing	16%	11%
Services	11%	11%
Construction	6%	11%

There have been no major changes in St. Martin's industry mix since 1959, although construction's share of total earnings has risen somewhat and manufacturing's share has declined.

C. Government, farming, construction, and trade have had average growth records over the 1966–68 period, but most of the other sectors have performed very poorly. Earnings in the transportation and service sectors have been declining absolutely since 1966.

Parish-St. Mary

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	48.1	8th	60.8	6th
Personal Income (millions)	$75.4	6th	$181.0	4th
Per-Capita Income	$1,491	7th	$2,818	6th

These ranks have remained relatively stable over the 1959–68 period, with some slight improvement in each category. St. Mary's personal income growth rate over the 1959–68 period was the fourth best among the non-SMSA parishes and its per-capita income growth rate was very good. More recently (1965–68), its growth record was consistently above average.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 60.7	$149.5
Mining	18%	26%
Manufacturing	12%	15%
Trade	17%	14%
Transportation-public utilities	11%	12%
Services	9%	10%
Construction	15%	8%

Since 1959, there has been a shift in industry mix out of farming, trade, and construction and into mining (primarily) and manufacturing. For the most part, this shift took place gradually, although construction's share of total earnings fell rather sharply over the 1959–62 period. In 1968, only one other non-SMSA parish recorded a larger percentage of total earnings in the mining sector.

C. The mining and service areas were very good growth sectors over the 1965–68 period. Most of the other sectors recorded roughly average growth rates. However, the trade sector had a bad year in 1968.

Parish-Tangipahoa

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	58.5	4th	68.6	4th
Personal Income (millions)	$65.4	9th	$113.2	9th
Per-Capita Income	$1,141	25th	$1,688	33rd

This parish's population and personal income ranks have remained fairly stable over the 1959–68 period, but there has been a noticeable deterioration in its per-capita rank. Its personal income and per-capita income growth rates over the 1959–68 period have been below average relative to the other non-SMSA parishes. Its more recent (1965–68) growth performance was better than average, mainly due to good years in 1966 and 1968. 1967 was a very poor growth year for this parish.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 50.8	$ 85.3
Trade	27%	24%
Government	18%	21%
(State and local)	(16%)	(19%)
Farming	19%	13%
Manufacturing	11%	12%
Services	11%	11%
Construction	5%	11%

Since 1959, there has been a noticeable shift in industry mix out of farming—and to some extent trade—and into government and construction. Construction's share of total earnings increased markedly from 1965–66. Compared to all other non-SMSA parishes, Tangipahoa relied more heavily on the trade sector as a source of earnings in 1968.

C. Manufacturing and government have been good growth sectors over the recent 1965–68 period. Earnings in the farming and construction sectors have been extremely volatile over this time period.

Parish-Tensas

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	11.6	49th	11.4	50th
Personal Income (millions)	$12.2	45th	$19.4	48th
Per-Capita Income	$1,037	33rd	$1,687	34th

These ranks have been fairly constant over the 1959–68 period. Tensas' personal income growth record was below average and its per-capita income growth record was slightly above average over the same period. The 1959–62 period was particularly bad with per-capita falling 9%. Its growth performance more recently (1965–68) was above average primarily due to a very good year in 1966, as 1967 and 1968 were very poor growth years.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 10.4	$ 15.4
Farming	42%	53%
Government	13%	18%
(State and local)	(11%)	(15%)
Trade	11%	11%
Mining	18%	2%

There has been a large change in industry mix since 1959 from the mining sector into farming (primarily) and government. There was a large drop in mining's share of total earnings over the 1959–62 period and a big advance in farming's share over the 1965–66 period. In 1968, Tensas parish was first among non-SMSA parishes in the percentage of total earnings originating in the farm sector.

C. The extremely important farm sector performed very poorly in 1967 and 1968, accounting for the parish's poor showing in those years. Government was a steady, average growth sector, while earnings in the mining and construction industries fell sharply.

Parish-Terrebonne

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	59.9	3rd	74.4	3rd
Personal Income (millions)	$84.8	2nd	$179.4	3rd
Per-Capita Income	$1,447	9th	$2,468	9th

Terrebonne's rank in all three categories has remained fairly stable over the 1959–68 period. This parish's personal income growth rate was very good and its per-capita income growth rate was above average over this period. Its more recent (1965–68) performance was slightly below average due to a poor year in 1966. Terrebonne's 1967 and 1968 growth record was about average.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 67.5	$141.7
Mining	28%	25%
Trade	23%	23%
Manufacturing	7%	13%
Services	10%	11%
Government	10%	9%

Since 1959, manufacturing's share of total earnings has increased, while those of farming and mining have declined. Most of this shift occurred over the 1962–65 period. In 1968, only three other non-SMSA parishes relied more heavily on mining as a percentage of total earnings; only one other parish relied more heavily on the trade sector for its earnings.

C. The service, mining, and construction sectors have experienced roughly average growth rates of earnings over the 1965–68 period.

None of the other sectors could be called good growth areas during this period.

Parish-Union

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	17.4	38th	19.4	37th
Personal Income (millions)	$15.5	40th	$24.9	39th
Per-Capita Income	$966	39th	$1,396	49th

Union's ranks have remained fairly stable over the 1959–68 period except for a deterioration in its per-capita income position. The parish's growth record over the 1959–68 period was well below average, and was one of the poorest among the non-SMSA parishes over the more recent 1965–68 period. 1966 and 1967 were particularly poor growth years for the parish. It rallied with an above average performance in 1968.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 11.1	$ 16.3
Government	21%	29%
(State and local)	(18%)	(25%)
Manufacturing	16%	19%
Trade	12%	13%
Services	9%	12%
Farming	16%	7%

There have been some important changes in Union's industry mix since 1959, with government, manufacturing, and services increasing in importance and farming and mining decreasing. Farming fell sharply in importance over the 1962–65 period. Government significantly increased its share of total earnings over the 1959–62 period.

C. Government was the only steady, average growth sector in Union parish over the 1965–68 period. However, the service sector grew very well in 1967 and 1968. Manufacturing experienced a very volatile growth record.

Parish-Vermilion

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	38.3	11th	42.4	12th
Personal Income (millions)	$52.4	11th	$85.9	14th
Per-Capita Income	$1,401	13th	$2,079	17th

These rankings have remained fairly stable over the 1959–68 period, with some slight declines in all three categories. Vermilion's growth record over both the 1959–68 and 1965–68 periods was well below average. 1966 and 1967 were particularly poor growth years. However, the parish rallied with an above average performance in 1968.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	1968
Total earnings (millions)	$ 42.1	$ 66.3
Farming	29%	30%
Trade	12%	16%
Government	12%	16%
Mining	18%	10%

There has been a substantial change in industry mix since 1959, with a large decrease in mining's importance and increases occurring for government, manufacturing, and construction. The principal decrease in mining's share of total earnings took place over the 1959–62 period.

C. Earnings in the important farm sector have improved steadily from a mediocre growth performance in 1966 to an above average record in 1968. Government has been a steady, average growth sector. The trade and mining sectors have experienced very volatile growth records over the 1965–68 period.

Parish-Vernon

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		1968	
Population (thousands)	18.0	36th	60.6	7th
Personal Income (millions)	$18.1	35th	$219.6	2nd
Per-Capita Income	$1,025	35th	$3,701	1st

Vernon's 1968 ranks represent tremendous improvements over its 1959 positions. This parish was by far the fastest growing non-SMSA parish in terms of personal income (up 1212%) and per-capita income (up 261%) over the 1959–68 period. This growth is due to the reactivation of the Fort Polk training facility during the Berlin and Cuban crises

and the Viet Nam War. The parish's personal income and per-capita income growth records were the second best among the parishes over the recent 1965–68 period; however, this growth occurred almost totally in 1966, as 1967 was only average and 1968 was below average in growth performance.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 13.1	$194.8
Government	38%	93%
(military)	(11%)	(87%)
Trade	23%	3%
Farming	14%	1%
Services	11%	1%

In 1968, this parish obviously relied to an enormous extent on government as a source of earnings. Some 87% of all earnings were attributable to the military component of government. This parish was clearly unique among all non-SMSA parishes in the State.

C. The rate of growth of earnings in the government sector has been falling off markedly over the 1965–68 period. Government earnings rose 48% in 1966, 14% in 1967, and only 7% in 1968. This decline in the growth rate of government earnings clearly accounts for the tapering off of the parish's growth record in recent years.

Parish-Washington

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	43.4	9th	46.3	10th
Personal Income (millions)	$73.0	5th	$96.2	12th
Per-Capita Income	$1,686	2nd	$2,084	16th

While its population rank has remained relatively stable since 1959, Washington's personal income and per-capita income rankings have deteriorated markedly. It was the poorest growing parish in terms of personal income over the 1959–68 period, and it was also the poorest growing parish over the more recent 1965–68 period. During the latter period, per-capita income rose by only 4%. 1967 was a particularly bad year for Washington parish.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 61.3	$ 77.1
Manufacturing	52%	38%
Government	11%	17%
(State and local)	(9%)	(15%)
Trade	10%	15%
Services	8%	10%

Since 1959, there has been a massive change in industry mix out of manufacturing and into government and trade. This shift occurred primarily over the 1959–62 period.

C. The construction sector has deteriorated badly since 1965—falling in dollar earnings in each year. Growth in manufacturing has been very erratic and the trade sector has performed poorly over the 1965–68 period. In fact, the parish has not enjoyed a good growth sector during this period.

Parish-Webster

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	39.1	10th	41.8	13th
Personal Income (millions)	$63.0	8th	$143.6	5th
Per-Capita Income	$1,644	3rd	$3,507	2nd

Webster's rank in all three categories has been relatively stable over the 1959–68 period, with its population rank falling slightly and its income ranks rising slightly. This parish was one of the fastest growing over the 1959–68 period and was the fastest growing non-SMSA parish over the 1965–68 period in terms of both personal income and per-capita income. However, this was due to very good years in 1966 and 1967, as Webster's growth in 1968 was below average. A munitions plant is located in this parish.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 50.4	$115.7
Manufacturing	43%	61%
Government	13%	11%
(State and local)	(10%)	(9%)
Trade	12%	8%
Services	12%	8%

In 1968, Webster was first among non-SMSA parishes in the percentage of total earnings attributable to the manufacturing sector. Since 1959, there has been a massive shift in Webster's industry mix into manufacturing and

out of construction, trade, services, and transportation-public utilities. As might be expected, most of this shift occurred from 1965–1967 commensurate with the increase in the Viet Nam War effort.

C. Manufacturing had an excellent growth record in 1966 and 1967, but was down to an average growth rate in 1968. Government was a steady, average growth sector over the 1965–68 period. Construction had an excellent growth record up to 1968, when earnings fell 30%.

Parish-West Baton Rouge

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	14.6	43rd	16.6	43rd
Personal Income (millions)	$14.4	42nd	$27.5	38th
Per-Capita Income	$1,086	31st	$1,830	27th

West Baton Rouge parish's ranks have remained fairly stable over the 1959–68 period, with some slight improvement in its income positions. The parish's growth performance over the 1959–68 period was slightly above average—basically due to a very good record in 1962–65. Its growth performance recently (1965–68) has been poor, especially in 1967 and 1968.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 10.5	$ 19.5
Transportation-public utilities	16%	29%
Government	19%	21%
(State and local)	(16%)	(17%)
Farming	18%	13%
Construction	8%	11%
Trade	22%	8%

In 1968, West Baton Rouge parish relied more heavily on the transportation-public utilities sector as a source of earnings than did any other non-SMSA parish. There has been a major shift in industry mix since 1959, with the transportation-utilities' share of earnings increasing and trade's share declining. Most of the improvement in transportation-public utilities occurred over the 1962–65 period. Construction's share of total earnings increased substantially in 1966 and 1967, but declined in 1968.

C. Following a very good year in 1966, earnings in the construction sector have been falling absolutely. The important transportation-utilities sector has also performed very poorly recently—especially in 1967 and 1968. Only government and services have been steady, average growth sectors for this parish over the 1965–68 period.

Parish-West Carroll

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	14.0	45th	15.8	44th
Personal Income (millions)	$13.1	44th	$23.8	44th
Per-Capita Income	$956	40th	$1,534	42nd

In 1968, this parish's population and income ranks were roughly the same as they were in 1959. However, some fluctuation in income rankings took place during this period; West Carroll's per-capita income rank improved from a 1959 position of 40th to a 1966 position of 26th before it deteriorated badly to its present rank. Over the 1959–68 period West Carroll's growth rate was about average compared to other non-SMSA parishes. However, its growth record over the more recent 1965–68 period was below average due to a poor year in 1967 and an extremely bad year in 1968 (per-capita income fell 11%).

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 10.5	$ 17.4
Farming	47%	40%
Government	17%	20%
(State and local)	(14%)	(17%)
Trade	12%	13%

A substantial portion of West Carroll's earnings are in the farm sector. However, there has been a change in industry mix from farming into several of the other sectors since 1959. The biggest part of this shift occurred in 1968; farming's share of total earnings was above 50% in both 1966 and 1967.

C. After registering an increase of 55% in earnings in 1966, the important farm sector suffered serious declines in 1967 and 1968 (earnings were down 1% and 33%, respectively). Government was a steady, average growth sector and the relatively small manufacturing

sector grew very well over the 1965–68 period. The trade sector performed poorly.

Parish-West Feliciana

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	12.2	48th	11.6	49th
Personal Income (millions)	$9.0	50th	$26.5	41st
Per-Capita Income	$721	50th	$2,226	13th

Although West Feliciana's population position has remained fairly stable since 1959, there has been an improvement in its personal income position and a very significant improvement in its per-capita income position. West Feliciana was the second fastest growing parish over the 1959–68 period in terms of per-capita income. Its performance in the more recent 1965–68 period was about average and due completely to a tremendous growth year in 1967 (per-capita income up 33%). 1966 was a poor year and 1968 was a very poor year (per-capita income down 2%).

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 7.2	$ 21.0
Manufacturing	31%	54%
Farming	20%	17%
Government	25%	17%
(State and local)	(22%)	(16%)

Only one other non-SMSA parish relied more heavily on manufacturing as a percent of total earnings in 1968. There has been a massive change in industry mix since 1959 toward more manufacturing and away from several of the other sectors. Manufacturing's share of total earnings has been quite volatile in recent years—32% in 1965, 19% in 1966, 50% in 1967, and 54% in 1968. The construction sector has been equally volatile. It produced 31% of total earnings in 1966 as opposed to only 2% in 1968.

C. Government was the only steady, average growth sector in this parish over the 1965–68 period. Most of the other sectors were very volatile. For example, manufacturing earnings were down 36% in 1966, up 256% ($8 million) in 1967, and up 5% in 1968. The farm sector was also very volatile, having poor years in 1966 and 1968 and a very good year in 1967.

Parish-Winn

A. Population and income—absolute figures and ranks among non-SMSA parishes, 1959 and 1968:

	1959		*1968*	
Population (thousands)	15.8	41st	16.9	42nd
Personal Income (millions)	$17.9	36th	$33.5	33rd
Per-Capita Income	$1,141	24th	$1,990	20th

Winn's ranks have remained fairly stable since 1959, although it has registered slight improvements in its income positions. Its growth rates of personal income and per-capita income have been a little above average over the 1959–68 period compared with other non-SMSA parishes. Its growth was evenly spread and about average or better over the 1965–68 period.

B. Total earnings and sectors with largest percent of total earnings, 1959 and 1968:

	1959	*1968*
Total earnings (millions)	$ 13.4	$ 25.0
Manufacturing	22%	36%
Government	21%	23%
(State and local)	(15%)	(18%)
Trade	16%	12%
Services	11%	11%

There has been a large change in industry mix since 1959 into manufacturing and out of several of the other sectors. For the most part this shift occurred gradually.

C. Over the 1965–68 period, manufacturing was a good, strong growth sector for this parish, although its growth rate has been tapering off. Government was a steady, average growth sector over this period. None of the other sectors performed particularly well.

State, Area and Parish Manpower Projections for Louisiana to 1985

by

JAMES A. PAPKE AND DR. JOHN LEGLER

PURPOSE AND SCOPE

Job opportunities in the future are an important part of the many considerations necessary to structuring a state's educational system. To provide one element to these considerations, projections to 1985 of total State employment by major industry and occupational grouping are presented in Tables 1-4; the SMSA occupation data are contained in Tables 5-12; and, the employment projections by parish and major industry are listed in Tables 13-21. An appendix to the report contains the assumptions, methodology and data sources employed to develop the manpower projections.

Before describing the highlights of the manpower projections, a comment on the limitations affecting the reliability of these projections is necessary. Efforts to project future manpower requirements are a difficult undertaking in view of the wide variety of technological, economic, political, and related developments which may influence these requirements. It should be remembered that the estimates are approximations only, and caution in their interpretation and application is in order. Perhaps the major limitation pertains primarily to the data generated for the parishes and SMSA's. Whenever estimated aggregative data (e.g., national and State totals) are broken down into detailed disaggregative series, some accuracy and analytical usefulness are sacrificed. Thus, for example, the reliability of the estimate of the projected total number of engineers in the State of Louisiana in 1985 is greater than the estimate for the Lake Charles SMSA. That is, factors affecting the intra-State location of engineering employment are more variable, numerous, and complex than those affecting their inter-State location. Recognizing these limitations, the results, nevertheless, represent the staff's best judgment and are dependent on the realization of the various assumptions on which the projections are based.

HIGHLIGHTS OF THE PROJECTIONS

State (Tables 1-4)

1. The most dramatic change in Statewide industry employment to 1985 is the shift to the service-producing industries (transportation, communications, and public utilities, wholesale and retail trade, finance, insurance and real estate, services, and government) from the goods-producing industries (agriculture, mining, construction and manufacturing). By 1985, more than 7 of every 10 members of the Louisiana labor force—or 1.4 million persons—are projected to be in service-oriented industries (See Table 1).

2. Within the overall service-producing sector the most rapidly growing major segment will be business- and individual-oriented services (e.g., advertising, accounting, auditing, research and development, and repair services, legal, medical and educational services, and hotel, amusement and recreational services, etc.) See Table 2.

3. Because the occupational structure of the State's labor force is largely determined by the relative composition of the industry structure, the fastest growing occupational groups will continue to be those in the Professional and Technical category. At 270 thousand in 1985, employment in these occupations will represent 15.2 per cent of total employment, up from 10.3 per cent in 1960 (Table 3). The increasing concentration of population in metropolitan areas and rising incomes will account for the new opportunities for professional and technical personnel.

4. Farm workers in Louisiana will decline by over 50 per cent by 1985, from 62 thousand in 1960 to 27 thousand. Employment requirements for farm workers will continue to reflect the trends toward larger and more mechanized operations, and rising productivity due to improvements in farm technology and science.

5. Employment in the construction industry is

experiencing long term growth with short-term cyclical fluctuations. Construction employment in the State increased 48 thousand, an increase of 61.2 per cent, between 1960 and 1967. It is projected to increase an additional 54.6 per cent by 1985, reflecting, in large part, the increased demand for home building, for expanding investment in industrial plants and for State and local capital facilities.

6. The projected 74 per cent expansion of employment in the trade sectors—Wholesale and Retail Trade—will substantially increase the demand for sales personnel. By 1985, 132 thousand persons will be involved in sales, a 104.6 per cent increase over the 1960 level. Wholesale trade employment will increase more rapidly than that of retail trade, the latter being subject to a wider variety of labor-saving, technological innovations (e.g., vending machines, self-service devices, computers for inventory control, etc.).

7. The so-called white-collar occupations (professional and technical, managers, officials, and proprietors, clerical and sales workers), which surpassed employment in the so-called blue-collar occupations (craftsmen and foremen, operatives and nonfarm laborers) for the first time in Louisiana in the decade of the 1950's, will account for over 43 per cent of all employed workers by 1985. Employment in these occupations will more than double, from 381.4 thousand in 1960 to 821.3 thousand in 1985.

8. Blue collar occupations will account for approximately a third (33.2 per cent) of the State's labor force in 1985, down from 36.2 per cent in 1960. The number of employed workers in this group will increase, however, from 365.6 thousand in 1960 to 630.2 thousand in 1985—a 72 per cent rise. Included in this category are the highly skilled craftsmen employed in the manufacturing sector (primarily fabricated metal products and transportation equipment), the semi-skilled workers such as assemblers and inspectors, material moving equipment operators, and drivers of trucks, buses and taxicabs, and the nonfarm laborers.

SMSA's (Tables 5-11)

(Note: In 1960, Louisiana had five areas classified by the U.S. Department of Commerce as Standard Metropolitan Statistical Areas. The Lafayette SMSA was added subsequently. The boundaries of the New Orleans SMSA have also been enlarged since the 1960 data were published.)

1. The overall growth in employment in 1985 is reflected in general regional expansion of employment throughout the State of Louisiana. Differences in the rate of growth are, however, projected to be substantial among the various regions. Employment growth rates over the 25 year projective period 1960–1985 range from 22.3 per cent for all non-SMSA's combined to 201.3 per cent for the Baton Rouge SMSA. (Table 5)

2. An increasing concentration of employment in the SMSA's is apparent. In 1960, Louisiana's five SMSA's accounted for just under one half (47.7 per cent) of total State employment. By 1985, almost two-thirds (63.4 per cent) of total employment will be located in large metropolitan areas.

3. Employment in 1985 in all areas *outside* the SMSA's is projected to increase by 126,603 (22.3 per cent) over the 1960 level. This increase, however, falls considerably below the overall Statewide increase of 74.6 per cent and below the increase projected for every SMSA.

4. Employment is expected to more than double by 1985 in three of Louisiana's six SMSA's.

5. Baton Rouge is projected to be the fastest growing SMSA in Louisiana. The accelerated employment growth will almost double the area's share of total State employment (from 6.8 per cent of the total to 11.8 per cent).

6. By 1985, the New Orleans SMSA will provide employment to one-third of the State's labor force (up from approximately one-quarter in 1960).

7. The occupational "mix" in each of the State's major industrial and population centers reflects the center's industrial structure. For example, in the Lake Charles SMSA, 1960 employment in Professional and Technical occupations accounted for about 10 per cent of the area's total; in 1985, these occupations are expected to approach 15 per cent of the area's total employment.

8. One of the fastest growing major occupational groups in most of the SMSA's will be Service Workers. This occupational group encompasses a wide variety of jobs and a wide variety of skills, including federal agents, policemen, firemen, beauty operators, and the like. In the New Orleans SMSA, this group provided employment for 16 per cent of the area's labor force in 1960. By 1985, one out of every four (25.9 per cent) area residents in the labor force will be pursuing these service occupations. The rate of increase in

this group is more than twice as fast as the rate projected for the area's total employment.

Parishes (Tables 13-21)

(Note: Manpower projections to 1985 for Louisiana's 64 Parishes are presented by nine major industry types. A further breakdown by occupational group proved to be of no analytical value).

1. The number of persons employed in agriculture by parish is given in Table 13. Orleans and Lafourche Parishes, which employed the largest percentages of the State total in this industry in 1960, will be replaced by East Baton Rouge by 1985. With only few exceptions, the number of persons employed in agriculture in each parish will be less in 1985 than in 1960.

2. Mining employment in Orleans Parish is projected to increase fourfold (to 14,262) over the 25-year period 1960–1985 and account for 22.3 per cent of total mining employment. Thus, though mining is projected to have the lowest Statewide rate of employment growth of all nonfarm industries, its relative importance will increase substantially in some parishes.

3. The construction industry generally will benefit from rising population and per capita income growth. In particular, parishes such as Ascension, Plaquemines, St. Charles, West Baton Rouge and West Feliciana will show pronounced growth in contract construction employment.

4. By 1985, manufacturing employment will have experienced a broader dispersal throughout the State of Louisiana than the 1960 distributional pattern. Thirty-three parishes, including the large population centers, are projected to have growth rates less than the Statewide average of 64.7 per cent.

5. The largest of the service industries—wholesale and retail trade—and transportation are expected to record employment gains paralleling those of the whole Louisiana economy. Retail trade employment will expand most rapidly in new merchandising centers.

6. The projected parish employment data for industries classified as Finance, Insurance and Real Estate suggest an uneven regional growth pattern, with the smaller parishes in general recording impressive percentage increases over the 25-year period, but the major commercial centers maintaining substantial leads in absolute numbers. This group of industries is the only one to record a positive growth rate in every parish.

7. Finally, within the heterogenous services (labor-intensive) division, employment growth is related to increases in population, personal disposable income, and generally expanding economic activity. Only ten parishes are expected to record absolute declines in this industry's employment opportunities. Substantial gains (over 200 per cent) are projected for 27 parishes.

GENERAL IMPLICATIONS

The industrial, occupational, and regional manpower requirements, as projected, indicate increased employment for occupations requiring higer levels of education, manual skills, and formal training in the future than in the past. It is imperative that the Louisiana Master Plan accommodate a strengthening of the State's educational and training institutions and gear them to future occupational needs.

Job entry educational requirements are likely to rise most rapidly in the professional, service, clerical, managerial, and other white-collar fields. At the same time, the need for educational, vocational and technical programs to provide entrance and advancement opportunities for those pursuing manual occupations will have to be satisfied if the projected number and variety of blue-collar and service jobs are to be filled.

APPENDIX: METHODOLOGY, PROCEDURES AND DATA SOURCES

The basic assumption in making area manpower projections is that the analysis should be made within the context of nationwide economic, technological, and demographic developments. State employment projections by *industry and occupation* were, therefore, derived by adaptation of the data published by the federal and State governments. An explanation of the methodology employed in the foregoing projections is set forth below in two parts, that applying to State projections and that applying to the SMSA and parishes' projections.

TABLE 1

STATE OF LOUISIANA: EMPLOYMENT BY INDUSTRY, 1960, 1967 AND 1985
(In thousands of persons)

Industry	*1960 Actual*		*1967 Actual*		*1985 Projected*	
Total Employment	1,088.0	(100.0)	1,305.5	(100.0)	1,899.2	(100.0)
Agriculture	152.2	(14.0)	97.0	(7.4)	30.3	(1.6)
Mining	45.1	(4.1)	52.2	(4.0)	64.1	(3.4)
Oil and Gas Extraction	41.3	(3.8)	48.7	(3.7)	59.4	(3.7)
Contract Construction	77.9	(7.2)	125.6	(9.6)	194.2	(10.2)
Manufacturing	146.0	(13.4)	178.6	(13.7)	240.5	(12.7)
Durable	52.7	(4.8)	81.7	(6.3)	114.6	(6.03)
Lumber and Wood	21.2	(1.9)	18.5	(1.4)	12.3	(0.6)
Stone, Clay and Glass	7.1	(0.7)	8.3	(0.6)	19.1	(1.0)
Fabricated Metal	7.2	(0.7)	11.2	(0.9)	23.7	(1.2)
Machinery	4.8	(0.4)	7.7	(0.6)	16.0	(0.8)
Transportation Equipment	8.9	(0.8)	16.2	(1.2)	21.2	(1.1)
Nondurable	94.3	(8.7)	96.9	(7.4)	125.9	(6.6)
Food and Kindred	33.9	(3.1)	32.9	(2.5)	22.3	(1.2)
Paper and Allied	17.6	(1.6)	15.8	(1.2)	16.1	(0.9)
Chemicals and Allied	16.4	(1.5)	21.5	(1.6)	25.8	(1.4)
Transportation, Communications and Public Utilities	96.7	(8.9)	104.1	(8.0)	145.9	(7.7)
Wholesale and Retail Trade	214.5	(19.7)	260.0	(19.9)	373.2	(19.7)
Wholesale	52.6	(4.8)	65.1	(5.0)	96.4	(5.1)
Retail	161.9	(14.9)	194.9	(14.9)	276.8	(14.6)
Finance, Insurance and Real Estate	37.1	(3.4)	47.9	(3.7)	85.1	(4.5)
Services	173.3	(15.9)	239.7	(18.4)	444.2	(23.4)
Government	145.2	(13.3)	200.4	(15.4)	321.7	(16.8)
Federal	25.0	(2.3)	31.2	(2.4)	35.1	(1.8)
State and Local	120.2	(11.0)	169.2	(13.0)	286.6	(15.1)

Source: U.S. Department of Agriculture, *Agricultural Statistics*, 1961–1968; U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings Statistics for States and Areas 1939–67*, *Tomorrow's Manpower Needs*, Bulletin 1606 (Washington: 1969) and *The U.S. Economy in 1980*, Bulletin 1673 (Washington: 1970); see text for methodology and computation of 1985 projections.

TABLE 2

PER CENT CHANGE OF LOUISIANA EMPLOYMENT BY INDUSTRY 1960-1967, 1967-1985, AND 1960-1985

Industry	*1960–1967*	*1967–1985*	*1960–1985*
Total Employment	20.0%	45.5%	74.6%
Agriculture	−36.3	−68.8	−80.1
Mining	15.7	22.8	42.1
Oil and Gas Extraction	17.9	23.0	43.8
Contract Construction	61.2	54.6	149.3
Manufacturing	22.3	34.6	64.7
Durable	30.3	40.3	117.5
Lumber and Wood	−12.7	−33.5	−41.9
Stone, Clay and Glass	16.9	130.0	169.0
Fabricated Metal	55.6	111.6	229.2
Machinery	60.4	107.8	223.3
Transportation Equipment	54.9	80.8	138.2
Nondurable	2.8	29.9	33.5
Food and Kindred	−3.0	−32.2	−34.2
Paper and Allied	−10.2	1.9	−8.5
Chemicals and Allied	31.1	20.0	57.3
Transportation, Communications and Public Utilities	7.7	40.2	50.9
Wholesale and Retail Trade	21.2	43.5	74.0
Wholesale	23.8	48.1	83.3
Retail	20.4	42.0	71.0
Finance, Insurance and Real Estate	29.1	77.7	129.4
Services	38.3	85.3	156.3
Government	38.0	60.5	121.6
Federal	24.8	12.5	40.4
State and Local	40.8	69.4	138.4

Source: U.S. Department of Agriculture, *Agricultural Statistics*, 1961–1968; U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings Statistics for States and Areas 1939–67*, *Tomorrow's Manpower Needs*, Bulletin 1606 (Washington: 1969) and *The U.S. Economy in 1980*, Bulletin 1673 (Washington: 1970).

TABLE 3

DETAILED OCCUPATION OF THE EMPLOYMENT FOR THE STATE OF LOUISIANA 1950, 1960, AND PROJECTED 1985

Occupation	*1950*	*1960*	*1985*
Total	875,907	1,007,812*	1,899,200
Professional, Technical	70,400	103,530	269,585
Engineers, Technical	6,512	9,022	29,782
Engineers, Aeronautical	10	13	57
Engineers, Chemical	688	1,102	4,518
Engineers, Civil	2,013	2,547	7,794
Engineers, Electrical	924	1,145	4,271
Engineers, Industrial	243	536	2,439
Engineers, Mechanical	1,288	1,468	4,066
Engineers, Metalurgical, Etc.	19	42	84
Engineers, Mining	740	896	1,792
Other Engineers, Technical	575	1,273	4,761
Natural Scientists	2,057	3,197	8,999
Chemists	972	1,157	3,957
Agricultural Scientists	111	149	316
Biological Scientists	122	140	501
Geologists, Geophysicists	663	1,610	3,751
Mathematicians	7	49	180
Physicists	45	28	104
Other Natural Scientists	137	64	190
Technicians, exc. Medical, Dental	2,474	4,664	17,849
Draftsmen	1,040	1,993	9,088
Surveyors	774	1,186	4,104
Radio Operators	419	758	2,054
Technicians, Other	241	727	2,603
Medical, Other Health Workers	13,242	23,139	47,377
Dentists	904	985	2,463
Dieticians, Nutritionists	289	459	918
Nurses, Professional	4,988	7,020	18,884
Optometrists	182	255	444
Osteopaths	12	26	57
Pharmacists	1,271	1,283	1,925
Physicians and Surgeons	3,001	3,394	8,824
Psychologists	43	125	493
Technicians, Medical, Dental	1,134	1,950	10,257
Veterinarians	148	189	378
Other Medical, Health Workers	1,270	1,367	2,734
Teachers	22,759	34,311	86,664
Teachers, Elementary	12,448	19,940	41,874
Teachers, Secondary	6,837	8,228	23,779
Teachers, College	1,916	3,559	13,595
Teachers, Other	1,558	2,584	7,416
Social Scientists	205	346	958
Economists	43	93	285
Statisticians and Actuaries	123	181	480
Other Social Scientists	39	72	193
Other Professional, Technical and Kindred	18,358	26,775	77,956
Accountants and Auditors	4,529	6,042	18,549
Airplane Pilots and Navigators	247	641	1,750
Architects	295	442	1,025
Workers in Arts and Entertainment	3,003	4,056	10,099
Clergymen	3,282	3,607	6,853
Designers, exc. Design Draftsmen	69	213	709
Editors and Reporters	619	821	2,660

* This figure should not be strictly compared with the 1960 total employment figure in Table 1. Differences in concepts and classification procedures between U. S. Bureau of the Census data and U. S. Bureau of Labor Statistics data contribute to the observed difference.

TABLE 3 (Cont'd)

Occupation	*1950*	*1960*	*1985*
Lawyers and Judges	2,300	3,027	6,659
Librarians	731	1,360	3,346
Personnel and Labor Relations Workers	527	1,185	3,946
Photographers	561	476	552
Social and Welfare Workers	1,295	1,816	7,228
Other Professional, Technical and Kindred	900	3,089	14,580
Managers, Officials, Proprietors	74,197	91,993	159,148
Officers, Pilots, Engineers, Ship	2,467	4,217	5,148
Clerical and Kindred Workers	85,703	120,112	260,643
Stenos, Typists, Secretaries	19,720	29,020	73,130
Sales Workers	55,714	65,809	131,618
Craftsmen, Foremen and Kindred	101,012	124,908	254,812
Electricians	3,932	4,786	10,003
Plumbers and Pipe Fitters	4,934	5,374	13,059
Structural Metalworkers	854	1,268	2,156
Foremen	9,523	15,437	33,190
Mechanics and Repairmen	21,499	31,671	81,800
Airplane Mechanics and Repairmen	283	515	1,143
Motor Vehicle Mechanics	9,956	10,807	22,695
Office Machine Mechanics	403	335	1,032
Radio and T.V. Mechanics	896	1,889	3,419
Railroad and Car Shop	423	342	404
Other Mechanics and Repairmen	9,055	16,753	53,107
Other Craftsmen and Kindred	755	1,311	2,268
Operatives and Kindred Workers	132,047	164,832	283,511
Service Workers (Inc. Private Households)	113,640	156,369	406,559
Laborers, exc. Farm and Mine	84,154	75,965	91,918
Farmers and Farm Workers	146,871	61,647	26,647
Occupation Not Reported	12,169	42,647	14,759

Sources: U. S. Department of Agriculture, *Agricultural Statistics*, 1961–1968; U. S. Bureau of the Census, *U. S. Census of Population 1960*; U. S. Department of Labor, Bureau of Labor Statistics, *The U. S. Economy in 1980* Bulletin 1673 (Washington: 1970), *Tomorrow's Manpower Needs* Bulletin 1606 (Washington: 1969), *Employment and Earnings Statistics for States and Areas 1939–67*, and *Employment and Earnings Statistics for the United States 1909–1967*.

TABLE 4

PER CENT CHANGE OF EMPLOYMENT BY DETAILED OCCUPATION FOR LOUISIANA 1950–1960 AND 1960–1985

Occupation	*1950–60 (Per Cent)*	*1960–1985 (Per Cent)*
Total	15.1%	88.4%
Professional, Technical	47.1	160.1
Engineers, Technical	38.2	230.0
Engineers, Aeronautical	30.0	336.5
Engineers, Chemical	60.2	310.9
Engineers, Civil	26.5	206.6
Engineers, Electrical	23.9	273.2
Engineers, Industrial	120.6	355.0
Engineers, Mechanical	14.0	277.6
Engineers, Metalurgical, Etc...	121.1	100.4
Engineers, Mining	21.1	100.5
Other Engineers, Technical ...	121.4	274.2
Natural Scientists	55.4	181.3
Chemists	19.0	242.5
Agricultural Scientists	34.2	112.8
Biological Scientists	14.8	258.1
Geologists, Geophysicists	142.8	133.9
Mathematicians	600.0	268.3
Physicists	−37.8	270.0
Other Natural Scientists	−53.3	197.1
Technicians, exc. Medical, Dental.	88.5	283.4
Draftsmen	91.6	356.1
Surveyors	53.2	246.3
Radio Operators	80.9	171.1
Technicians, Other	201.7	258.7
Medical, Other Health Workers..	74.7	105.0
Dentists	9.0	150.4
Dieticians, Nutritionists	58.8	100.1
Nurses, Professional	40.7	169.3
Optometrists	40.1	120.5
Osteopaths	116.7	69.1
Pharmacists	.9	50.3
Physicians and Surgeons	13.1	160.2
Psychologists	190.7	294.7
Technicians, Medical, Dental ..	70.6	426.0
Veterinarians	27.7	100.3
Other Medical, Health Workers	7.6	100.0
Teachers	50.8	153.2
Teachers, Elementary	60.2	110.7
Teachers, Secondary	20.3	189.6
Teachers, College	85.8	289.5
Teachers, Other	65.6	187.4
Social Scientists	68.8	177.2
Economists	116.3	206.9
Statisticians and Actuaries ...	47.2	165.5
Other Social Scientists	84.6	168.0
Other Professional, Technical and Kindred	45.8	191.8
Accountants and Auditors	33.4	207.3
Airplane Pilots and Navigators	159.5	173.5
Architects	49.8	132.0
Workers in Arts and Entertainment	35.1	149.4
Clergymen	9.9	90.6
Designers, exc. Design Draftsmen	208.7	233.6
Editors and Reporters	32.6	224.3
Lawyers and Judges	31.6	120.8
Librarians	86.0	146.7
Personnel and Labor Relations Workers	124.9	233.8
Photographers	−15.2	16.9
Social and Welfare Workers ...	40.2	298.5
Other Professional, Technical, and Kindred	243.2	372.8
Managers, Officials, Proprietors....	24.0	73.1
Officers, Pilots, Engineers, Ship..	70.9	22.4
Clerical and Kindred Workers	40.1	117.0
Stenos, Typists, Secretaries	47.2	152.3
Sales Workers	18.1	100.6
Craftsmen, Foremen and Kindred..	23.7	104.6
Electricians	21.8	109.3
Plumbers and Pipe Fitters	8.9	143.2
Structural Metalworkers	48.5	70.5
Foremen	62.1	115.8
Mechanics and Repairmen	47.3	158.0
Airplane Mechanics and Repairmen	82.0	120.3
Motor Vehicle Mechanics	8.5	110.8
Office Machine Mechanics	20.3	208.3
Radio and T.V. Mechanics	110.8	81.9
Railroad and Car Shop	26.3	18.2
Other Mechanics and Repairmen	85.0	217.2
Other Craftsmen and Kindred...	73.6	73.3
Operatives and Kindred Workers..	24.8	72.0
Service Workers (Inc. Private Households)	37.6	160.4
Laborers, exc. Farm and Mine	−9.7	21.1
Farmers and Farm Workers	−58.0	−56.8
Occupation Not Reported	250.5	−65.4

Sources: See Table 3

TABLE 5

STATE OF LOUISIANA: EMPLOYMENT IN SMSA AND NON-SMSA, 1960 AND 1985

Area	*1960*		*1985*		*% Change 1960–85*
Baton Rouge ..	74,631	(6.8)	224,874	(11.8)	201.3
Lafayette	*		71,096	(3.7)	*
Lake Charles .	40,456	(3.7)	85,080	(4.5)	110.3
Monroe	32,543	(3.0)	63,559	(3.3)	95.3
New Orleans ..	281,584	(25.9)	626,421	(33.0)	122.5
Shreveport ...	89,889	(8.3)	132,670	(7.0)	47.6
All Non-SMSA	568,897	(52.3)	695,500	(36.6)	22.3
Total	1,088,000	(100.0)	1,899,200	(100.0)	74.6

Source: Tables 6–12

* No percentage change computed. Base year is zero.

Note: Percentage composition appears in parenthesis. Details may not add to totals because of rounding.

TABLE 6

STATE OF LOUISIANA: EMPLOYMENT IN BATON ROUGE STANDARD METROPOLITAN STATISTICAL AREA BY OCCUPATION 1960 AND 1985

Occupation	*1960*	*1985*	*% Change 1960–85*
Total	74,631	224,874	201.3
Professional, Technical	11,123	32,912	195.9
Engineers, Technical	1,388	3,280	136.3
Engineers, Aeronautical	5	5	0
Engineers, Chemical	386	343	−11.1
Engineers, Civil	350	1,373	292.3
Engineers, Electrical	142	418	194.4
Engineers, Industrial	65	212	226.2
Engineers, Mechanical	229	398	73.8
Engineers, Metalurgical, Etc.	8	8	0
Engineers, Mining	24	19	−20.8
Other Engineers, Technical	179	504	181.6
Natural Scientists	499	642	25.1
Chemists	356	364	2.2
Agricultural Scientists	49	39	−20.4
Biological Scientists	13	50	284.6
Geologists, Geophysicists	65	122	87.7
Mathematicians	0	19	*
Physicists	8	11	37.5
Other Natural Scientists	8	19	137.5
Technicians, exc. Medical, Dental	506	2,642	422.1
Draftsmen	301	1,544	413.0
Surveyors	56	637	1,037.5
Radio Operators	19	160	742.1
Technicians, Other	130	296	127.7
Medical Other Health Workers	1,377	6,615	380.4
Dentists	104	331	218.3
Dieticians, Nutritionists	66	109	65.2
Nurses, Professional	577	2,547	341.4
Optometrists	4	60	1,400.0
Osteopaths	4	8	100.0
Pharmacists	117	203	73.5
Physicians and Surgeons	269	1,179	338.3
Psychologists	28	58	107.1
Technicians, Medical, Dental	179	1,389	676.0
Veterinarians	13	360	176.9
Other Medical, Health Workers	16	371	2,218.8
Teachers	3,668	11,109	202.9
Teachers, Elementary	1,718	5,385	213.4
Teachers, Secondary	721	3,249	350.6
Teachers, College	1,041	1,863	79.0
Teachers, Other	188	612	225.5
Social Scientists	82	90	9.8
Economists	28	26	−7.1
Statisticians and Actuaries	34	47	38.2
Other Social Scientists	20	17	15.0
Other Professional, Technical and Kindred	3,603	7,552	137.4
Accountants and Auditors	709	1,820	156.7
Airplane Pilots and Navigators	25	167	568.0
Architects	80	139	73.8
Workers in Arts and Entertainment	457	1,320	188.8
Clergymen	257	940	265.8
Designers, exc. Design Draftsmen	39	89	128.2
Editors and Reporters	124	269	116.9

* No percentage change computed. Base year is zero.

TABLE 6 (Cont'd)

Occupation	*1960*	*1985*	*% Change 1960–85*
Lawyers and Judges	313	766	144.7
Librarians	178	438	146.1
Personnel and Labor Relations Workers	177	327	84.7
Photographers	36	53	47.2
Social and Welfare Workers	191	590	208.9
Other Professional, Technical, and Kindred	1,017	1,631	60.4
Managers, Officials, Proprietors	7,876	18,965	140.9
Officers, Pilots, Engineers, Ship	78	510	553.8
Clerical and Kindred Workers	11,779	27,982	137.6
Stenos, Typists, Secretaries	3,423	7,952	132.3
Sales Workers	5,221	14,925	185.9
Craftsmen, Foremen and Kindred	10,713	37,052	245.9
Electricians	633	1,863	194.3
Plumbers and Pipe Fitters	908	2,602	186.6
Structural Metalworkers	91	448	392.3
Foremen	1,665	2,864	77.5
Mechanics and Repairmen	2,153	9,365	335.0
Airplane Mechanics and Repairmen	11	100	809.1
Motor Vehicle Mechanics	625	2,487	297.9
Office Machine Mechanics	38	129	239.5
Radio and T.V. Mechanics	144	371	157.6
Railroad and Car Shop	25	42	68.0
Other Mechanics and Repairmen	1,310	6,236	376.0
Other Craftsmen and Kindred	208	281	35.1
Operatives and Kindred Workers	9,819	27,857	183.7
Service Workers (Inc. Private Households)	12,935	48,458	274.6
Laborers, exc. Farm and Mine	4,806	13,625	183.5
Farmers and Farm Workers	359	3,098	762.9

Source: U. S. Department of Commerce, Bureau of the Census, *U. S. Census of Population: 1960; Detailed Characteristics*; See text for methodology and computation of 1985 projections.

TABLE 7

STATE OF LOUISIANA: EMPLOYMENT IN LAFAYETTE STANDARD METROPOLITAN STATISTICAL AREA BY OCCUPATION, 1960 AND 1985

Occupation	*1960**	*1985*
Total		71,096
Professional, Technical		10,220
Engineers, Technical		1,039
Engineers, Aeronautical		1
Engineers, Chemical		147
Engineers, Civil		259
Engineers, Electrical		135
Engineers, Industrial		67
Engineers, Mechanical		94
Engineers, Metalurgical, Etc.		1
Engineers, Mining		180
Other Engineers, Technical		155
Natural Scientists		452
Chemists		84
Agricultural Scientists		9
Biological Scientists		14
Geologists, Geophysicists		331
Mathematicians		6
Physicists		3
Other Natural Scientists		5
Technicians, exc. Medical, Dental		634
Draftsmen		325
Surveyors		156
Radio Operators		67
Technicians, Other		86
Medical, Other Health Workers		1,933
Dentists		101
Dieticians, Nutritionists		34
Nurses, Professional		768
Optometrists		18
Osteopaths		2
Pharmacists		88
Physicians and Surgeons		358
Psychologists		18
Technicians, Medical, Dental		421
Veterinarians		13
Other Medical, Health Workers		112
Teachers		3,403
Teachers, Elementary		1,629
Teachers, Secondary		983
Teachers, College		563
Teachers, Other		228
Social Scientists		30
Economists		9
Statisticians and Actuaries		15
Other Social Scientists		6
Other Professional, Technical and Kindred		2,729
Accountants and Auditors		584
Airplane Pilots & Navigators		96
Architects		39
Workers in Arts & Entertainment		401
Clergymen		284
Designers, exc. Design Draftsmen		24
Editors and Reporters		71
Lawyers and Judges		245
Librarians		169
Personnel & Labor Relations Workers		116
Photographers		16
Social and Welfare Workers		201
Other Professional, Technical, and Kindred		483
Managers, Officials, Proprietors		6,306
Officers, Pilots, Engineers, Ship		55
Clerical and Kindred Workers		9,654
Stenos, Typists, Secretaries		2,705
Sales Workers		5,732
Craftsmen, Foremen and Kindred		8,844
Electricians		19
Plumbers and Pipe Fitters		403
Structural Metalworkers		62
Foremen		1,204
Mechanics and Repairmen		2,908
Airplane Mechanics & Repairmen		37
Motor Vehicle Mechanics		944
Office Machine Mechanics		47
Radio and T.V. Mechanics		26
Railroad and Car Shop		17
Other Mechanics & Repairmen		1,837
Other Craftsmen and Kindred		84
Operatives and Kindred Workers		9,650
Service Workers (Inc. Private Households)		15,837
Laborers, exc. Farm and Mine		3,624
Farmers and Farm Workers		1,229

Source: U.S. Department of Commerce, Bureau of the Census, *U.S. Census of Population: 1960; Detailed Characteristics*; See text for methodology and computation of 1985 projections.

* Lafayette was not a SMSA in 1960; hence no intertemporal comparisons.

TABLE 8

STATE OF LOUISIANA: EMPLOYMENT IN LAKE CHARLES STANDARD METROPOLITAN STATISTICAL AREA BY OCCUPATION, 1960 AND 1985

Occupation	*1960*	*1985*	*% Change 1960–85*
Total	40,456	85,080	110.3
Professional, Technical	3,989	12,103	203.4
Engineers, Technical	494	1,579	219.6
Engineers, Aeronautical	0	3	*
Engineers, Chemical	169	225	33.1
Engineers, Civil	90	494	448.9
Engineers, Electrical	52	189	263.5
Engineers, Industrial	23	120	421.7
Engineers, Mechanical	96	207	115.6
Engineers, Metalurgical, Etc.	0	4	*
Engineers, Mining	36	55	52.8
Other Engineers, Technical	28	282	907.1
Natural Scientists	125	407	225.6
Chemists	93	208	123.7
Agricultural Scientists	0	16	*
Biological Scientists	0	25	*
Geologists, Geophysicists	24	134	458.3
Mathematicians	0	9	*
Physicists	0	5	*
Other Natural Scientists	8	10	12.5
Technicians, exc. Medical, Dental	182	1,024	462.6
Draftsmen	53	553	943.4
Surveyors	72	243	237.5
Radio Operators	48	95	97.9
Technicians, Other	9	133	1,377.8
Medical, Other Health Workers	624	1,848	196.2
Dentists	56	104	85.7
Dieticians, Nutritionists	8	42	425.0
Nurses, Professional	339	623	83.8
Optometrists	8	19	137.5
Osteopaths	0	2	*
Pharmacists	8	78	875.0
Physicians and Surgeons	96	380	295.8
Psychologists	0	23	*
Technicians, Medical, Dental	76	440	478.9
Veterinarians	17	20	17.6
Other Medical, Health Workers	16	117	631.3
Teachers	1,311	3,632	177.0
Teachers, Elementary	845	1,675	98.2
Teachers, Secondary	338	1,016	200.6
Teachers, College	119	579	386.6
Teachers, Other	85	362	208.2
Social Scientists	8	45	462.5
Economists	0	13	*
Statisticians and Actuaries	4	22	450.0
Other Social Scientists	4	10	150.0
Other Professional, Technical and Kindred	1,245	3,568	186.6
Accountants and Auditors	199	871	337.7
Airplane Pilots and Navigators	16	41	156.3
Architects	8	47	487.5
Workers in Arts and Entertainment	216	435	101.4
Clergymen	156	292	87.2
Designers, exc. Design Draftsmen	0	37	*
Editors and Reporters	28	123	339.3
Lawyers and Judges	95	302	217.9

* No percentage change computed. Base year is zero.

TABLE 8 (Cont'd)

Occupation	*1960*	*1985*	*% Change 1960–85*
Librarians	62	145	133.9
Personnel and Labor Relations Workers	51	194	280.4
Photographers	24	30	25.0
Social and Welfare Workers	64	373	482.8
Other Professional, Technical, and Kindred	326	678	108.0
Managers, Officials, Proprietors	4,296	6,967	62.2
Officers, Pilots, Engineers, Ship	118	114	−3.4
Clerical and Kindred Workers	4,813	11,154	131.7
Stenos, Typists, Secretaries	1,246	3,138	151.8
Sales Workers	2,875	5,107	77.6
Craftsmen, Foremen and Kindred	6,775	13,609	100.9
Electricians	307	651	112.1
Plumbers and Pipe Fitters	464	885	90.7
Structural Metalworkers	126	153	21.4
Foremen	870	1,282	47.4
Mechanics and Repairmen	1,550	3,532	127.9
Airplane Mechanics and Repairmen	17	44	158.8
Motor Vehicle Mechanics	527	686	30.2
Office Machine Mechanics	20	42	110.0
Radio and T.V. Mechanics	91	151	65.9
Railroad and Car Shop	4	6	50.0
Other Mechanics and Repairmen	891	2,603	192.1
Other Craftsmen and Kindred	105	112	6.7
Operatives and Kindred Workers	7,651	13,015	70.1
Service Workers (Inc. Private Households)	6,379	18,233	185.8
Laborers, exc. Farm and Mine	3,252	4,743	58.8
Farmers and Farm Workers	426	149	−65.0

Source: U.S. Department of Commerce, Bureau of the Census, *U.S. Census of Population: 1960; Detailed Characteristics*; See text for methodology and computation of 1985 projections.

TABLE 9

STATE OF LOUISIANA: EMPLOYMENT IN MONROE STANDARD METROPOLITAN STATISTICAL AREA BY OCCUPATION, 1960 AND 1985

Occupation	*1960*	*1985*	*% Change 1960–85*
Total	32,543	63,559	95.3
Professional, Technical	3,318	7,285	119.6
Engineers, Technical	228	977	328.5
Engineers, Aeronautical	0	2	*
Engineers, Chemical	28	176	528.6
Engineers, Civil	66	230	248.5
Engineers, Electrical	40	140	250.0
Engineers, Industrial	7	93	1,228.6
Engineers, Mechanical	33	149	251.5
Engineers, Metalurgical, Etc.	0	6	*
Engineers, Mining	28	22	−7.8
Other Engineers, Technical	26	159	511.5
Natural Scientists	70	265	278.6
Chemists	44	162	268.2
Agricultural Scientists	0	10	*
Biological Scientists	5	16	220.0
Geologists, Geophysicists	17	57	235.3
Mathematicians	0	6	*
Physicists	0	3	*
Other Natural Scientists	0	11	*
Technicians, exc. Medical, Dental	151	532	252.3
Draftsmen	55	276	401.8
Surveyors	47	115	144.7
Radio Operators	20	60	200.0
Technicians, Other	29	81	279.3
Medical, Other Health Workers	548	1,151	110.0
Dentists	23	75	326.1
Dieticians, Nutritionists	24	24	*
Nurses, Professional	176	433	146.0
Optometrists	17	10	−41.2
Osteopaths	0	1	*
Pharmacists	63	87	38.1
Physicians and Surgeons	93	204	119.4
Psychologists	5	12	140.0
Technicians, Medical, Dental	102	235	130.4
Veterinarians	0	8	*
Other Medical, Health Workers	45	62	37.8
Teachers	1,185	1,977	66.8
Teachers, Elementary	699	889	27.2
Teachers, Secondary	239	538	125.1
Teachers, College	117	308	163.2
Teachers, Other	130	242	86.2
Social Scientists	12	31	158.3
Economists	8	9	12.5
Statisticians and Actuaries	4	16	400.0
Other Social Scientists	0	6	*
Other Professional, Technical and Kindred	1,124	2,352	109.3
Accountants and Auditors	111	668	501.8
Airplane Pilots and Navigators	15	53	253.3
Architects	21	25	19.0
Workers in Arts and Entertainment	216	257	19.0
Clergymen	213	155	28.1
Designers, exc. Design Draftsmen	4	25	525.0
Editors and Reporters	33	109	230.3
Lawyers and Judges	99	173	74.7

* No percentage change computed. Base year is zero.

TABLE 9 (Cont'd)

Occupation	*1960*	*1985*	*% Change 1960–85*
Librarians	67	79	17.9
Personnel and Labor Relations Workers	29	137	372.4
Photographers	4	19	375.0
Social and Welfare Workers	83	210	153.0
Other Professional, Technical and Kindred	229	442	93.0
Managers, Officials, Proprietors	3,591	5,921	64.9
Officers, Pilots, Engineers, Ship	29	150	417.2
Clerical and Kindred Workers	3,952	8,943	126.3
Stenos, Typists, Secretaries	1,017	2,306	126.7
Sales Workers	2,766	6,026	117.9
Craftsmen, Foremen and Kindred	4,473	8,776	96.2
Electricians	145	325	124.1
Plumbers and Pipe Fitters	135	422	212.6
Structural Metalworkers	37	72	94.6
Foremen	522	1,039	99.0
Mechanics and Repairmen	1,311	2,863	118.4
Airplane Mechanics and Repairmen	8	36	350.0
Motor Vehicle Mechanics	490	880	79.6
Office Machine Mechanics	21	39	85.7
Radio and T.V. Mechanics	62	110	77.4
Railroad and Car Shop	27	13	—51.9
Other Mechanics and Repairmen	703	1,785	153.9
Other Craftsmen and Kindred	44	74	68.2
Operatives and Kindred Workers	5,593	10,981	96.3
Service Workers (Inc. Private Households)	6,036	12,312	103.9
Laborers, exc. Farm and Mine	2,487	3,108	25.0
Farmers and Farm Workers	327	207	—36.7

Source: U.S. Department of Commerce, Bureau of the Census, *U.S. Census of Population: 1960; Detailed Characteristics*; See text for methodology and computation of 1985 projections.

TABLE 10

STATE OF LOUISIANA: EMPLOYMENT IN NEW ORLEANS STANDARD METROPOLITAN STATISTICAL AREA BY OCCUPATION, 1960 AND 1985

Occupation	*1960*	*1985*	*% Change 1960–85*
Total	281,584	626,421	122.5
Professional, Technical	32,352	103,917	221.2
Engineers, Technical	3,356	9,481	182.5
Engineers, Aeronautical	4	19	375.0
Engineers, Chemical	176	1,442	719.3
Engineers, Civil	934	2,229	138.7
Engineers, Electrical	460	1,520	230.4
Engineers, Industrial	246	817	232.1
Engineers, Mechanical	618	1,214	96.4
Engineers, Metalurgical, Etc.	17	28	64.7
Engineers, Mining	295	468	58.6
Other Engineers, Technical	506	1,744	244.7
Natural Scientists	1,275	2,828	121.8
Chemists	424	1,354	219.3
Agricultural Scientists	25	109	336.0
Biological Scientists	48	180	375.0
Geologists, Geophysicists	715	1,013	41.7
Mathematicians	19	65	242.1
Physicists	16	39	143.8
Other Natural Scientists	28	68	142.9
Technicians, exc. Medical, Dental	1,571	5,464	251.2
Draftsmen	807	2,749	240.6
Surveyors	211	1,193	265.4
Radio Operators	330	656	98.8
Technicians, Other	223	866	289.3
Medical, Other Health Workers	7,268	20,607	183.5
Dentists	392	1,082	176.0
Dieticians, Nutritionists	172	372	116.3
Nurses, Professional	3,334	8,286	148.5
Optometrists	85	197	131.8
Osteopaths	9	25	177.8
Pharmacists	520	664	37.7
Physicians and Surgeons	1,642	3,934	139.6
Psychologists	39	199	410.3
Technicians, Medical, Dental	859	4,537	428.2
Veterinarians	45	100	122.2
Other Medical, Health Workers	171	1,211	508.2
Teachers	8,344	36,549	338.0
Teachers, Elementary	4,629	17,522	278.5
Teachers, Secondary	1,768	10,580	498.4
Teachers, College	1,154	6,060	424.3
Teachers, Other	793	2,387	201.3
Social Scientists	296	325	14.6
Economists	188	95	−49.5
Statisticians and Actuaries	72	164	127.8
Other Social Scientists	36	66	83.3
Other Professional, Technical and Kindred	10,242	28,663	179.9
Accountants and Auditors	2,925	6,390	118.5
Airplane Pilots and Navigators	288	648	125.0
Architects	196	424	116.3
Workers in Arts and Entertainment	1,432	4,323	201.9
Clergymen	700	3,055	336.4
Designers, exc. Design Draftsmen	141	264	87.2
Editors and Reporters	307	989	222.1
Lawyers and Judges	1,510	1,982	31.3
Librarians	327	1,446	342.2

TABLE 10 (Cont'd)

Occupation	*1960*	*1985*	*% Change 1960–85*
Personnel and Labor Relations Workers	548	1,273	132.3
Photographers	200	196	—2.0
Social and Welfare Workers	494	2,343	374.3
Other Professional, Technical, and Kindred	1,174	5,330	354.0
Managers, Officials, Proprietors	29,199	57,973	98.5
Officers, Pilots, Engineers, Ship	1,275	2,808	120.2
Clerical and Kindred Workers	50,467	82,661	63.8
Stenos, Typists, Secretaries	12,382	26,090	110.7
Sales Workers	22,968	26,521	102.5
Craftsmen, Foremen and Kindred	35,919	77,602	116.0
Electricians	1,592	2,821	77.2
Plumbers and Pipe Fitters	1,359	3,563	162.2
Structural Metalworkers	447	589	31.8
Foremen	4,429	9,714	119.3
Mechanics and Repairmen	9,198	27,867	203.0
Airplane Mechanics and Repairmen	283	394	39.2
Motor Vehicle Mechanics	2,565	8,217	220.4
Office Machine Mechanics	148	416	181.1
Radio and T.V. Mechanics	613	1,256	104.9
Railroad and Car Shop	151	160	6.0
Other Mechanics and Repairmen	5,438	17,424	220.4
Other Craftsmen and Kindred	398	696	74.9
Operatives and Kindred Workers	43,584	86,993	99.6
Service Workers (Inc. Private Households)	44,072	156,573	255.3
Laborers, exc. Farm and Mine	22,257	29,868	34.2
Farmers and Farm Workers	766	4,313	463.1

Source: U.S. Department of Commerce, Bureau of the Census, *U.S. Census of Population: 1960; Detailed Characteristics*; See text for methodology and computation of 1985 projection.

Note: St. Tammany parish was added to New Orleans SMSA subsequent to the 1960 census. 1985 data estimates reflect the inclusion of St. Tammany.

TABLE 11

STATE OF LOUISIANA: EMPLOYMENT IN SHREVEPORT STANDARD METROPOLITAN STATISTICAL AREA BY OCCUPATION, 1960 AND 1985

Occupation	*1960*	*1985*	*% Change 1960–85*
Total	89,889	132,670	47.6
Professional, Technical	10,357	17,212	66.2
Engineers, Technical	1,018	2,244	120.4
Engineers, Aeronautical	4	5	25.0
Engineers, Chemical	42	409	873.8
Engineers, Civil	278	370	33.1
Engineers, Electrical	185	326	76.2
Engineers, Industrial	74	205	178.0
Engineers, Mechanical	150	324	116.0
Engineers, Metalurgical, Etc.	9	7	−22.2
Engineers, Mining	129	220	70.5
Other Engineers, Technical	147	378	157.1
Natural Scientists	425	842	98.1
Chemists	52	322	519.2
Agricultural Scientists	5	25	400.0
Biological Scientists	13	38	192.3
Geologists, Geophysicists	319	421	32.0
Mathematicians	16	14	−12.5
Physicists	4	7	75.0
Other Natural Scientists	16	15	−6.3
Technicians, exc. Medical, Dental	605	1,496	147.3
Draftsmen	388	882	127.3
Surveyors	90	230	155.6
Radio Operators	63	190	201.6
Technicians, Other	64	194	203.1
Medical, Other Health Workers	1,927	2,507	30.1
Dentists	95	125	31.6
Dieticians, Nutritionists	34	57	67.6
Nurses, Professional	1,004	966	−3.8
Optometrists	34	23	−32.3
Osteopaths	8	3	−62.5
Pharmacists	83	152	83.1
Physicians and Surgeons	359	458	27.6
Psychologists	8	31	287.5
Technicians, Medical, Dental	238	520	118.5
Veterinarians	13	34	161.5
Other Medical, Health Workers	51	138	170.6
Teachers	2,699	4,407	63.3
Teachers, Elementary	1,781	1,946	9.3
Teachers, Secondary	603	1,180	95.7
Teachers, College	64	673	951.6
Teachers, Other	251	608	142.2
Social Scientists	52	81	55.8
Economists	4	24	500.0
Statisticians and Actuaries	44	41	−6.8
Other Social Scientists	4	16	300.0
Other Professional, Technical and Kindred	3,631	5,635	55.2
Accountants and Auditors	1,109	1,546	39.4
Airplane Pilots and Navigators	58	170	193.1
Architects	59	55	−6.8
Workers in Arts and Entertainment	454	555	22.2
Clergymen	357	339	−5.0
Designers, exc. Design Draftsmen	8	48	500.0
Editors and Reporters	89	210	136.0
Lawyers and Judges	319	449	34.5
Librarians	119	180	51.3

TABLE 11 (Cont'd)

Occupation	*1960*	*1985*	*% Change 1960–85*
Personnel and Labor Relations Workers	136	348	155.9
Photographers	67	42	—37.3
Social and Welfare Workers	150	624	316.0
Other Professional, Technical, and Kindred	706	1,069	51.4
Managers, Officials, Proprietors	10,024	12,841	28.1
Officers, Pilots, Engineers, Ship	0	487	*
Clerical and Kindred Workers	13,140	14,310	8.9
Stenos, Typists, Secretaries	3,722	5,688	52.8
Sales Workers	6,891	11,812	71.4
Craftsmen, Foremen and Kindred	10,657	16,500	54.8
Electricians	332	410	23.5
Plumbers and Pipe Fitters	323	509	57.6
Structural Metalworkers	72	75	4.2
Foremen	1,304	2,660	104.0
Mechanics and Repairmen	2,726	....	....
Airplane Mechanics and Repairmen	67	106	58.2
Motor Vehicle Mechanics	1,014	1,705	68.1
Office Machine Mechanics	46	179	289.1
Radio and T.V. Mechanics	155	169	9.0
Railroad and Car Shop	49	39	—20.4
Other Mechanics and Repairmen	1,359	3,972	192.3
Other Craftsmen and Kindred	124	163	31.5
Operatives and Kindred Workers	12,652	23,763	87.8
Service Workers (Inc. Private Households)	18,735	28,053	49.7
Laborers, exc. Farm and Mine	5,165	5,514	6.8
Farmers and Farm Workers	2,304	2,665	15.7

Source: U.S. Department of Commerce, Bureau of the Census, *U.S. Census of Population: 1960; Detailed Characteristics*; See text for methodology and computation of 1985 projection.

* No percentage change computed. Base year is zero.

TABLE 12

STATE OF LOUISIANA: EMPLOYMENT IN ALL NON-SMSA PARISHES STANDARD METROPOLITAN STATISTICAL AREA BY OCCUPATION, 1960 AND 1985

Occupation	*1960**	*1985*
Total	568,891	695,500
Professional, Technical		86,301
Engineers, Technical		11,197
Engineers, Aeronautical		22
Engineers, Chemical		1,776
Engineers, Civil		2,839
Engineers, Electrical		1,543
Engineers, Industrial		925
Engineers, Mechanical		1,675
Engineers, Metalurgical, Etc.		30
Engineers, Mining		848
Other Engineers, Technical		1,539
Natural Scientists		3,591
Chemists		1,463
Agricultural Scientists		118
Biological Scientists		178
Geologists, Geophysicists		1,673
Mathematicians		61
Physicists		36
Other Natural Scientists		62
Technicians, exc. Medical, Dental		6,062
Draftsmen		2,759
Surveyors		1,530
Radio Operators		826
Technicians, Other		947
Medical, Other Health Workers		13,040
Dentists		645
Dieticians, Nutritionists		280
Nurses, Professional		5,261
Optometrists		117
Osteopaths		16
Pharmacists		653
Physicians and Surgeons		2,311
Psychologists		152
Technicians, Medical, Dental		2,715
Veterinarians		167
Other Medical, Health Workers		723
Teachers		25,587
Teachers, Elementary		12,828
Teachers, Secondary		6,233
Teachers, College		3,549
Teachers, Other		2,977
Social Scientists		356
Economists		109
Statisticians and Actuaries		175
Other Social Scientists		72
Other Professional, Technical and Kindred		26,468
Accountants and Auditors		6,670
Airplane Pilots and Navigators		575
Architects		296
Workers in Arts & Entertainment		2,808
Clergymen		1,788
Designers, exc. Design Draftsmen		222
Editors and Reporters		889
Lawyers and Judges		2,742
Librarians		889
Personnel and Labor Relations Workers		1,551
Photographers		196
Social and Welfare Workers		2,887
Other Professional, Technical and Kindred		4,947
Managers, Officials, Proprietors		50,175
Officers, Pilots, Engineers, Ship		1,024
Clerical and Kindred Workers		105,939
Stenos, Typists, Secretaries		25,271
Sales Workers		41,495
Craftsmen, Foremen and Kindred		92,429
Electricians		3,914
Plumbers and Pipe Fitters		4,675
Structural Metalworkers		757
Foremen		14,427
Mechanics and Repairmen		29,113
Airplane Mechanics & Repairmen		426
Motor Vehicle Mechanics		7,746
Office Machine Mechanics		180
Radio and T.V. Mechanics		1,336
Railroad and Car Shop		175
Other Mechanics and Repairmen		19,250
Other Craftsmen and Kindred		858
Operatives and Kindred Workers		111,252
Service Workers (Inc. Private Households)		127,093
Laborers, exc. Farm and Mine		31,436
Farmers and Farm Workers		14,986

Source: U.S. Department of Commerce, Bureau of the Census, *U.S. Census of Population: 1960; Detailed Characteristics*; See text for methodology and computation of 1985 projections.

* 1960 data by occupation were not compiled because of changes in definitions and boundaries of SMSA.

TABLE 13

STATE OF LOUISIANA: EMPLOYMENT IN AGRICULTURE
BY PARISH, 1960 AND 1985

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Acadia	4,642	606	3.05	2.00	−86.9
Allen	1,948	303	1.28	1.00	−84.4
Ascension	0	36	0	.12	a
Assumption	0	0	0	0	b
Avoyelles	0	394	0	1.30	a
Beauregard	381	500	.25	1.65	31.2
Bienville	0	0	0	0	b
Bossier	913	119	.60	1.71	−87.0
Caddo	7,838	2,516	5.15	8.30	−67.9
Calcasieu	4,246	1,698	2.79	5.60	−60.0
Caldwell	0	0	0	0	b
Cameron	0	0	0	0	b
Catahoula	0	0	0	0	b
Claiborne	0	0	0	0	b
Concordia	0	455	0	1.50	b
De Soto	0	0	0	0	b
East Baton Rouge	4,764	3,522	3.13	11.63	−26.1
East Carroll	0	0	0	0	b
East Feliciana	0	0	0	0	b
Evangeline	639	877	.42	2.89	47.2
Franklin	2,146	551	1.41	1.82	−74.3
Grant	0	0	0	0	b
Iberia	776	182	.51	.60	−76.5
Iberville	0	0	0	0	b
Jackson	0	0	0	0	b
Jefferson	0	1,573	0	5.19	a
Jefferson Davis	7,321	0	4.81	0	−100.0
Lafayette	837	1,397	.55	4.61	66.9
Lafourche	17,061	1,424	11.21	4.70	−91.7
La Salle	0	0	0	0	b
Lincoln	1,629	242	1.07	.80	−85.1
Livingston	0	0	0	0	b
Madison	0	182	0	.60	a
Morehouse	639	479	.42	1.58	−25.0
Natchitoches	1,370	48	.90	.16	−96.5
Orleans	19,938	2,985	13.10	9.85	−85.0
Ouachita	4,642	236	3.05	.78	−94.9
Plaquemines	3,653	579	2.40	1.91	−84.2
Pointe Coupee	0	0	0	0	b
Rapides	2,603	1,364	1.71	4.50	−47.6
Red River	0	0	0	0	b
Richland	0	248	0	.82	a
Sabine	0	45	0	.15	a
St. Bernard	0	0	0	0	b
St. Charles	0	124	0	.41	a
St. Helena	0	0	0	0	b
St. James	0	0	0	0	b
St. John the Baptist	0	0	0	0	b
St. Landry	1,520	2,112	3.43	6.97	−59.5
St. Martin	0	0	0	0	b
St. Mary	15,433	0	10.14	0	−100.0
St. Tammany	0	346	0	1.14	a
Tangipahoa	0	1,061	0	3.50	a
Tensas	0	139	0	.46	a
Terrebonne	4,307	1,385	2.83	4.57	−67.8
Union	4,962	315	3.26	1.04	−93.7
Vermilion	2,542	500	1.67	1.65	−80.3

TABLE 13 (Cont'd)

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Vernon	0	0	0	0	b
Washington	1,431	427	.94	1.41	—70.2
Webster	0	530	0	1.75	a
West Baton Rouge	0	0	0	0	b
West Carroll	715	124	.47	.41	—82.7
West Feliciana	0	0	0	0	b
Winn	0	0	0	0	b

Source: U. S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1951–1968; See text for methodology and computation of 1985 projections.

a. Per cent change cannot be computed because employment was zero in 1960.

b. Zeros in this table indicate either there are no employees in this industry or that figures were withheld by the Census Bureau to avoid disclosure of operations of individual reporting units.

TABLE 14

STATE OF LOUISIANA: EMPLOYMENT IN MINING BY PARISH, 1960 AND 1985

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Acadia	194	562	.43	.87	189.7
Allen	0	87	0	.14	a
Ascension	0	48	0	.08	a
Assumption	54	481	.12	.75	790.7
Avoyelles	198	0	.44	0	—100.0
Beauregard	113	120	.25	.19	6.2
Bienville	18	96	.04	.15	434.3
Bossier	266	622	.59	.97	133.8
Caddo	2,196	7,304	4.87	11.39	232.6
Calcasieu	902	1,946	2.00	3.04	115.7
Caldwell	0	0	0	0	b
Cameron	36	865	.08	1.35	2,302.8
Catahoula	59	424	.13	.66	618.6
Claiborne	184	300	.43	.47	54.6
Concordia	54	735	.12	1.15	1,261.1
De Soto	27	577	.06	.90	2,037.0
East Baton Rouge	235	577	.52	.90	145.5
East Carroll	0	0	0	0	b
East Feliciana	0	0	0	0	b
Evangeline	2,284	24	.63	.04	—91.5
Franklin	0	48	0	.08	a
Grant	32	24	.07	.04	—25.0
Iberia	979	2,999	2.17	4.68	206.3
Iberville	36	264	.08	4.13	633.3
Jackson	0	0	0	0	b
Jefferson	884	2,345	1.96	3.66	165.3
Jefferson Davis	185	653	.41	1.02	253.0
Lafayette	753	7,541	1.67	10.21	901.4
Lafourche	816	1,635	1.81	2.55	100.4
La Salle	325	1,042	.72	1.63	220.6
Lincoln	126	802	.28	1.25	536.5
Livingston	81	0	.18	0	—100.0
Madison	0	0	0	0	b
Morehouse	0	0	0	0	b
Natchitoches	0	0	0	0	b
Orleans	2,616	14,262	5.80	22.25	445.2
Ouachita	198	735	.44	1.15	271.2
Plaquemines	1,592	4,711	3.53	7.35	195.9
Pointe Coupee	0	564	0	.88	a
Rapides	140	0	.31	0	—100.0
Red River	0	83	0	.13	a
Richland	0	192	0	.30	a
Sabine	0	192	0	.30	a
St. Bernard	0	0	0	0	b
St. Charles	81	776	.18	1.21	858.0
St. Helena	0	0	0	0	b
St. James	0	0	0	0	b
St. John the Baptist	0	0	0	0	b
St. Landry	537	673	1.19	1.05	25.3
St. Martin	0	769	0	1.20	a
St. Mary	785	4,038	1.74	6.30	414.4
St. Tammany	113	58	.25	.09	—48.7
Tangipahoa	131	19	.29	.03	—85.6
Tensas	95	205	.21	.32	115.8
Terrebonne	713	3,846	1.58	6.00	439.4
Union	0	83	0	.13	a
Vermilion	316	962	.70	1.50	204.4

TABLE 14 (Cont'd)

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Vernon	0	0	0	0	b
Washington	117	103	.26	.16	−12.0
Webster	262	737	.58	1.15	181.3
West Baton Rouge	0	0	0	0	b
West Carroll	0	0	0	0	b
West Feliciana	95	0	.21	0	−100.0
Winn	0	147	0	.23	a

Source: U. S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1951–1968; See text for methodology and computation of 1985 projections.

a. Per cent change cannot be computed because employment was zero in 1960.

b. Zeros in this table indicate either there are no employees in this industry or that figures were withheld by the Census Bureau to avoid disclosure of operations of individual reporting units.

TABLE 15

STATE OF LOUISIANA: EMPLOYMENT IN CONTRACT CONSTRUCTION BY PARISH, 1960 AND 1985

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Acadia	740	2,313	.95	1.20	212.6
Allen	78	175	.10	.09	124.4
Ascension	117	10,370	.15	5.35	8,763.2
Assumption	16	87	.02	.05	443.8
Avoyelles	584	1,315	.75	.68	125.2
Beauregard	117	192	.15	.10	64.1
Bienville	156	245	.20	.13	57.1
Bossier	1,803	0	1.39	0	−100.0
Caddo	6,910	3,898	8.87	2.01	−43.6
Calcasieu	4,316	14,796	5.54	7.62	242.8
Caldwell	31	35	.04	.02	12.9
Cameron	226	0	.29	0	−100.0
Catahoula	125	439	.16	.23	251.2
Claiborne	86	0	.11	0	−100.0
Concordia	241	122	.31	.06	−49.4
De Soto	257	0	.33	0	−100.0
East Baton Rouge	10,345	47,132	13.28	24.90	355.6
East Carroll	62	140	.08	.07	125.8
East Feliciana	39	52	.05	.03	33.3
Evangeline	101	210	.13	.11	107.9
Franklin	179	1,088	.23	.56	507.8
Grant	226	70	.29	.04	−69.0
Iberia	880	2,278	1.13	1.17	158.9
Iberville	530	2,622	.68	1.35	397.0
Jackson	78	70	.10	.04	−10.3
Jefferson	3,942	28,532	5.06	14.69	623.8
Jefferson Davis	428	385	.55	.20	−10.0
Lafayette	2,057	6,230	2.64	3.21	202.9
Lafourche	904	2,400	1.16	1.24	165.5
La Salle	125	262	.16	.14	109.6
Lincoln	849	0	1.09	0	−100.0
Livingston	249	928	.32	.48	272.7
Madison	31	105	.04	.05	238.7
Morehouse	109	971	.14	.50	790.8
Natchitoches	187	563	.24	.29	201.1
Orleans	17,613	13,108	22.61	6.75	−25.6
Ouachita	3,498	2,826	4.49	1.50	
Plaquemines	86	5,146	.11	2.65	5,883.7
Pointe Coupee	117	233	.15	.12	99.1
Rapides	1,846	3,185	2.37	1.64	72.5
Red River	39	291	.05	.15	646.2
Richland	257	350	.33	.18	36.2
Sabine	86	175	.11	.09	103.5
St. Bernard	514	4,463	.66	2.30	768.3
St. Charles	319	5,243	.401	2.70	1,543.6
St. Helena	0	0	0	0	b
St. James	1,145	1,748	1.47	.90	52.7
St. John the Baptist	109	893	.14	.46	719.3
St. Landry	1,293	350	1.66	.18	−72.9
St. Martin	280	1,515	.36	.78	441.1
St. Mary	1,909	6,506	2.45	3.35	240.8
St. Tammany	351	1,977	.45	1.02	463.2
Tangipahoa	561	1,981	.72	1.02	253.1
Tensas	47	78	.06	.04	66.0
Terrebonne	724	4,505	.93	2.32	522.2
Union	241	1,029	.31	.53	327.0
Vermilion	288	2,466	.37	1.27	756.3

TABLE 15 (Cont'd)

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Vernon	55	388	.07	.20	605.5
Washington	304	1,767	.39	.91	481.3
Webster	561	1,903	.72	.98	239.2
West Baton Rouge	140	3,107	.18	1.60	2,119.3
West Carroll	31	291	.04	.15	841.9
West Feliciana	8	272	.01	.14	3,300.0
Winn	31	78	.04	.04	151.6

Source: U. S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1951–1968; See text for methodology and computation of 1985 projections.

a. Per cent change cannot be computed because employment was zero in 1960.

b. Zeros in this table indicate either there are no employees in this industry or that figures were withheld by the Census Bureau to avoid disclosure of operations of individual reporting units.

TABLE 16

STATE OF LOUISIANA: EMPLOYMENT IN MANUFACTURING
BY PARISH, 1960 AND 1985

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Acadia	832	1,924	.57	.80	131.3
Allen	1,898	1,515	1.30	.63	−20.2
Ascension	1,168	5,652	.80	2.35	383.9
Assumption	1,212	2,818	.83	1.15	132.5
Avoyelles	423	361	.29	.15	−14.7
Beauregard	861	241	.59	.10	−72.0
Bienville	832	1,323	.57	.55	59.0
Bossier	1,095	2,078	.75	.86	89.8
Caddo	859	18,550	5.52	7.71	130.2
Calcasieu	8,702	13,593	5.96	5.65	56.2
Caldwell	117	144	.08	.06	23.1
Cameron	102	0	.07	0	−100.0
Catahoula	131	0	.09	0	−100.0
Claiborne	307	1,371	.21	.57	346.6
Concordia	234	385	.16	.16	64.5
De Soto	1,212	1,876	.83	.78	54.8
East Baton Rouge	19,520	20,801	13.37	8.65	6.6
East Carroll	146	409	.10	.17	180.1
East Feliciana	204	361	.14	.15	80.0
Evangeline	234	120	.16	.05	−48.7
Franklin	88	1,251	.06	.52	1,321.6
Grant	175	120	.12	.05	−31.4
Iberia	1,256	2,405	.86	1.00	91.5
Iberville	978	3,006	.67	1.25	207.4
Jackson	2,015	1,924	1.38	.80	−4.5
Jefferson	11,869	24,202	8.13	10.06	103.9
Jefferson Davis	248	361	.17	.15	45.6
Lafayette	1,650	2,023	1.13	.84	22.6
Lafourche	1,168	3,175	.80	1.32	171.8
La Salle	715	361	.49	.15	−49.5
Lincoln	934	1,563	.64	.65	67.3
Livingston	496	0	.34	0	−100.0
Madison	526	48	.36	.02	−90.9
Morehouse	2,482	457	1.70	.19	−81.6
Natchitoches	292	1,010	.20	.42	245.9
Orleans	31,419	48,227	21.52	20.05	53.5
Ouachita	6,431	12,071	5.09	5.02	62.4
Plaquemines	1,416	1,010	.97	.42	−28.7
Pointe Coupee	350	0	.24	0	−100.0
Rapides	3,635	6,013	2.49	2.50	65.4
Red River	29	48	.02	.02	65.5
Richland	161	649	.11	.27	303.1
Sabine	803	553	.55	.23	−31.1
St. Bernard	4,322	2,257	2.96	.94	−47.8
St. Charles	2,234	5,339	1.53	2.22	139.0
St. Helena	29	192	.02	.08	562.1
St. James	1,387	3,680	.95	1.53	165.3
St. John the Baptist	920	1,996	.63	.83	117.0
t. Landry	788	433	.54	.18	−45.1
t. Martin	394	0	.27	0	−100.0
t. Mary	1,664	6,421	1.14	2.67	285.9
Tammany	1,124	3,074	.77	1.28	173.5
ıgipahoa	2,351	1,010	1.61	.42	−57.0
ıas	146	120	.10	.05	−17.8
bonne	1,723	1,852	1.18	.77	7.5
	423	770	.29	.32	82.0
n	350	2,213	.24	.92	532.3

TABLE 16 (Cont'd)

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Vernon	73	241	.05	.10	230.1
Washington	4,657	3,752	3.19	1.56	−19.4
Webster	3,752	17,508	2.57	7.28	366.6
West Baton Rouge	146	120	.10	.05	−17.8
West Carroll	88	192	.06	.08	118.2
West Feliciana	409	1,251	.28	.52	205.9
Winn	905	2,621	.62	1.09	198.6

Source: U. S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1951–1968; See text for methodology and computation of 1985 projections.

a. Per cent change cannot be computed because employment was zero in 1960.

b. Zeros in this table indicate either there are no employees in this industry or that figures were withheld by the Census Bureau to avoid disclosure of operations of individual reporting units.

TABLE 17

STATE OF LOUISIANA: EMPLOYMENT IN TRANSPORTATION INDUSTRIES BY PARISH, 1960 AND 1985

Pari	1960 Actual	1985 Projected	1960 % of State Total	1985 % of State Total	% Change 1960–85
Acadia	948	0	.98	0	−100.0
Allen .	251	336	.26	.23	33.9
Ascensi	106	905	.11	.62	753.8
Assump	0	0	0	0	b
Avoyell	232	321	.24	.22	38.4
Beaureg	629	759	.65	.52	20.7
Bienvill	77	263	.08	.18	241.6
Bossier	648	591	.67	.41	−8.8
Caddo .	7,572	13,655	7.83	9.36	80.3
Calcasie	4,061	2,116	4.20	1.45	−47.9
Caldwell	39	0	.04	0	−100.0
Cameron	87	511	.09	.35	487.4
Catahou	29	29	.03	.02	0
Claiborn	503	438	.52	.30	−12.9
Concordi	338	496	.35	.34	46.7
De Soto	290	233	.30	.16	−19.7
East Ba ouge	5,560	14,968	5.75	10.26	169.2
East Ca	135	657	.14	.45	386.7
East Fe a	48	277	.05	.19	477.8
Evangeli	174	832	.18	.57	378.2
Franklin	232	379	.24	.26	63.4
Grant .	155	175	.16	.12	12.9
Iberia .	725	3,509	.75	2.41	384.0
Iberville	271	452	.28	.31	66.8
Jackson .	87	88	.09	.06	1.1
Jefferson	3,065	11,307	3.17	7.75	268.9
Jefferson s	619	263	.64	.18	−57.5
Lafayette	2,146	6,268	2.22	4.30	192.1
Lafourch	1,750	5,865	1.81	4.02	235.1
La Salle	242	160	.25	.11	−33.9
Lincoln .	251	832	.26	.57	231.5
Livingsto	87	131	.09	.09	50.6
Madison	97	131	.10	.09	35.1
Morehous	764	0	.79	0	−100.0
Natchitoc	358	802	.37	.55	124.0
Orleans .	43,090	45,248	44.56	31.01	5.0
Ouachita	1,499	4,698	1.55	3.22	213.4
Plaquemi	735	3,020	.76	2.07	310.9
Pointe Co	97	73	.10	.05	−24.7
Rapides	1,373	4,253	1.42	2.92	209.8
Red Rive	58	0	.06	0	−100.0
Richland .	97	219	.10	.15	125.8
Sabine ...	135	175	.14	.12	29.6
St. Berna	213	0	.22	0	−100.0
St. Charle	706	1,780	.73	1.22	152.1
St. Helena	0	0	0	0	b
St. James	0	88	0	.06	a
St. John t ptist	97	321	.10	.22	230.9
St. Landry	551	1,342	.57	.92	143.6
St. Martin	58	58	.06	.04	0
St. Mary	1,344	8,258	1.39	5.66	514.4
St. Tamma	425	1,246	.44	.85	193.2
Tangipaho	580	339	.60	.23	−41.6
Tensas ..	0	0	0	0	b
Terrebonne	1,779	4,625	1.84	3.17	160.0
Union ...	184	657	.19	.45	257.1
Vermilion	571	1,401	.59	.96	145.4

TABLE 17 (Cont'd)

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Vernon	232	613	.24	.42	164.2
Washington	367	409	.38	.28	11.4
Webster	484	88	.50	.06	−81.8
West Baton Rouge	0	1,167	0	.80	a
West Carroll	135	145	.14	.10	7.4
West Feliciana	0	29	0	.02	a
Winn	145	117	.15	.08	−19.3

Source: U. S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1951–1968; See text for methodology and computation of 1985 projections.

a. Per cent change cannot be computed because employment was zero in 1960.

b. Zeros in this table indicate either there are no employees in this industry or that figures were withheld by the Census Bureau to avoid disclosure of operations of individual reporting units.

TABLE 18

STATE OF LOUISIANA: EMPLOYMENT IN WHOLESALE TRADE
BY PARISH, 1960 AND 1985

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Acadia	552	723	1.05	.75	31.0
Allen	0	0	0	0	b
Ascension	142	453	.27	.47	219.0
Assumption	32	29	.06	.03	−9.4
Avoyelles	174	193	.33	.20	10.9
Beauregard	63	154	.12	.16	144.4
Bienville	32	308	.06	.32	862.5
Bossier	300	1,290	.57	1.34	330.0
Caddo	6,186	11,516	11.76	11.95	86.2
Calcasieu	1,546	3,835	2.94	3.98	148.1
Caldwell	5	0	.01	0	−100.0
Cameron	26	174	.05	.18	569.2
Catahoula	32	67	.06	.07	109.4
Claiborne	79	212	.15	.22	168.4
Concordia	105	251	.20	.26	139.0
De Soto	95	0	.18	0	−100.0
East Baton Rouge	3,372	12,724	6.41	13.20	277.3
East Carroll	47	386	.09	.40	721.3
East Feliciana	16	0	.03	0	−100.0
Evangeline	110	0	.21	0	−100.0
Franklin	121	164	.23	.17	35.5
Grant	26	39	.05	.04	50.0
Iberia	625	694	1.24	.72	6.4
Iberville	110	67	.21	.07	−39.1
Jackson	26	48	.05	.05	84.6
Jefferson	3,082	11,809	5.86	12.25	283.2
Jefferson Davis	168	337	.32	.35	100.6
Lafayette	1,652	4,751	3.14	4.93	187.6
Lafourche	873	48	1.66	.05	−94.5
La Salle	42	193	.08	.20	359.5
Lincoln	137	270	.26	.28	97.1
Livingston	0	48	0	.05	a
Madison	163	58	.31	.06	64.4
Morehouse	79	530	.15	.55	570.9
Natchitoches	200	308	.38	.32	54.0
Orleans	22,224	28,099	42.25	29.15	26.4
Ouachita	1,773	3,657	3.37	3.79	106.3
Plaquemines	105	606	.20	.63	477.1
Pointe Coupee	95	145	.18	.15	52.6
Rapides	1,462	3,008	2.78	3.12	105.7
Red River	21	19	.04	.02	−9.5
Richland	53	106	.10	.11	100.0
Sabine	42	106	.08	.11	152.4
St. Bernard	347	6	.66	.01	−98.3
St. Charles	68	790	.13	.82	1,061.8
St. Helena	0	0	0	0	b
St. James	63	116	.12	.12	84.1
St. John the Baptist	37	549	.07	.57	1,383.8
St. Landry	1,089	675	2.07	.70	−38.0
St. Martin	79	413	.15	.43	422.8
St. Mary	405	1,523	.77	1.58	276.0
St. Tammany	89	618	.17	.64	594.4
Tangipahoa	552	3,486	1.05	.93	531.5
Tensas	11	0	.02	0	−100.0
Terrebonne	784	1,436	1.49	1.49	83.2
Union	95	0	.18	0	−100.0
Vermilion	216	453	.41	.47	109.7

TABLE 18 (Cont'd)

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Vernon	63	308	.12	.32	388.9
Washington	352	337	.67	.53	—4.3
Webster	132	0	.25	[illegible]	—100.0
West Baton Rouge	163	0	.31	[illegible]	—100.0
West Carroll	42	48	.08	.05	14.3
West Feliciana	37	10	.07	.01	—73.0
Winn	79	145	.15	.15	83.5

Source: U. S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1951–1968; See text for methodology and computation of 1985 projections.

a. Per cent change cannot be computed because employment was zero in 1960.

b. Zeros in this table indicate either there are no employees in this industry or that figures were withheld by the Census Bureau to avoid disclosure of operations of individual reporting units.

TABLE 19

STATE OF LOUISIANA: EMPLOYMENT IN RETAIL TRADE BY PARISH, 1960 AND 1985

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Acadia	1,975	1,938	1.22	.70	−1.9
Allen	761	1,246	.47	.45	63.7
Ascension	988	2,547	.61	.92	1,578.0
Assumption	324	554	.20	.20	71.0
Avoyelles	907	1,550	.56	.56	70.9
Beauregard	761	1,384	.47	.50	81.9
Bienville	389	1,938	.24	.70	398.2
Bossier	1,991	4,620	1.23	1.67	132.0
Caddo	14,927	17,220	9.22	6.22	15.4
Calcasieu	6,832	10,895	4.22	3.94	59.5
Caldwell	210	360	.13	.13	71.4
Cameron	146	249	.09	.09	70.5
Catahoula	259	471	.16	.17	81.9
Claiborne	599	304	.37	.11	−49.2
Concordia	615	1,107	.38	.40	80.0
De Soto	648	554	.40	.20	−14.5
East Baton Rouge	14,976	28,328	9.25	10.23	89.2
East Carroll	389	1,024	.24	.37	163.2
East Feliciana	146	304	.09	.11	108.2
Evangeline	826	1,439	.51	.52	74.2
Franklin	842	1,744	.52	.63	107.1
Grant	243	138	.15	.05	−43.2
Iberia	2,509	3,654	1.55	1.32	45.6
Iberville	826	1,716	.51	.62	107.7
Jackson	502	858	.31	.31	70.9
Jefferson	8,176	47,526	5.05	17.17	481.3
Jefferson Davis	1,538	3,353	.95	.85	118.0
Lafayette	5,294	13,181	3.27	4.76	149.0
Lafourche	2,056	4,706	1.27	1.70	128.9
La Salle	389	360	.24	.13	−7.5
Lincoln	1,182	3,100	.73	1.12	162.3
Livingston	534	1,439	.33	.52	169.5
Madison	534	969	.33	.35	81.5
Morehouse	1,085	1,024	.67	.37	−5.6
Natchitoches	907	2,574	.56	.93	183.8
Orleans	49,411	36,765	30.52	13.28	−25.6
Ouachita	5,699	13,466	3.52	4.87	136.3
Plaquemines	453	2,685	.28	.97	492.7
Pointe Coupee	534	858	.33	.31	60.7
Rapides	5,229	6,588	3.23	2.38	26.0
Red River	308	277	.19	.10	−10.1
Richland	729	1,356	.45	.49	86.0
Sabine	486	830	.30	.30	70.8
St. Bernard	615	2,134	.38	.77	247.0
St. Charles	470	7,075	.29	.28	64.9
St. Helena	49	83	.03	.03	69.4
St. James	308	692	.19	.25	124.7
St. John the Baptist	453	692	.28	.25	52.8
St. Landry	3,141	5,287	1.94	1.91	68.3
St. Martin	599	1,716	.37	.62	186.5
St. Mary	2,186	6,366	1.35	2.30	191.2
St. Tammany	1,376	5,301	.85	1.92	285.2
Tangipahoa	2,671	6,560	1.65	2.37	145.6
Tensas	243	443	.15	.16	82.3
Terrebonne	2,607	7,723	1.61	2.79	196.2
Union	291	554	.18	.20	90.4
Vermilion	1,684	2,657	1.04	.96	57.8

TABLE 19 (Cont'd)

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Vernon	712	2,823	.44	1.02	296.5
Washington	1,765	2,768	1.09	1.00	56.8
Webster	1,587	2,760	.98	1.00	74.4
West Baton Rouge	372	111	.23	.04	−70.2
West Carroll	275	609	.17	.22	121.4
West Feliciana	146	249	.09	.09	70.5
Winn	502	830	.31	.30	65.3

Source: U. S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1951–1968; See text for methodology and computation of 1985 projections.

a. Per cent change cannot be computed because employment was zero in 1960.

b. Zeros in this table indicate either there are no employees in this industry or that figures were withheld by the Census Bureau to avoid disclosure of operations of individual reporting units.

TABLE 20

State of Louisiana: Employment in Finance, Insurance and Real Estate By Parish, 1960 and 1985

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Acadia	271	681	.73	.80	151.3
Allen	59	340	.16	.40	476.3
Ascension	130	706	.35	.83	443.1
Assumption	30	128	.08	.15	326.3
Avoyelles	241	740	.65	.87	207.1
Beauregard	93	187	.25	.22	101.1
Bienville	30	245	.08	.41	716.7
Bossier	249	1,081	.67	1.27	334.1
Caddo	3,947	6,304	10.64	7.41	62.9
Calcasieu	1,376	1,977	3.71	2.32	44.9
Caldwell	26	68	.07	.08	161.5
Cameron	22	51	.06	.06	131.8
Catahoula	19	77	.05	.09	305.3
Claiborne	52	119	.14	.14	128.8
Concordia	37	264	.10	.31	613.5
De Soto	48	128	.13	.15	166.7
East Baton Rouge	4,040	12,091	10.89	14.21	199.3
East Carroll	48	145	.13	.17	202.1
East Feliciana	45	638	.12	.75	1,317.8
Evangeline	67	340	.18	.40	407.5
Franklin	52	128	.14	.15	146.2
Grant	19	34	.05	.04	78.9
Iberia	312	979	.84	1.15	213.8
Iberville	148	221	.40	.26	49.3
Jackson	67	340	.81	.40	407.5
Jefferson	679	5,755	1.82	6.76	748.2
Jefferson Davis	145	426	.39	.50	193.8
Lafayette	1,135	3,412	3.06	4.01	200.6
Lafourche	304	877	.82	1.03	188.5
La Salle	48	111	.13	.13	131.3
Lincoln	204	1,421	.55	1.67	596.6
Livingston	48	351	.13	.37	556.3
Madison	59	136	.16	.16	130.5
Morehouse	141	289	.38	.34	105.0
Natchitoches	134	936	.36	1.10	598.5
Orleans	16,636	23,219	44.84	27.58	39.6
Ouachita	1,302	4,185	3.51	4.92	221.4
Plaquemines	26	247	.07	.29	850.0
Pointe Coupee	48	315	.13	.37	556.3
Rapides	1,736	4,689	4.68	5.51	170.1
Red River	15	43	.04	.05	186.7
Richland	126	272	.34	.32	115.9
Sabine	0	119	0	.14	a
St. Bernard	78	603	.21	.71	673.1
St. Charles	37	264	.10	.31	613.5
St. Helena	11	51	.03	.06	363.6
St. James	33	85	.09	.10	157.6
St. John the Baptist	0	68	0	.08	a
St. Landry	356	1,030	.96	1.21	189.3
St. Martin	56	119	.15	.14	112.5
St. Mary	0	1,319	0	1.55	a
St. Tammany	126	1,009	.34	1.19	700.8
Tangipahoa	186	834	.50	.98	348.4
Tensas	22	85	.06	.10	286.4
Terrebonne	349	2,000	.94	2.35	473.1
Union	48	119	.13	.14	147.9
Vermilion	145	289	.39	.34	99.3

TABLE 20 (Cont'd)

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Vernon	70	153	.19	.18	118.6
Washington	308	1,191	.83	1.40	286.7
Webster	237	630	.64	.74	165.8
West Baton Rouge	22	60	.06	.07	172.7
West Carroll	37	77	.10	.09	108.1
West Feliciana	0	43	0	.05	a
Winn	37	264	.10	.31	613.5

Source: U. S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1951–1968; See text for methodology and computation of 1985 projections.

a. Per cent change cannot be computed because employment was zero in 1960.

b. Zeros in this table indicate either there are no employees in this industry or that figures were withheld by the Census Bureau to avoid disclosure of operations of individual reporting units.

TABLE 21

State of Louisiana: Employment in Service Industries By Parish, 1960 and 1985

Parish	1960 Actual	1985 Projected	1960 % of State Total	1985 % of State Total	% Change 1960–85
Acadia	1,716	2,754	.99	.62	60.5
Allen	399	0	.23	0	—100.0
Ascension	399	355	.23	.08	—11.0
Assumption	191	533	.11	.12	179.1
Avoyelles	589	1,821	.34	.41	209.2
Beauregard	659	1,644	.38	.37	149.5
Bienville	225	222	.13	.05	—1.3
Bossier	1,386	4,308	.80	.97	210.8
Caddo	18,075	17,675	10.43	3.98	—2.2
Calcasieu	6,655	18,950	3.84	4.27	184.7
Caldwell	156	1,555	.09	.35	896.8
Cameron	139	888	.80	.20	538.8
Catahoula	243	533	.14	.12	119.3
Claiborne	485	222	.28	.05	—54.2
Concordia	295	1,377	.17	.31	366.8
De Soto	225	222	.13	.05	—1.3
East Baton Rouge	15,198	61,038	8.77	13.74	301.6
East Carroll	173	800	.10	.18	362.4
East Feliciana	121	267	.07	.06	120.7
Evangeline	693	3,332	.40	.75	308.8
Franklin	277	1,199	.16	.27	332.9
Grant	35	0	.02	0	—100.0
Iberia	1,820	4,846	1.05	1.10	168.5
Iberville	468	1,111	.27	.25	137.4
Jackson	364	489	.21	.11	34.3
Jefferson	8,093	31,760	4.67	7.15	292.4
Jefferson Davis	711	2,532	.41	.57	256.1
Lafayette	5,199	18,403	3.00	4.14	254.0
Lafourche	1,716	7,328	.99	1.65	327.1
La Salle	260	533	.15	.12	105.0
Lincoln	936	2,488	.54	.56	165.8
Livingston	225	1,510	.13	.34	571.1
Madison	277	888	.16	.20	220.6
Morehouse	607	1,421	.35	.32	134.1
Natchitoches	763	311	.44	.07	—59.2
Orleans	75,593	155,483	43.62	35.00	105.7
Ouachita	5,840	10,048	3.37	2.26	72.1
Plaquemines	451	5,863	.26	1.32	1,200.0
Pointe Coupee	225	622	.13	.14	176.4
Rapides	6,481	16,702	3.74	3.76	157.7
Red River	139	533	.08	.12	283.5
Richland	451	1,155	.26	.26	156.1
Sabine	260	1,421	.15	.32	446.5
St. Bernard	347	4,442	.20	1.00	180.1
St. Charles	291	3,198	.17	.72	984.1
St. Helena	17	0	.01	0	—100.0
St. James	295	577	.17	.13	95.6
St. John the Baptist	191	444	.11	.10	132.5
St. Landry	1,560	5,891	.90	1.31	273.0
St. Martin	156	577	.09	.13	269.9
St. Mary	1,109	9,386	.64	2.11	746.3
St. Tammany	728	6,321	.42	1.42	768.3
Tangipahoa	1,144	7,774	.66	1.75	579.5
Tensas	52	178	.03	.04	242.3
Terrebonne	1,993	14,081	1.15	3.17	606.5
Union	225	755	.13	.17	735.6
Vermilion	1,040	5,819	.60	1.31	459.5

TABLE 21 (Cont'd)

Parish	*1960 Actual*	*1985 Projected*	*1960 % of State Total*	*1985 % of State Total*	*% Change 1960–85*
Vernon	641	1,732	.37	.39	170.2
Washington	1,005	2,621	.59	.59	160.8
Webster	1,178	4,486	.68	1.01	280.8
West Baton Rouge	121	311	.07	.07	157.0
West Carroll	173	444	.10	.10	156.6
West Feliciana	243	0	.14	0	—100.0
Winn	468	1,199	.27	.27	156.2

Source: U. S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1951–1968; See text for methodology and computation of 1985 projections.

a. Per cent change cannot be computed because employment was zero in 1960.

b. Zeros in this table indicate either there are no employees in this industry or that figures were withheld by the Census Bureau to avoid disclosure of operations of individual reporting units.

State

The future employment level of individual industries is the primary determinant of occupational requirements. For example, a sharp change in total employment in manufacturing will have a marked effect on the requirements for blue-collar workers such as machine operators. On the other hand, requirements for white-collar workers will be significantly influenced by total employment in the banking industry. Consequently, the first step in making projections of manpower requirements is estimating future employment by industrial division.

Estimates were made of Louisiana's relative share of national employment by industry in 1985, based on a nineteen year historical trend. These projections were made on the basis of detailed industry subclassifications to serve both as control figures and to represent more accurately Louisiana's industrial structure. These resulting percentage shares of national employment by industry in 1985 were applied to U.S. Bureau of Labor Statistics projections of total national employment by industry to arrive at first approximations of Statewide total employment by industry.

Once State projections of employment by industry were available, it was possible to project employment by occupation. Over time the occupational structure within an industry will change. For example, the percentage share of total employment in the construction industry of unskilled laborers has tended to diminish while the share for skilled craftsmen such as electricians has increased. In making occupational projections for Louisiana, it was assumed that the State trends in the changing occupational structure within an industry would be the same as the national trends. This is not to say that the State's industry—occupational *patterns* are the same as the national patterns, but only that the trends are the same. If, for example, the national trends show that employment in carpentry as a percent of total employment in construction will decrease in the future, it was assumed that the same trend applied to Louisiana. By making this assumption, it was possible to project occupational needs in Louisiana in 1985 by applying data from national industry-occupation patterns 1960 and 1975 published by the U.S. Bureau of Labor Statistics.

The estimates of Louisiana's occupational needs were then derived by applying 1960 and 1985 national industry-occupational patterns to the appropriate State industry employment estimates for each year; summing the resulting occupational employment to State totals; computing the 1960 to 1985 change factors (percentage change) for each occupation; and applying the change factors to separately estimated 1960 area occupational employment totals. The specific individual steps were as follows:

1. The 1960 national industry-occupational patterns were applied to the respective 1960 State industry employment estimates. The resulting occupational employment was then summed to State totals. The same procedure was repeated using 1985 projections. As an example, these two aggregates for physicians and surgeons in Louisiana were 2,673 for 1960 and 6,934 for 1985.

2. The 1960–85 change factor for the occupations was then computed by dividing the 1985 employment aggregate by the 1960 employment aggregate developed in the preceding step. The change factor for physicians and surgeons was 2.60.

3. Base period (1960) State occupation data were taken from the 1960 U.S. Census of Population. There were 3,394 physicians and surgeons in Louisiana in 1960. This figure is different from the estimated figure for 1960 in step 1. A difference is to be expected since step 1 used a national pattern to derive the aggregate figure.

4. The change factor from step 2 is applied to the base period (1960) figure from step 3 to give a projection of physicians and surgeons in Louisiana in 1985. The result is a projection of 8,824 doctors and physicians in 1985, illustrating that Louisiana's trends and not patterns are assumed to be identical to the national figures.

The above procedures were repeated for all the occupations listed in tables 3 and 4.

SMSA and Parishes

Data on employment in each industry by parish were assembled for the years 1950–1968. Employing these data and the Statewide totals for employment by industry, a percentage of total Statewide employment in each industry was computed for each parish in each year. By the method of least squares regression using time as the independent variable and the percentage of total Statewide employment in each industry as the dependent variable, estimates for the percentage of Statewide employment in 1985 were obtained.

For each parish the estimated percentage of

State total employment by industry was multiplied by the estimated Statewide employment in that industry to obtain estimated employment in 1985 in each parish.

To derive the occupational breakdown for the Standard Metropolitan Statistical Areas, the data from national industry-occupation patterns 1960 and 1975 published by the U.S. Bureau of Labor Statistics were employed. Estimates of the occupational needs of each parish were derived by applying the industry-occupational patterns to the appropriate parish industry employment estimate for 1985. The parish data in each SMSA were summed to determine the SMSA totals for each occupation.

REFERENCES

1. U.S. Department of Labor, Bureau of Labor Statistics, *Tomorrow's Manpower Needs*, Bulletin No. 1606 (Washington: 1969), Volume 1, p. 1.
2. U.S. Department of Commerce, Bureau of the Census, *County Business Patterns 1968* (Washington: 1969).
3. U. S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-25. No. 375.
4. *Ibid.*
5. U.S. Department of Labor, Bureau of Labor Statistics, *The U.S. Economy in 1980*, Bulletin No. 1673, (Washington: 1970), Table A-22.
6. *Ibid.*
7. U.S. Department of Labor, Bureau of Labor Statistics, *Tomorrow's Manpower Needs*, Bulletin No. 1606, (Washington: 1969), Volume 3, pp. 4-5.
8. U. S. Department of Labor, Bureau of Labor Statistics, *The U.S. Economy in 1980*, Bulletin No. 1673, (Washington: 1970), Table A-18.
9. Government workers involved in activities unique to government are classified in the public administration industry. Government workers in agencies engaged in activities also carried on by private enterprises, such as education and medical services are classified in their appropriate industry category, regardless of whether they are paid from public or private funds.
10. U.S. Department of Labor, Bureau of Labor Statistics, *Tomorrow's Manpower Needs*, Bulletin No. 1606 (Washington: 1969), Volume 4, Appendix D.
11. *Ibid.*, Appendix G.
12. U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings Statistics for States and Areas 1939–67*, Bulletin No. 1370-5, (Washington: 1968).
13. Historical pattern derived from data in U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, selected years.

Long Range Projections of the Property Tax Base of Louisiana, by Parish, to 1985

by

JOHN B. LEGLER AND JAMES A. PAPKE

Although the State of Louisiana does not rely on the property tax as a major revenue source, the State is very much involved with property taxation in the State. The State allows homestead exemptions against Parish and District property taxes and the State reimburses local governments for the revenue losses incurred as a result of State granted exemptions. These reimbursements are funded from income tax receipts. In fiscal 1968–1969 these reimbursements totaled $78,345,500 which represented 99 per cent of income tax receipts in that fiscal year.

Excluding the amounts paid to local governments for revenue lost through exemptions, property tax collections in fiscal year 1966–1967 amounted to $196,463,000 or $53.65 per capita. On a per capita basis Louisiana ranked 48th among the 50 States and the District of Columbia.[1]

The limited use of the property tax in the State suggests the possibility of extending its use to assist in the financing of education. In particular, there is some speculation that junior colleges could be financed through an extension of the property tax. The use of the property tax to finance junior colleges is practiced in other localities in the United States. Thus, such a proposal is not without precedent. Of course, this proposal would increase property tax burdens in Louisiana which are presently on average quite low. On average, in fiscal 1966–1967 property tax revenue amounted to only $23.86 per $1000 of personal income compared to a national average of $44.87 per $1000 of personal income. With respect to property tax burdens as measured by average tax payments per $1000 of personal income Louisiana ranked 47th among the 50 States and the District of Columbia.[2]

To facilitate analysis of the amounts of revenue which could be raised, the necessary tax rates, and the distribution of tax burdens among the State's Parishes, property tax base projections have been made to 1985 at five year intervals for each Parish. These projections are contained in Tables 1 and 2 which provide projections for local assessments and State assessments, respectively. The local assessments are for real and personal property and are after exemptions and deductions. State assessments consist of assessments on railroads, public utilities and watercraft and aircraft, also after exemptions and deductions. Table 3 shows the percentage distributions of the projections of the locally assessed portion of the property tax base by Parish. Changes in the percentage distribution over time reflects changes in the geographic patterns of economic development in Louisiana and accordingly, the portion of total property tax burdens that would be imposed if a Statewide property tax were enacted at a uniform rate.

The figures contained in Tables 1 and 2 are projections based on a set of quite strong assumptions regarding the physical growth of the State's economy as reflected in changing property values. The projections were made on the basis of historical trends in property assessments by Parish between 1961 and 1966 and projections by Parish of one measure of economic growth, population. Quite simply, it was assumed that the ratio of the percentage change in assessed values to the percentage change in population between 1961 and 1966 would hold in the future. Based on assessed values for each Parish contained in the 1967 and 1962 Census of Governments, *Taxable Property Values*, a ratio of the percentage change in assessed values to the percentage change in population was constructed for each parish. The percentage change in assessed value at future dates over the base year was computed by multiplying the percentage change in population between the projected year and the base year by the ratio of percentage change in assessed value to the percentage change in population between 1961 and 1966. For example, if a Parish experienced an increase in assessed values of 10 per cent and an increase of 5 percent in population between 1961 and 1966, it is assumed that assessed values will increase by

[1] U.S. Bureau of the Census, Census of Governments, 1967, Vol. 7: *State Reports*, No. 18: Louisiana (U.S. Government Printing Office, Washington, D.C., 1970, p. 8.

[2] Ibid., p. 8.

2 percent for every 1 percent increase in population in the future. At the aggregate State level for the locally assessed portion of the property values, assessments increased by 19.77 percent between 1961 and 1966. The State's population increased by 9.91 percent. Thus the "multiplier" at the State level is 1.99. The percentage changes in population between the base year and 1970, 1975, 1980, and 1985 for each Parish were calculated from the projections of the Division of Business and Economic Research of L.S.U. in New Orleans.[3]

Based on the aggregate State multiplier and the population projections of the Division of Business and Economic Research of L.S.U.-New Orleans, it is projected that the State assessed portion of the property tax base will increase by 22.8 percent by 1970, 48.8 percent by 1975, 78.0 percent by 1980 and by 110.6 percent by 1985 over the property tax base of 1966. It is projected that the locally assessed portion of the property tax base will increase by 20.6 percent by 1970, 44.1 percent by 1975, 70.6 percent by 1980 and 100.0 percent by 1985. The projections would necessarily be reduced if alternative population projections of the U.S. Census Bureau were employed since all of the projection series of the U.S. Census Bureau are lower than the projections of the Division of Business and Economic Research.

Changes in income may also be an important determining factor of the growth in the property tax base. Unfortunately, we do not have projections of changes in income at the Parish level to include this economic variable in the analysis. At the State level, projections of the property tax base have been made by assuming that there is a constant ratio between growth in assessed values and growth in per capita income. Table 4 provides a comparison of the results in percentage terms under the two projection schemes. The income projection scheme provides somewhat higher projected assessments, but certainly at this level of sophistication, they may be regarded as comparable. At the present time a computer projection model taking both population growth and income growth into account simultaneously is being developed.

As may be noted in Tables 1 and 2, there are two projections of the total assessed property values. One is derived as described above. The other is simply the sum of the individual Parish projections. This brings us to the point of commenting on the individual Parish projections which in some cases may be legitimately subject to criticism. Between 1961 and 1966 all the Parishes experienced a growth in assessed values. Some Parishes experienced a growth in population and others experienced a decline in population. Computing projection "multipliers" as the ratio of precent change in assessed value to percent change in population results in some positive and some negative "multipliers". A negative "multiplier" times a projected decline in population produces an increased assessed value for future years. In most cases, even those Parishes which lose population in the future will probably experience increases in assessed values as they have in the past. In some cases, however, this projected growth seemed too large and was adjusted. In the case of some of the more rapidly growing Parishes the projected growth rates on the strictly arithmetic bases also appeared too great and these were also adjusted. The projections for the following Parishes were adjusted: Avoyelles, Calcasieu, DeSoto, Evangeline, Jackson and Winn. Even after these adjustments the sum of the projections for the individual Parishes exceeds the aggregate State projections.

Table 5 provides projections of the amounts of revenue which potentially could be raised under a State-wide property tax imposed at a rate of $0.10 per $100 of assessed value. In 1970, for example, the State could have raised $4.5 million by imposing a State-wide property tax of $0.10 per $100 of assessed value which would have increased total State and local tax burdens by approximately $1.16 per person.

[3] James Bobo, *et. al., The Population of Louisiana: Projections by Parish, by Race, Sex, and Age to 1985*, Division of Business and Economic Research, College of Business Administration, Louisiana State University in New Orleans, 1968.

TABLE 1

PROJECTIONS OF LOCALLY ASSESSED PROPERTY TAX BASE[a], BY PARISH TO 1985
(in thousands of dollars)

Parish	*1970*	*1975*	*1980*	*1985*
Acadia	$ 33,669	$ 34,135	$ 34,651	$ 35,064
Allen	10,338	11,480	13,607	14,221
Ascension	15,099	17,202	19,524	22,222
Assumption	12,476	14,948	17,430	20,526
Avoyelles	9,961	10,867	11,773	12,678
Beauregard	12,104	12,620	13,264	13,994
Bienville	9,588	10,946	12,439	13,797
Bossier	41,043	49,724	59,736	71,032
Caddo	359,116	407,222	455,014	500,139
Calcasieu	237,466	332,075	460,473	615,305
Caldwell	4,331	4,987	5,644	6,190
Cameron	22,098	26,634	30,040	34,573
Catahoula	11,529	16,555	21,579	26,576
Claiborne	13,506	13,937	14,370	14,771
Concordia	10,812	13,460	16,890	21,203
DeSoto	10,585	12,386	13,576	15,378
East Baton Rouge	435,821	538,630	666,662	828,052
East Carroll	8,041	8,875	9,707	10,302
East Feliciana	3,286	3,337	3,397	3,474
Evangeline	12,949	13,618	14,408	15,199
Franklin	8,015	8,739	9,411	10,083
Grant	2,256	2,388	2,521	2,654
Iberia	38,173	42,517	47,432	52,911
Iberville	14,158	15,207	16,390	17,669
Jackson	7,869	8,649	9,428	10,208
Jefferson	247,912	421,731	668,277	1,008,352
Jefferson Davis	30,588	36,237	42,880	49,521
Lafayette	42,758	54,627	69,288	87,480
Lafourche	52,967	65,518	79,589	95,181
LaSalle	8,278	8,756	9,226	9,226
Lincoln	12,670	12,792	12,792	13,033
Livingston	6,556	8,145	9,926	11,963
Madison	10,757	10,894	10,894	11,169
Morehouse	29,116	33,502	38,383	43,237
Natchitoches	14,097	15,172	16,576	17,315
Orleans	872,109	1,037,436	1,228,581	1,454,346
Ouachita	101,920	130,714	165,491	207,366
Plaquemines	128,613	182,803	253,297	328,532
Pointe Coupee	8,922	10,692	12,718	14,995
Rapides	41,346	50,176	60,173	71,557
Red River	4,170	4,542	4,880	5,151
Richland	12,540	14,043	15,318	16,475
Sabine	9,684	10,850	11,803	12,865
St. Bernard	60,533	94,679	137,411	188,200
St. Charles	35,491	44,710	55,853	68,716
St. Helena	1,642	1,980	2,232	2,569
St. James	21,848	30,373	40,960	53,339
St. John	12,837	16,185	20,142	24,707
St. Landry	45,497	54,649	62,905	71,226
St. Martin	17,137	22,891	29,412	35,536
St. Mary	113,791	165,932	229,037	304,968
St. Tammany	27,131	36,804	46,899	63,098
Tangipahoa	15,313	18,279	21,319	24,436
Tensas	10,310	11,951	13,411	14,687
Terrebonne	90,607	128,958	173,727	225,250
Union	8,458	8,474	8,400	8,507
Vermilion	34,547	41,865	44,273	46,681
Vernon	10,070	13,524	16,966	20,420
Washington	30,938	37,330	44,280	51,795

TABLE 1 (Cont'd)

Parish	*1970*	*1975*	*1980*	*1985*
Webster	30,646	31,568	32,492	33,327
West Baton Rouge	9,199	10,912	12,944	15,291
West Carroll	5,247	6,680	7,827	8,832
West Feliciana	6,694	8,054	9,639	11,456
Winn	7,783	9,025	10,268	11,510
State Total[b]	$3,417,076	$4,140,225	$4,952,966	$5,859,475
State Total	$3,575,011	$4,534,591	$5,709,945	$7,130,536

[a] After exemptions and deductions.
[b] Independent estimate of total state assessment.
Source: See Text.

TABLE 2

PROJECTIONS OF STATE PROPERTY TAX BASE[a] (STATE ASSESSED), BY PARISH TO 1985
(in thousands of dollars)

Parish	*1970*	*1975*	*1980*	*1985*
Acadia	$ 21,686	$ 24,917	$ 28,512	$ 31,359
Allen	7,103	7,905	9,390	9,821
Ascension	12,888	18,446	24,580	31,708
Assumption	5,897	7,348	8,805	10,624
Avoyelles	7,116	8,323	9,225	10,421
Beauregard	12,831	15,546	18,990	22,898
Bienville	7,932	8,472	9,064	9,603
Bossier	14,371	17,180	20,520	24,237
Caddo	84,378	104,067	123,632	142,090
Calcasieu	38,468	44,765	52,755	62,619
Caldwell	10,213	13,704	17,199	20,102
Cameron	6,896	7,583	8,099	8,786
Catahoula	3,587	4,641	5,695	6,744
Claiborne	6,410	6,524	6,638	6,744
Concordia	4,940	5,945	7,248	8,886
DeSoto	6,832	6,832	6,832	6,832
East Baton Rouge	129,956	193,430	272,474	291,252
East Carroll	6,682	7,170	7,658	8,007
East Feliciana	9,070	12,028	15,492	19,939
Evangeline	14,507	16,615	18,722	20,830
Franklin	10,560	12,786	15,012	17,156
Grant	7,184	8,247	9,309	10,373
Iberia	14,860	18,564	22,751	27,423
Iberville	8,740	11,489	14,600	17,947
Jackson	5,352	5,352	5,352	5,809
Jefferson	72,088	113,220	171,565	252,040
Jefferson Davis	18,759	21,854	25,492	29,131
Lafayette	10,058	23,811	29,682	36,970
Lafourche	25,736	30,994	39,812	51,536
LaSalle	10,963	13,130	15,267	15,267
Lincoln	6,172	6,212	6,212	6,288
Livingston	6,275	8,749	11,463	14,601
Madison	4,816	4,966	4,966	5,266
Morehouse	16,758	18,258	19,910	21,560
Natchitoches	11,083	11,242	11,447	11,555
Orleans	194,701	213,572	235,394	261,170
Ouachita	38,574	44,347	51,325	59,724
Plaquemines	40,672	65,818	98,536	133,454
Pointe Coupee	9,703	12,352	15,384	11,354
Rapides	28,081	33,440	39,504	46,409
Red River	3,727	3,932	4,119	4,268
Richland	9,541	10,685	11,654	12,535
Sabine	6,246	6,998	7,613	8,298
St. Bernard	19,772	30,926	44,884	61,473
St. Charles	11,461	14,439	18,037	22,191
St. Helena	7,522	9,070	10,226	11,772
St. James	6,524	9,070	12,232	15,928
St. John The Baptist	5,986	7,547	9,392	11,521
St. Landry	23,117	27,767	31,962	36,190
St. Martin	7,081	9,459	12,153	14,684
St. Mary	24,424	35,616	49,161	65,458
St. Tammany	16,325	22,145	28,219	37,967
Tangipahoa	13,028	15,552	18,137	20,790
Tensas	2,792	3,236	3,631	3,977
Terrebonne	26,291	37,419	50,409	65,359
Union	5,499	5,509	5,520	5,531
Vermilion	15,250	18,481	19,544	20,607
Vernon	7,640	10,272	12,886	15,510

TABLE 2 (Cont'd)

Parish	*1970*	*1975*	*1980*	*1985*
Washington	11,553	13,940	10,536	19,342
Webster	9,692	9,984	10,276	10,540
West Baton Rouge	6,041	7,106	8,500	10,041
West Carroll	9,013	11,477	13,447	15,174
West Feliciana	5,608	6,748	8,076	9,599
Winn	5,091	5,424	5,757	6,090
State Total[b]	$1,162,890	$1,408,990	$1,685,584	$1,994,085
State Total	$1,221,131	$1,542,706	$1,926,884	$2,293,380

[a] After exemptions and deductions.
[b] Independent estimate of total state assessment.
Source: See Text.

TABLE 3

Percentage Distributions of Projections of Locally Assessed Property Tax Base[a], By Parish to 1985

Parish	*1970*	*1975*	*1980*	*1985*
Acadia	.94	.75	.60	.49
Allen	.29	.25	.24	.20
Ascension	.42	.38	.34	.31
Assumption	.35	.33	.31	.29
Avoyelles	.28	.24	.21	.18
Beauregard	.34	.28	.23	.20
Bienville	.27	.24	.22	.19
Bossier	1.15	1.10	1.04	1.00
Caddo	10.04	8.98	7.97	7.01
Calcasieu	6.64	7.32	8.06	8.63
Caldwell	.12	.11	.10	.09
Cameron	.62	.59	.53	.48
Catahoula	.32	.37	.38	.37
Claiborne	.38	.31	.25	.21
Concordia	.30	.30	.30	.30
DeSoto	.30	.27	.24	.22
E. Baton Rouge	12.19	11.88	11.67	11.61
E. Carroll	.22	.20	.17	.14
E. Feliciana	.09	.07	.06	.05
Evangeline	.36	.30	.25	.21
Franklin	.22	.19	.16	.14
Grant	.06	.05	.04	.04
Iberia	1.07	.94	.83	.74
Iberville	.40	.34	.29	.25
Jackson	.22	.19	.17	.14
Jefferson	6.93	9.30	11.70	14.14
Jefferson Davis	.86	.80	.75	.69
Lafayette	1.20	1.20	1.21	1.23
Lafourche	1.48	1.44	1.39	1.33
LaSalle	.23	.19	.16	.13
Lincoln	.35	.28	.22	.18
Livingston	.18	.18	.17	.17
Madison	.30	.24	.19	.16
Morehouse	.81	.74	.67	.61
Natchitoches	.39	.33	.29	.24
Orleans	24.39	22.88	21.51	20.40
Ouachita	2.85	2.88	2.90	2.81
Plaquemines	3.60	4.03	4.44	4.61
Pointe Coupee	.25	.23	.22	.21
Rapides	1.16	1.10	1.05	1.00
Red River	.12	.10	.09	.07
Richland	.35	.31	.27	.23
Sabine	.27	.24	.21	.18
St. Bernard	1.69	2.09	2.41	2.64
St. Charles	.99	.99	.98	.96
St. Helena	.05	.04	.04	.04
St. James	.61	.67	.72	.75
St. John	.36	.36	.35	.35
St. Landry	1.27	1.21	1.10	1.00
St. Martin	.48	.50	.52	.50
St. Mary	3.18	3.66	4.01	4.28
St. Tammany	.76	.81	.82	.88
Tangipahoa	.43	.40	.37	.34
Tensas	.29	.26	.23	.21
Terrebonne	2.53	2.84	3.04	3.16
Union	.24	.19	.15	.12
Vermilion	.97	.92	.78	.65
Vernon	.28	.30	.30	.29
Washington	.87	.82	.78	.73
Webster	.86	.70	.57	.47
W. Baton Rouge	.25	.24	.23	.21
W. Carroll	.15	.15	.14	.12
W. Feliciana	.19	.18	.17	.16
Winn	.22	.20	.18	.16
State Total	100.00	100.00	100.00	100.00

[a] After exemptions and deductions.

Note: Figures may not add to totals because of rounding.

Source: Computed from Table 1.

TABLE 4

Projected Percentage Change in Property Tax Bases over 1966 Base Period

State Assessed	*Population Basis*[a]	*Income Basis*[b]
1966–1970	22.8%	26.2%
1966–1975	48.8	53.6
1966–1980	78.0	89.4
1966–1985	110.6	136.2
Locally Assessed		
1966–1970	20.6%	23.7%
1966–1975	44.1	48.4
1966–1980	70.6	80.7
1966–1985	100.0	123.0

[a] Based on ratio of percent change in assessed value to percent change in population for 1961–1966 times projected percent change in population between projected year and base year.

[b] Based on ratio of percent change in assessed value to percent change in per capita income between 1961–1966 times projected percent change in per capita between projected year and base year. Income per capita projected at growth rate of 5.5 percent per year.

Source: See text.

TABLE 5

Projections of Property Tax Revenues to 1985[a] (in thousands of dollars)

	1970	*1975*	*1980*	*1985*
State Assessed	$1,163	$1,409	$1,686	$1,994
Locally Assessed	$3,417	$4,140	$4,953	$5,859
Total	$4,580	$5,549	$6,639	$7,853

[a] Based on a rate of $0.10 per $100 of assessed value for projected assessed values at aggregate state level.

Source: Computed from Tables 1 and 2.

Long Range Revenue Projections for the State of Louisiana 1975, 1980, 1985

by

JOHN B. LEGLER AND JAMES A. PAPKE

Revenue projections have been constructed for Louisiana's major state taxes to 1985. Projections for intermediate benchmark years of 1975 and 1980 have also been made. The projections were based on estimated relationships between tax receipts and the state's economic growth. These estimated relationships were derived from historical data covering the last twenty years. Projections of future revenues were made by employing these estimated relationships and alternative assumptions regarding future economic growth in the State of Louisiana. Thus there is not a single set of projections, but sets of projections consistent with the alternative sets of assumptions about future economic growth in Louisiana. An explicit description of the revenue projecting techniques may be found in Appendix A of this report. It should be noted that the revenue projections are just that. They are projections of future revenues and not predictions. While the relationships between revenues and economic growth have been quite stable in the past, we have no guarantees that they will remain stable in the future. It is important to recognize this possibility since a large proportion of State tax revenues are earmarked for specific purposes and future expenditures for specific purposes such as education will depend to a large extent on the growth in revenues of one or more individual levies rather than the growth in total State tax revenue.

Future State tax revenues have been projected on the basis of projected levels of two measures of economic growth, population and per capita income. In general terms the revenue projection techniques suggest that the amount of revenue the State will derive from its taxes depends on how many people will reside in Louisiana in the future and how much they earn. It is less clear that these kinds of relationships hold for severance type taxes which may be more closely related to national economic growth rather than the State's economic growth. At a strictly statistical level, however, severance tax receipts have shown a rather close relationship to State economic growth which probably reflects a reasonable correlation of State to national economic growth. Although it may be necessary to revise these projections at a later date if clear indications of fundamental changes in the relationships become apparent, projections of severance tax receipts have been made on the same basis as other State taxes.

The projections have been made assuming that tax rates will remain at their present levels. Adjustments in the projections have been made, however, to reflect the rate and structural changes (elimination of the deduction for Federal income taxes in determining net income for state income tax purposes) made during the 1970 Legislative session. If future revenues projected at current tax rates are insufficient to finance expenditures at projected levels, it will be necessary for the State Legislature to increase tax rates or reduce the level of expenditures. Although the constitutional provision requiring two-thirds approval of the Legislature makes tax rate increases difficult, the substantial rate revisions made during 1970 suggest that this should not be regarded as an impossible alternative.

Several alternative projections of the population of Louisiana were considered for purposes of projecting State tax revenues. These alternative population projections are exhibited in Table 1. Three of the series are from the U.S. Bureau of the Census and these series are constructed by making alternative assumptions regarding migration and fertility rates. A fifth series denoted as series A in Table 1 has been taken from the projections of Louisiana's population made by the Division of Business and Economic Research of

TABLE 1

PROJECTIONS OF THE POPULATION OF LOUISIANA, 1965–1985 (figures in thousands)

Series	*1965*	*1970*	*1975*	*1980*	*1985*
I-B[1]	3561	3819	4163	4570	5021
II-B[2]	3561	3822	4172	4591	5053
I-D[3]	3561	3766	3980	4232	4523
II-D[3]	3561	3769	3988	4249	4549
A	3580	3951	4374	4849	5380

Louisiana State University at New Orleans. The high and the low projections have been graphically displayed to provide an indication of the range of the alternatives. By 1985 there is approximately a 20 percent difference between the high and the low projections of the State's population. Since the level of revenue derived from many of the State's taxes is sensitive to changes in the level of population, we may expect fairly wide ranges in the projections of state tax receipts.

Three alternative projections of income per capita for the State were constructed for use in projecting future tax revenues. These projections are presented in Table 2. The first series (series A in Table 2) assumes an average annual growth in per capita income of 5.5 percent. This is the average growth rate the State has experienced during the last 20 years. The second series of projections (series B in Table 2) assumes an average annual growth rate of 7.5 percent which is the average growth rate experienced by the State during the last 5 years. This rate of growth is quite high and it is doubtful that this rate of growth could be sustained over a long period of time. It should be pointed out that the 5 year period on which this rate is based was one of marked inflationary pressures on the economy. The third series of projections (series C of Table 2) assumes a growth in per capita income of 1.28 percent per 1 percent growth in population. This ratio of growth rates was derived by regressing income per capita on population for the 1950–1968 time period. The projections of per capita income in Series C were constructed by using this ratio and the projections of population of the Division of Business and Economic Research at L.S.U.-New Orleans. It produces income per capita projections significantly below the other alternative series. This series is probably (and hopefully from the standpoint of future tax revenues) on the low side but will produce revenue projections which reflect a somewhat depressed economy. The projections of income per capita have been graphically presented in the following graph. To the extent that State taxes are sensitive to changes in the level of per capita income, we must expect that the wide range in the income per capita projections will result in revenue projections which are quite far apart.

TABLE 2

PROJECTION OF THE INCOME PER CAPITA OF LOUISIANA, 1965–1985

Series	*1965*[1]	*1970*	*1975*	*1980*	*1985*
A[2]	$2079	$2943	$3847	$5028	$6573
B[3]	2079	3056	4387	6298	9042
C[4]	2079	2651	3193	3801	4480

[1] Actual figures.

[2] Assumes an average annual rate of growth of 5.5 percent. Rate based on average yearly growth in per capita income, 1950–1969.

[3] Assumes an average annual rate of growth of 7.5 percent. Rate based on average yearly growth in per capita income, 1965–1969.

[4] Assumes a growth in per capita income of 1.28 percent per 1 percent growth in population. Rate based on trend over 1950–1968 period and projected based on population projections of Louisiana State University in New Orleans, Division of Business and Economic Research.

[1] Series I-B assumes that gross migration rates of the 1955-60 period will continue throughout the projection period and that national fertility rates will decline very modestly from present levels.

[2] Series II-B assumes there will be a convergence of the 1955–60 gross migration rates during the projection period, and makes the same assumption about national fertility as number one.

[3] Series I-D makes the same assumption about interstate migration as Series I-B; Series II-D, the same as Series II-B; both Series I-D and II-D assume substantial drops in the present level of national fertility.

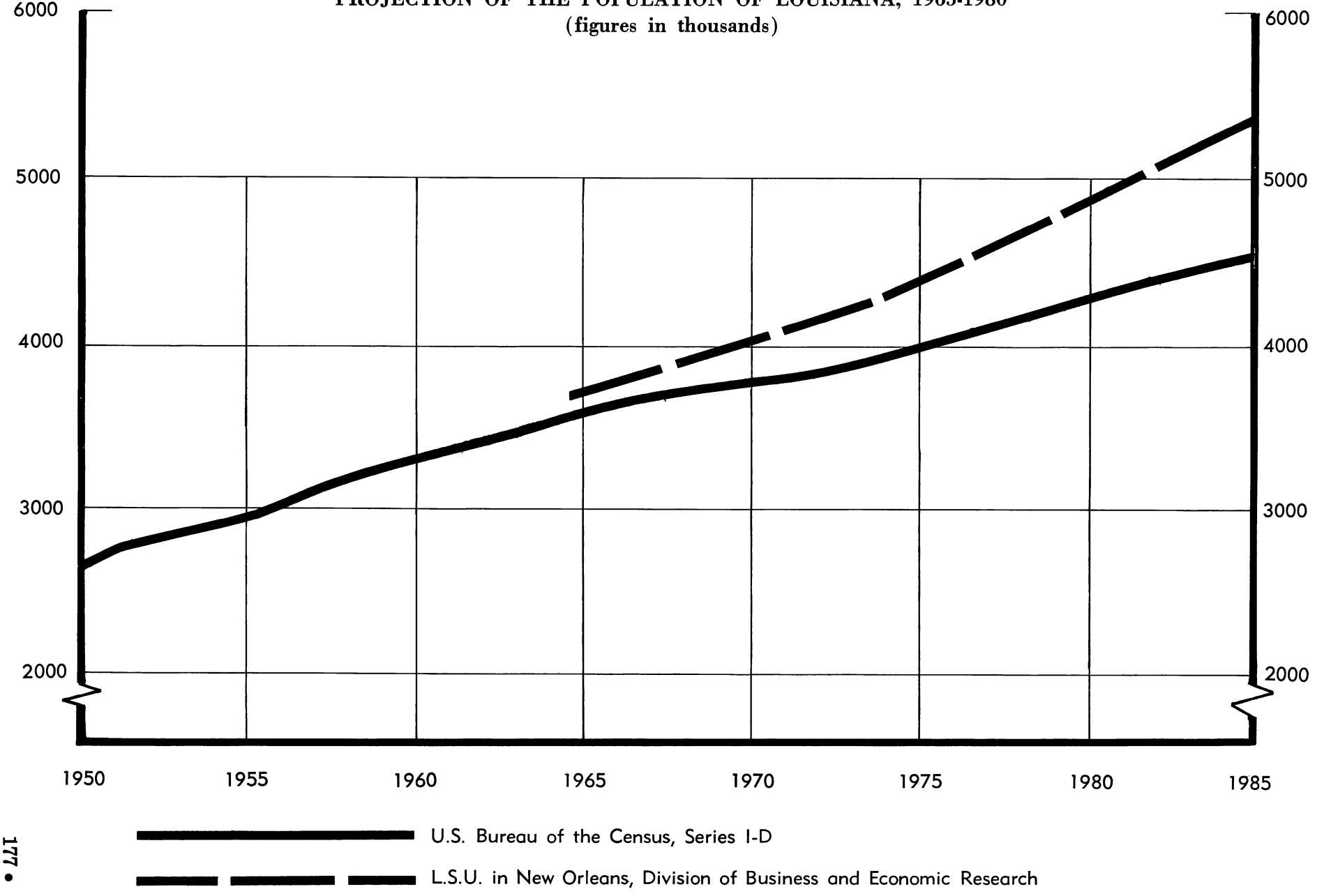
Source: Series I-B, II-B, I-D, II-D; U. S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 375, "Revised Projections of the Population of States: 1970 to 1985." Series A: Louisiana State University in New Orleans, Division of Business and Economic Research, *The Population of Louisiana: Projections by Race, Sex and Age to 1985.*

THE REVENUE PROJECTIONS

Three series of revenue projections for each major state tax have been made. These revenue projections are presented in Tables 3 and 4. From the data contained in Tables 3 and 4, graphs have been drawn to show the high and the low values for the projected revenues of each tax. Actual projections were made only for the benchmark years, 1975, 1980 and 1985. The continuity exhibited in the graphs is simply linear extrapolation between benchmark years. For the taxes where rate or structural changes have been made an obvious discontinuity in the graphs should appear resulting from a sharp increase in revenue resulting from the rate and structural change. For those taxes the trend between 1970 and the first projection benchmark year has been established by using budget estimates of revenues for the 1970–71 fiscal year.

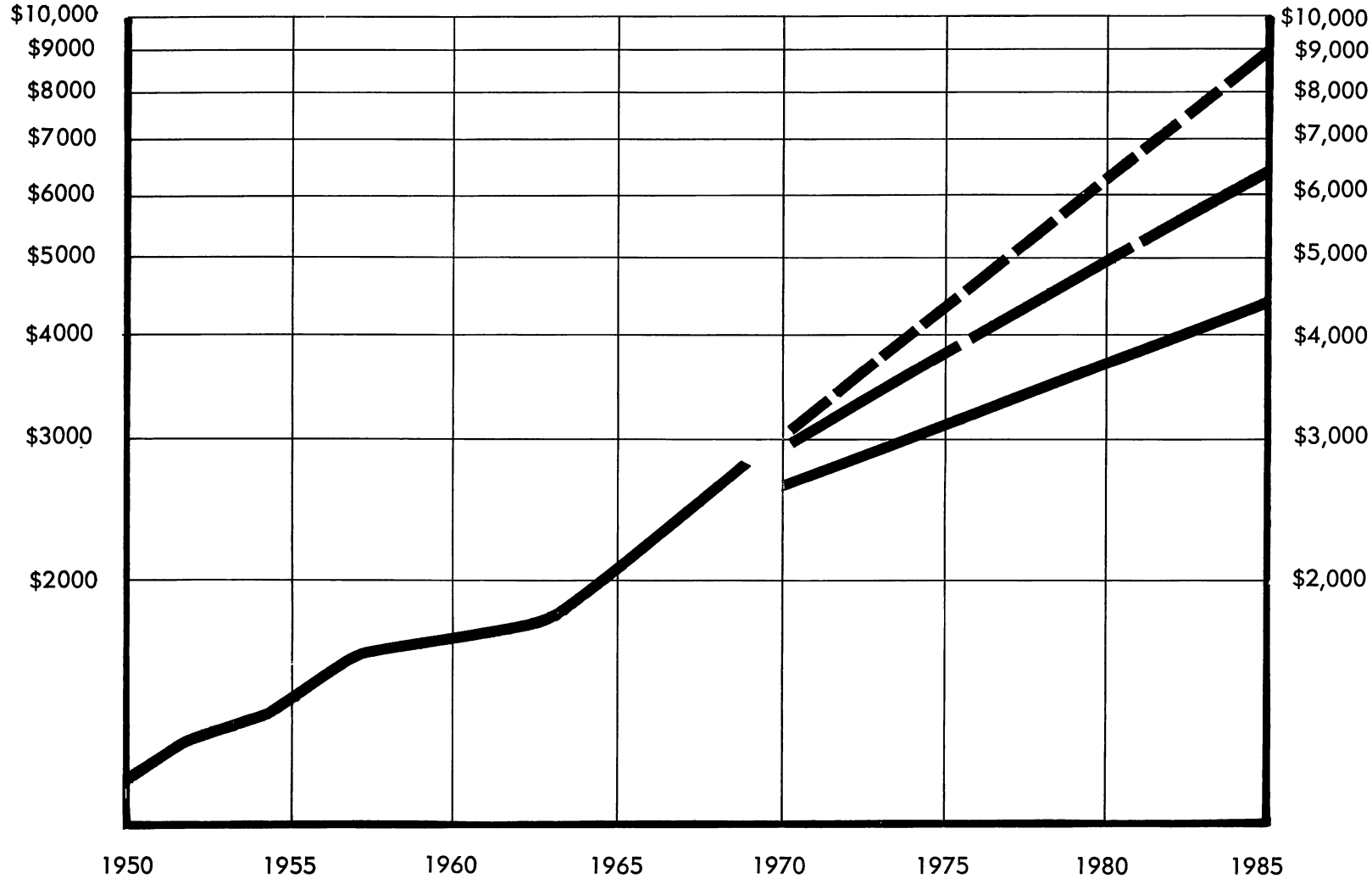
PROJECTION OF THE POPULATION OF LOUISIANA, 1965-1980

(figures in thousands)



INCOME

PROJECTIONS OF THE INCOME PER CAPITA OF LOUISIANA, 1970-1985



Note: Figures Plotted on Log Scale

Series 1 in Tables 3 and 4 was projected on the basis of population series A from Table 1 and income per capita series A from Table 2. The population series is that of the Division of Business and Economic Research, L.S.U.-New Orleans, which is the highest of the population projections available. The income per capita series is that which assumes an annual rate of growth which could be sustained over a long period of time. This series provides the highest revenues under all taxes. The graphical interpretations of the data reveal that this series exhibits a very high rate of growth in tax revenues in contrast to past trends. In a few instances the growth path produced by this series is not inconsistent with the trend of the last several years, however.

Series 2 combines the population projections of series I-D from Table 1 with the income per capita series C from Table 2. These series are the lowest projections of population and income per capita, respectively. This combination of population and income per capita projections produces the lowest projections of future tax revenues. This is to be expected since we are assuming that state tax receipts are a function of population and income. Of course the figures presented in Tables 3 and 4 are only projections, but if the initial estimates of the relationships between tax revenues and population and income per capita are reasonably accurate, then it would seem that the revenue projections of series 2 should provide a floor under our expectations of what future tax revenues are likely to be.

TABLE 3

Revenue Projections of Major State Taxes, Louisiana, 1975, 1980, and 1985
(amounts in thousands of dollars)

Tax	*1975*	*1980*	*1985*
		Series 1[a]	
Sales	$393,000	$592,000	$893,000
Income, Individual	227,000	466,000	958,000
Income, Corporate	65,400	101,000	153,000
Beverages	43,600	53,500	65,500
Tobacco Products	62,400	77,900	96,900
Petroleum Products	137,000	173,700	219,400
		Series 2[b]	
Sales	$294,000	$385,000	$496,000
Income, Individual	141,000	198,000	310,000
Income, Corporate	46,800	61,100	80,400
Beverages	37,900	43,200	49,000
Tobacco Products	50,300	56,900	65,600
Petroleum Products	106,100	126,900	147,000
		Series 3[c]	
Sales	$393,000	$592,000	$893,000
Income, Individual	190,000	378,000	755,000
Income, Corporate	60,300	91,100	137,000
Beverages	43,800	53,600	65,800
Tobacco Products	54,100	66,300	80,000
Petroleum Products	123,400	152,000	188,600

[a] Series I projected on the basis of population series A from Table 1 and income per capita series A from Table 2.
[b] Series 2 projected on the basis of population series I-D from Table 1 and income per capita series C from Table 2.
[c] Series 3 projected on the basis of population series II-B from Table 1 and income per capita series A from Table 2.
[d] The individual income tax figures have been revised on the basis of budget estimates of the increased revenue resulting from the elimination of the deductibility of Federal income taxes in calculating net income.
Source: See text.

TABLE 4

Revenue Projections of Severance Taxes, Louisiana, 1975, 1980, 1985
(amounts in thousands of dollars)

Tax	*1975*	*1980*	*1985*
		Series 1[a]	
Severance, Total[d]	$492,000	$820,000	$959,000
Oil	171,000	229,000	304,000
Distillates	41,800	72,900	117,000
Sulfur	4,200	5,300	6,700
Gas	264,000	405,000	550,000
		Series 2[b]	
Severance, Total[d]	$300,000	$399,000	$555,000
Oil	137,000	165,000	197,000
Distillates	24,600	33,700	48,200
Sulfur	3,600	4,190	4,820
Gas	159,000	200,000	235,000
		Series 3[c]	
Severance, Total[d]	$358,000	$567,000	$893,000
Oil	164,000	218,000	290,000
Distillates	30,400	50,100	82,500
Sulfur	4,200	5,300	6,700
Gas	184,000	255,000	325,000

NOTES: a, b, c, same as Table 3.
[d] Total Severance Taxes are an independent projection, receipts may be less than sum of individual levies.
Source: See text.

Series 3 combines the population series II-B from Table 1 and the income per capita series A from Table 2. Population series II-B falls between the high and low extremes of population projections. Income per capita series A is based on a growth rate which has been sustained over a 20 year period and it seems reasonable to assume that this growth rate could be sustained in the future. This combination of population and income per capita projections produces a revenue projection series which falls between the high and low extremes. For the taxes which are more sensitive to population change than income per capita change, the projections in series 3 will be close to that of series 1. This is true of the sales tax where at the level of accuracy employed the two series (1 and 3) are the same. In one case (the beverages tax) where the projection equation has a negative per capita income coefficient, the projections in series 3 are slightly higher than series 1.

APPENDIX—TECHNIQUES OF REVENUE PROJECTING

To project the amount of revenues that the State will realize from its taxes in future years we attempt to find stable relationships between tax receipts and economic variables which can be projected into the future. For example, we would expect that there is a relationship between the number of people living in the State and the amount of sales taxes that will be collected. We realize, however, that we will be able to do a better job of estimating tax receipts if we take into account other factors which affect the amount of sales taxes people pay. We know that income also will affect sales tax receipts. The greater one's income the more he will pay in sales tax seems a reasonable assumption to make. The sales tax rate is also an important variable to consider. In general, the higher the sales tax rate the greater the tax receipts. Although the sales tax rate had not been increased for a very long period of time in the State, the experience of other states in changing (increasing) their sales tax rates has been that a rate increase results in a less than proportional increase in tax revenue. Thus a doubling of projected yields for doubling of the tax rate would be very likely result in an overstating of the actual revenue which would be received.

If we can quantify the relationships between tax yields and these economic variables (income, population and tax rates), and these relationships remain stable, then we can estimate future tax revenues by making assumptions regarding the State's future economic and demographic performance. That is to say we can project revenues under alternative tax rates assuming that income and population grow at certain rates. If the assumptions regarding the future economic and demographic performance of the State prove to be inaccurate, the revenue projections can be re-estimated quite easily. Of course alternative revenue projections may be made based on different assumptions regarding future economic and demographic performance of the State.

The mechanics of estimating the relationships between tax revenues and the economic and demographic variables is quite simple. Symbolically we write the relationship as:

$$(1)\ R = f(y, N, r)$$

where R is the tax revenue, y is income per capita and r is the tax rate. The equation may be read simply as Tax revenue is a function of income per capita, population and the tax rate.

To determine the effects of changes in the economic, demographic and policy (tax rate) variables it is necessary to differentiate the logarithm of equation (1) with respect to time

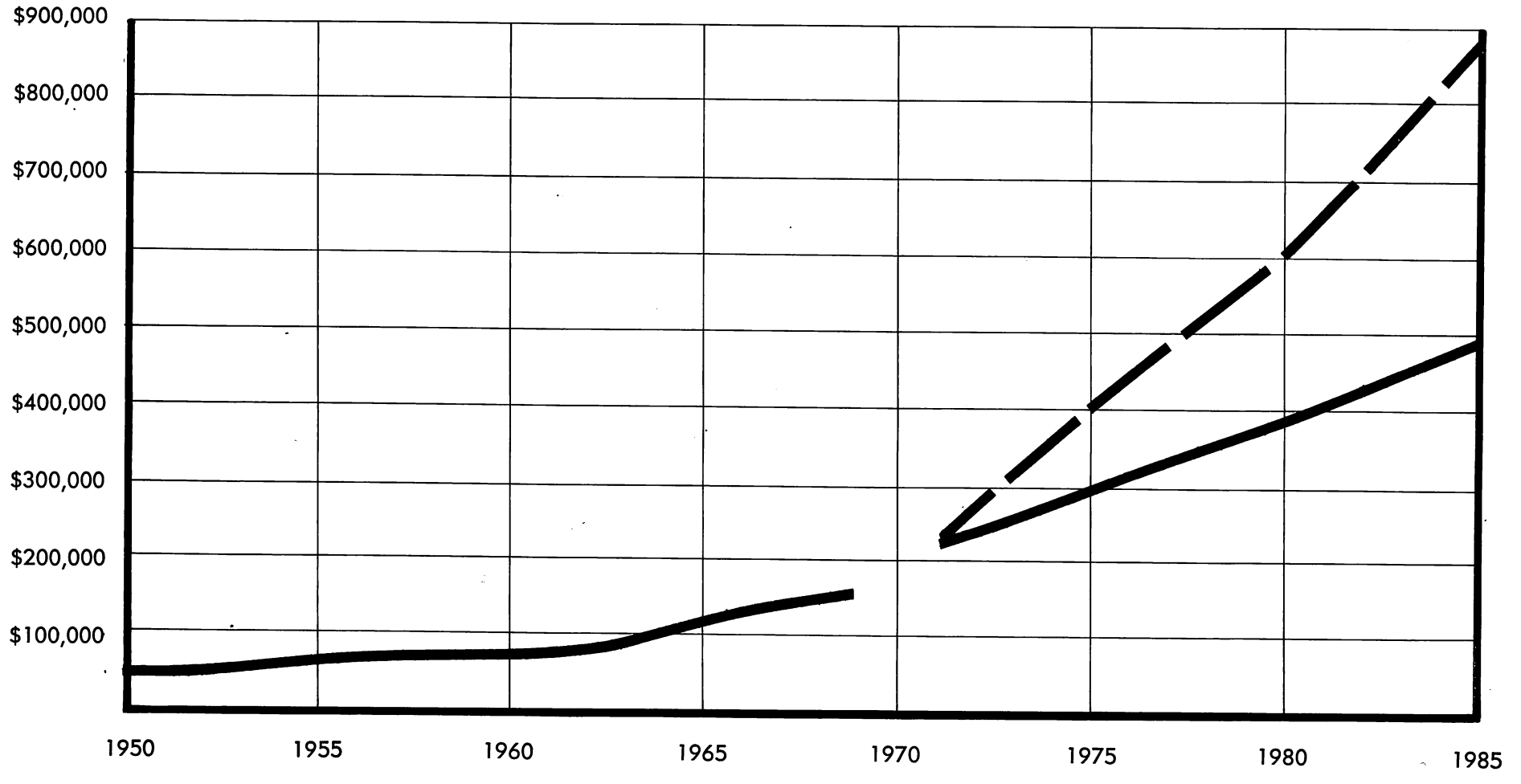
$$(2)\ \frac{\dot{R}}{R} = e_1\left(\frac{\dot{y}}{y}\right) + e_2\left(\frac{\dot{N}}{N}\right) + e_3\left(\frac{\dot{r}}{r}\right)$$

What this means is that the coefficients (e_i's) are the elasticities of tax revenues with respect to each of the variables. If the tax rate had remained constant (which was true of most of Louisiana's taxes) and we had used aggregate state income (income per capita x population) as the right hand variable, the elasticity would be the often used measure of the responsiveness (income elasticity) of the tax. [These elasticities have been estimated for purposes of analyzing Louisiana's tax structure with respect to its responsiveness to growth in income, but not projecting tax revenues, and are presented in the Table A-2 Income Elasticity of Major Louisiana State Taxes.] If the elasticities are constant over time (which is an assumption which is generally made), then the equation may be written

$$(3)\ R_t = A y_t^{e_1} N_t^{e_2} r_t^{e_3}$$

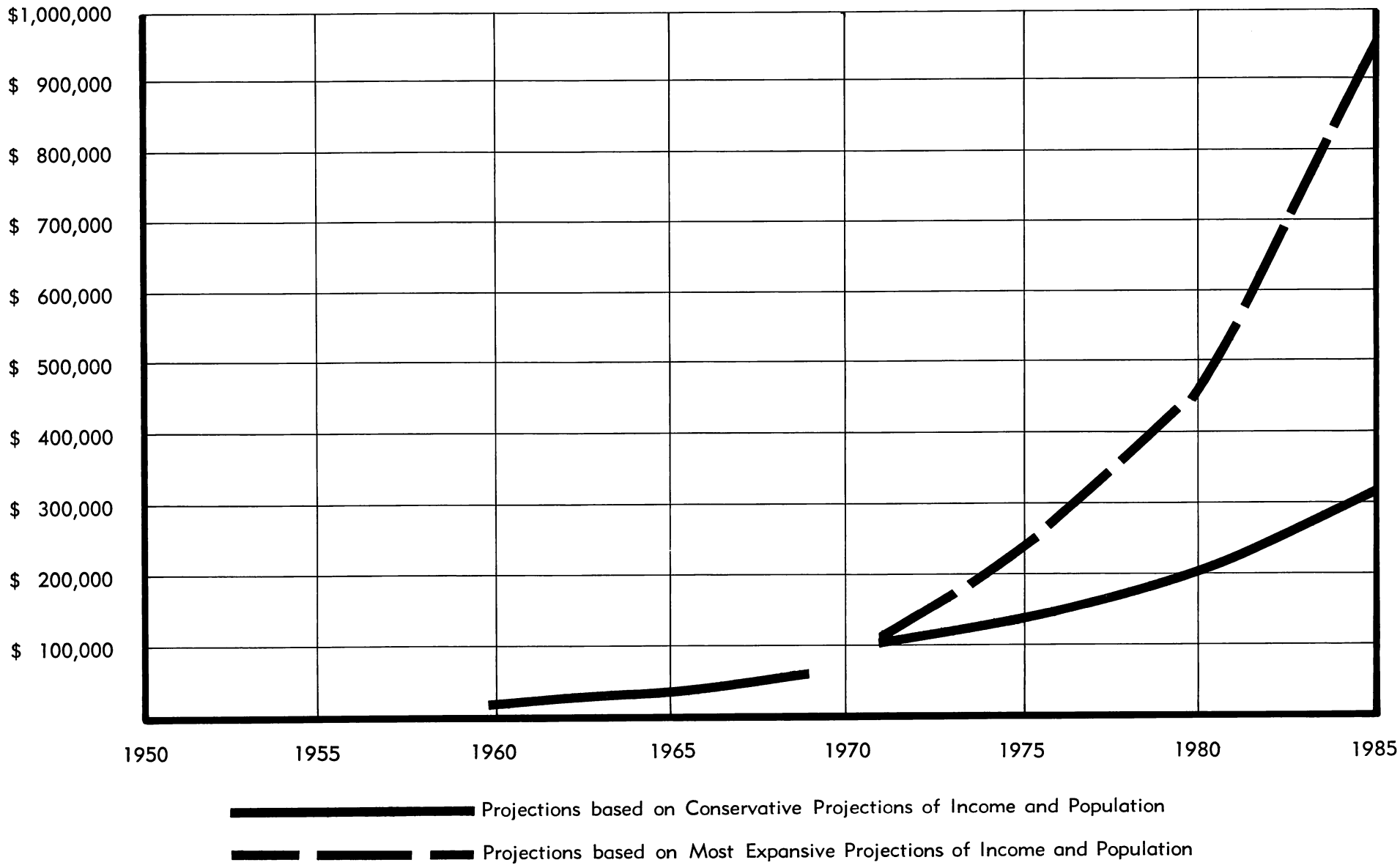
(where A is the antilog of the constant of integration.)

PROJECTIONS OF LOUISIANA STATE SALES TAX COLLECTIONS TO 1985



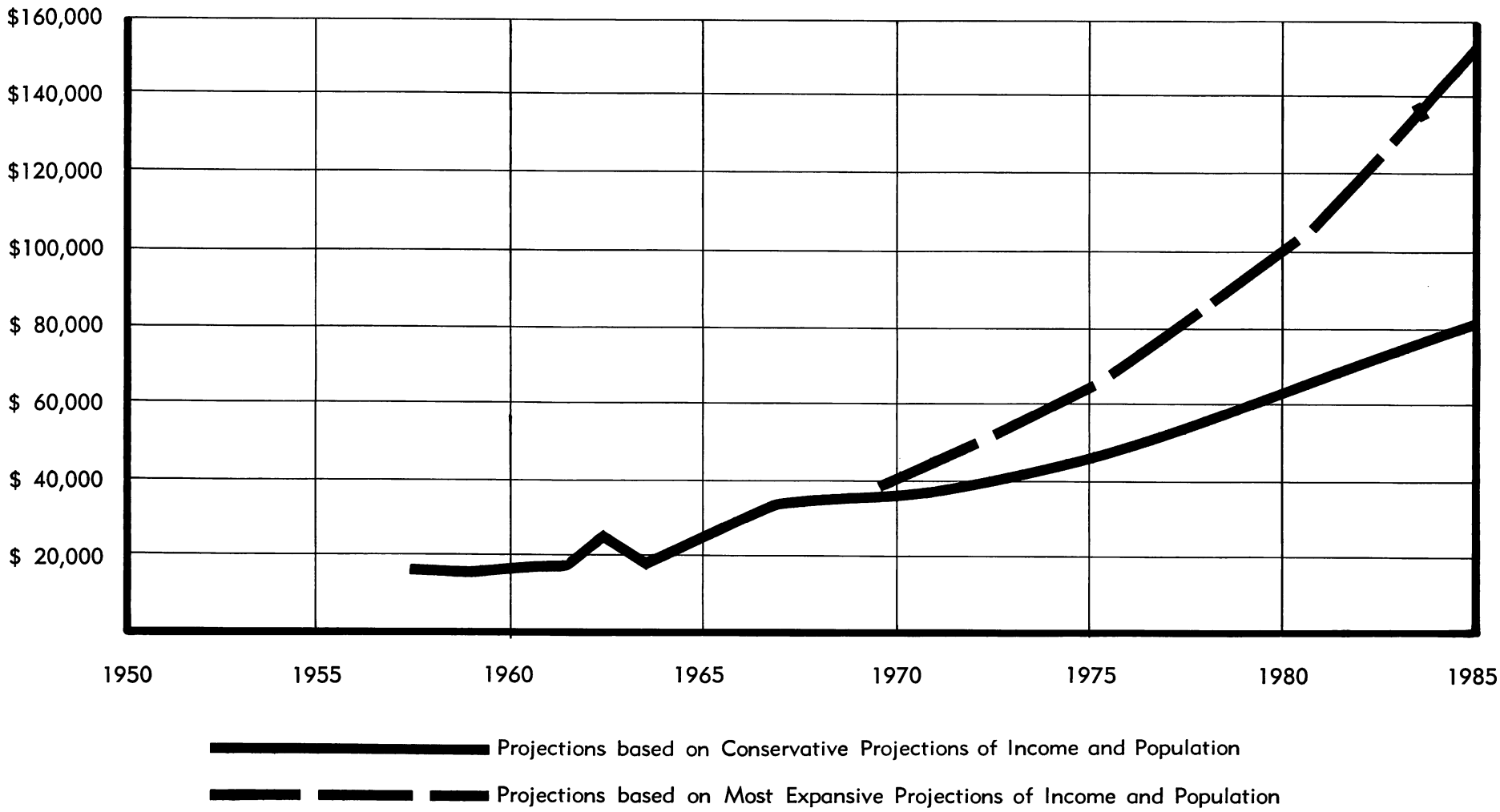
PROJECTIONS OF LOUISIANA STATE INDIVIDUAL INCOME TAXES TO 1985

(amounts in thousands of dollars)



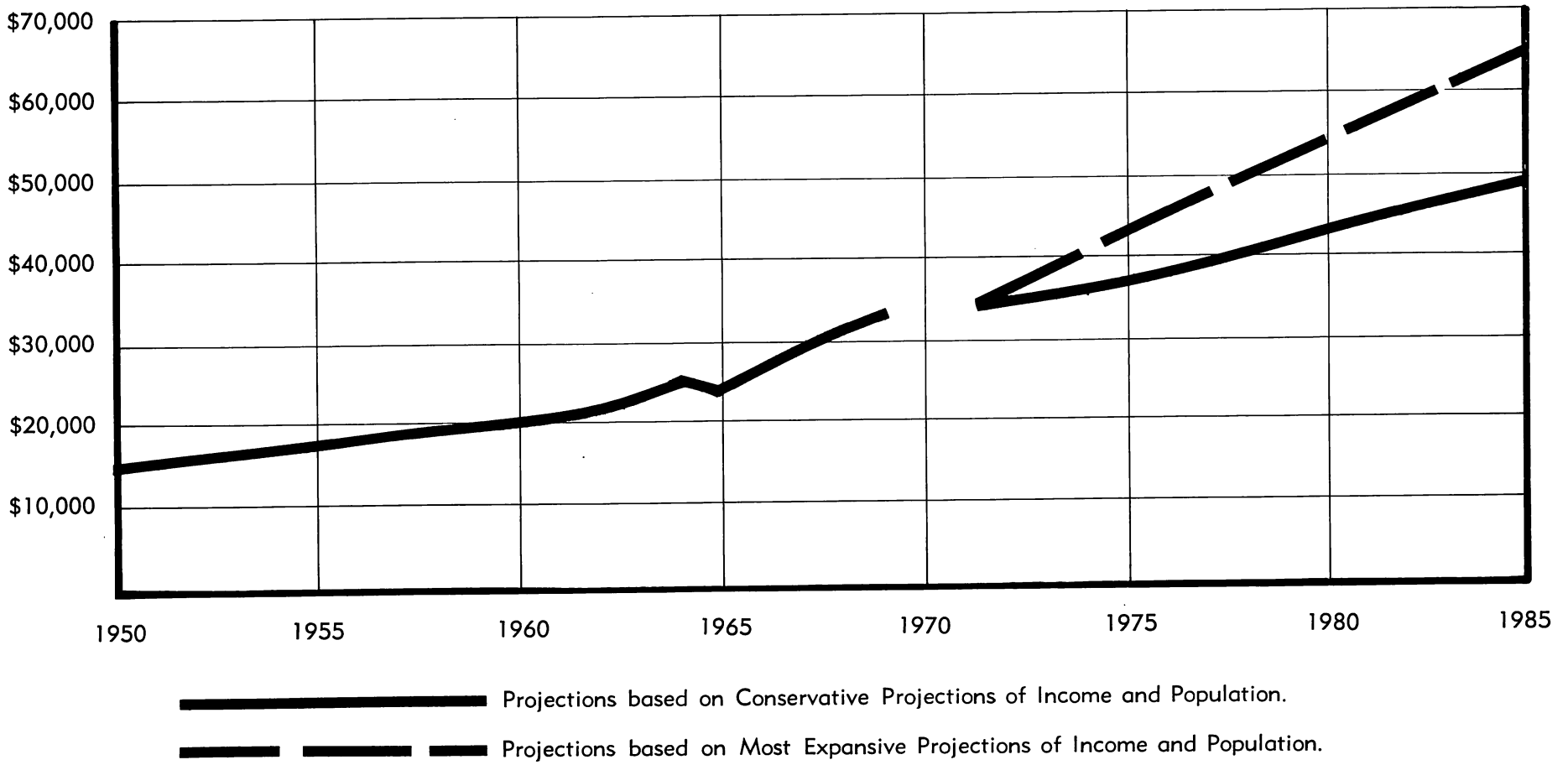
PROJECTIONS OF LOUISIANA STATE CORPORATE INCOME TAXES TO 1985

(amounts in thousands of dollars)



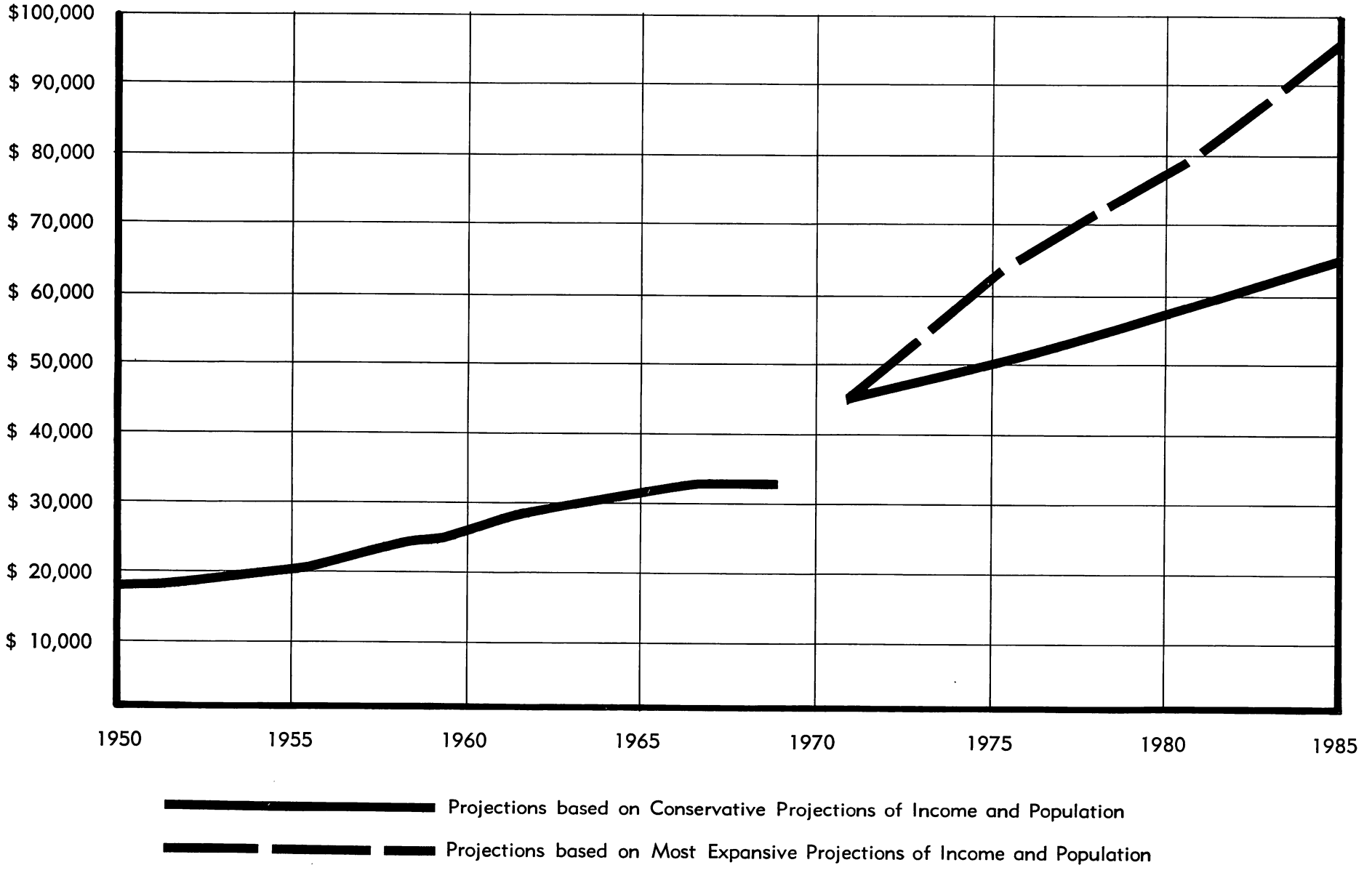
PROJECTIONS OF LOUISIANA STATE BEVERAGE TAX COLLECTIONS TO 1985

(amounts in thousands of dollars)



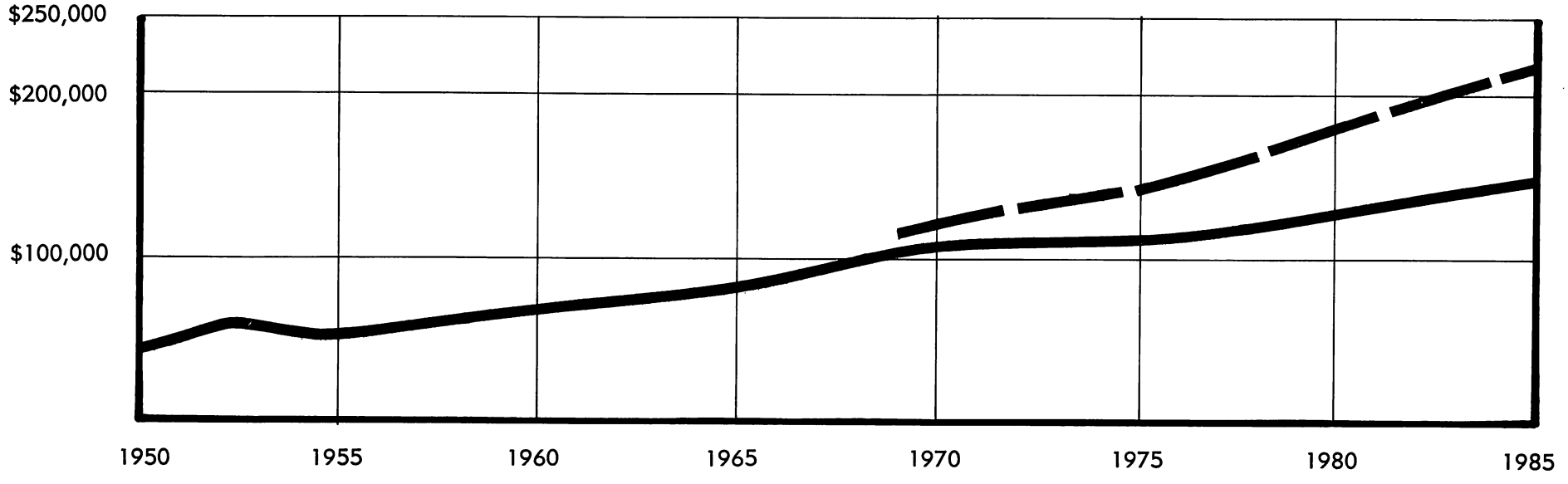
PROJECTIONS OF LOUISIANA STATE TOBACCO PRODUCTS TAX COLLECTIONS TO 1985

(amounts in thousands of dollars)



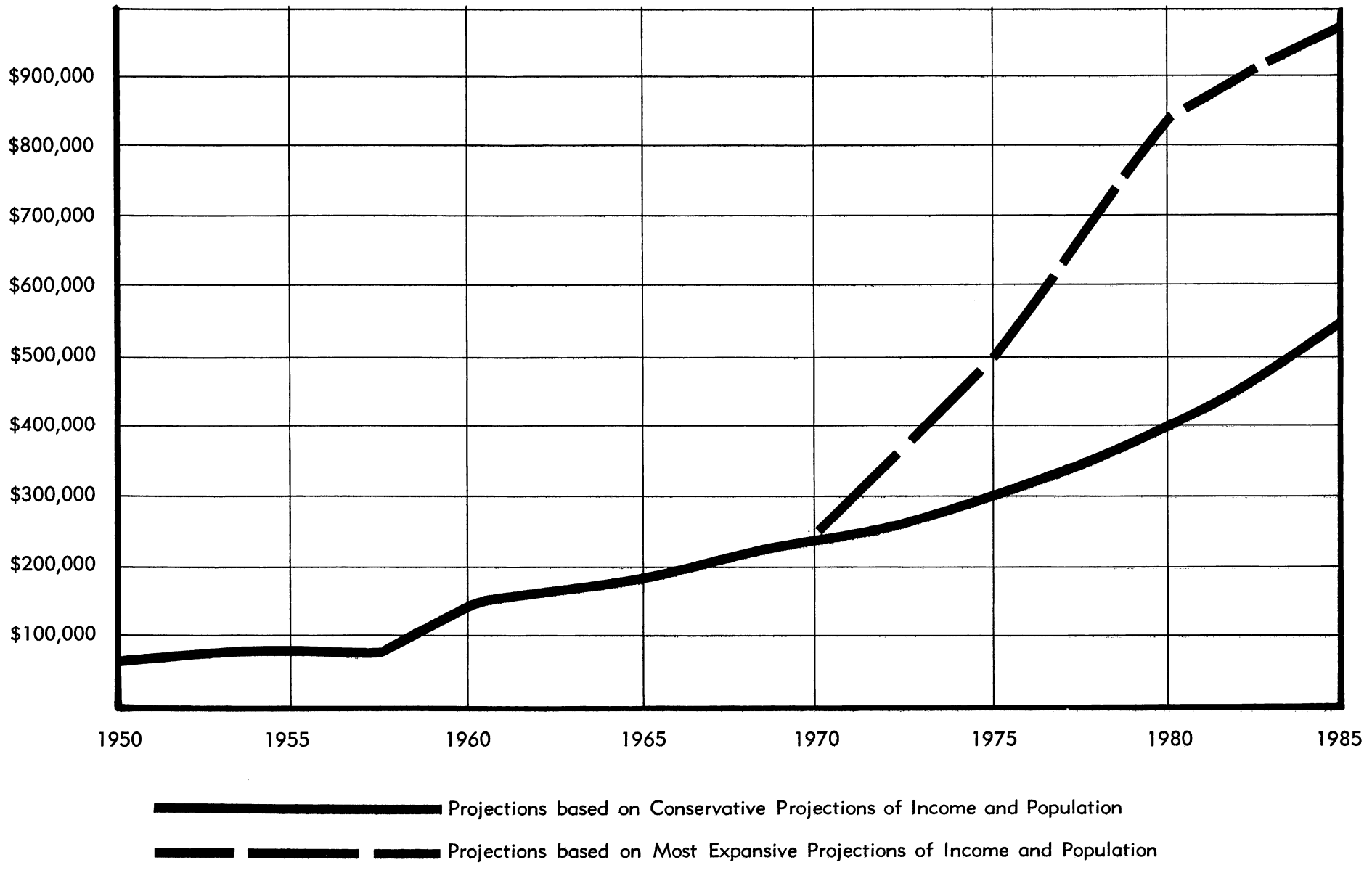
PROJECTIONS OF LOUISIANA STATE PETROLEUM PRODUCTS TAX COLLECTIONS TO 1985

(amounts in thousands of dollars)



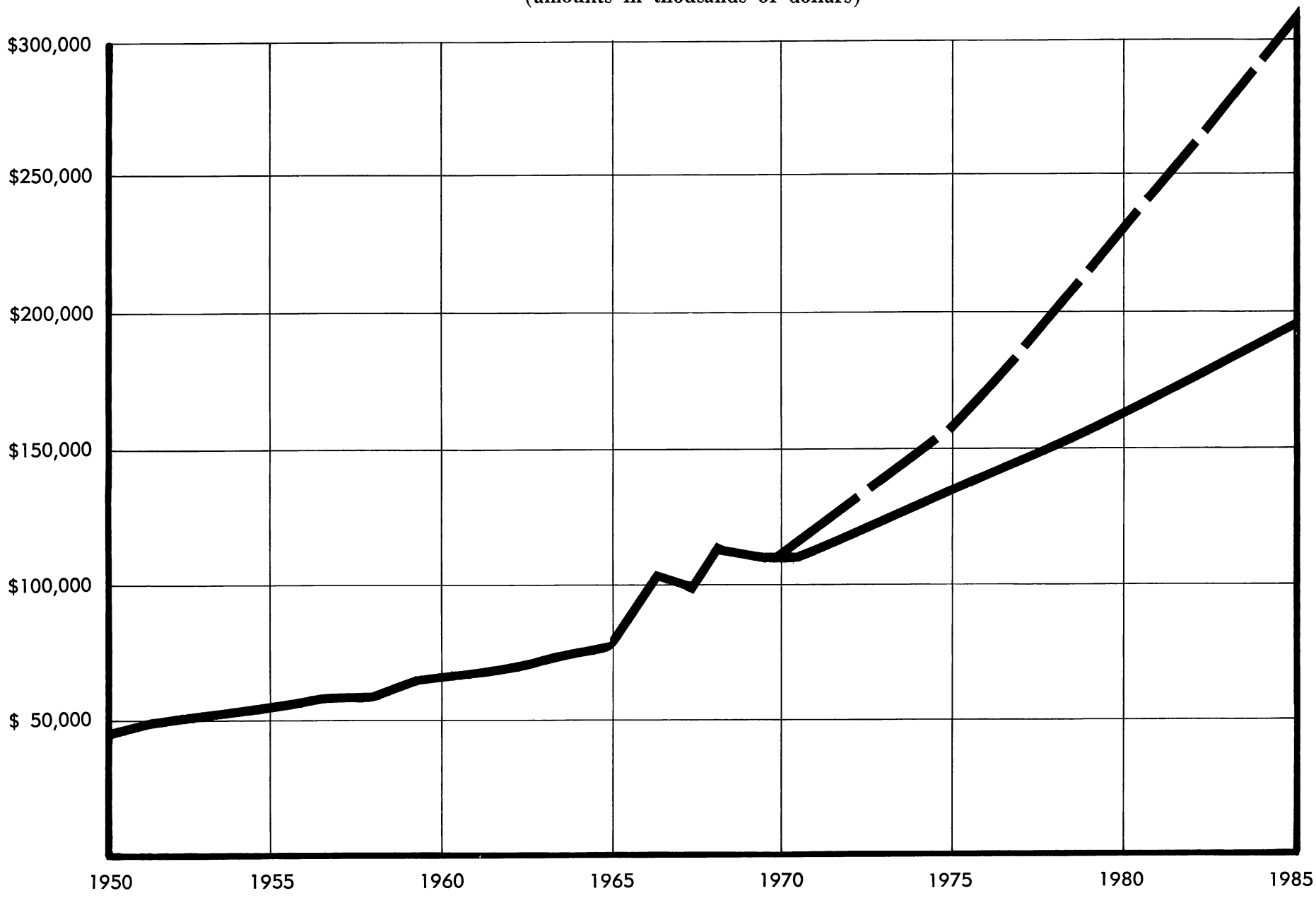
PROJECTIONS OF LOUISIANA STATE SEVERANCE TAX COLLECTIONS, 1970-1985

(amounts in thousands of dollars)



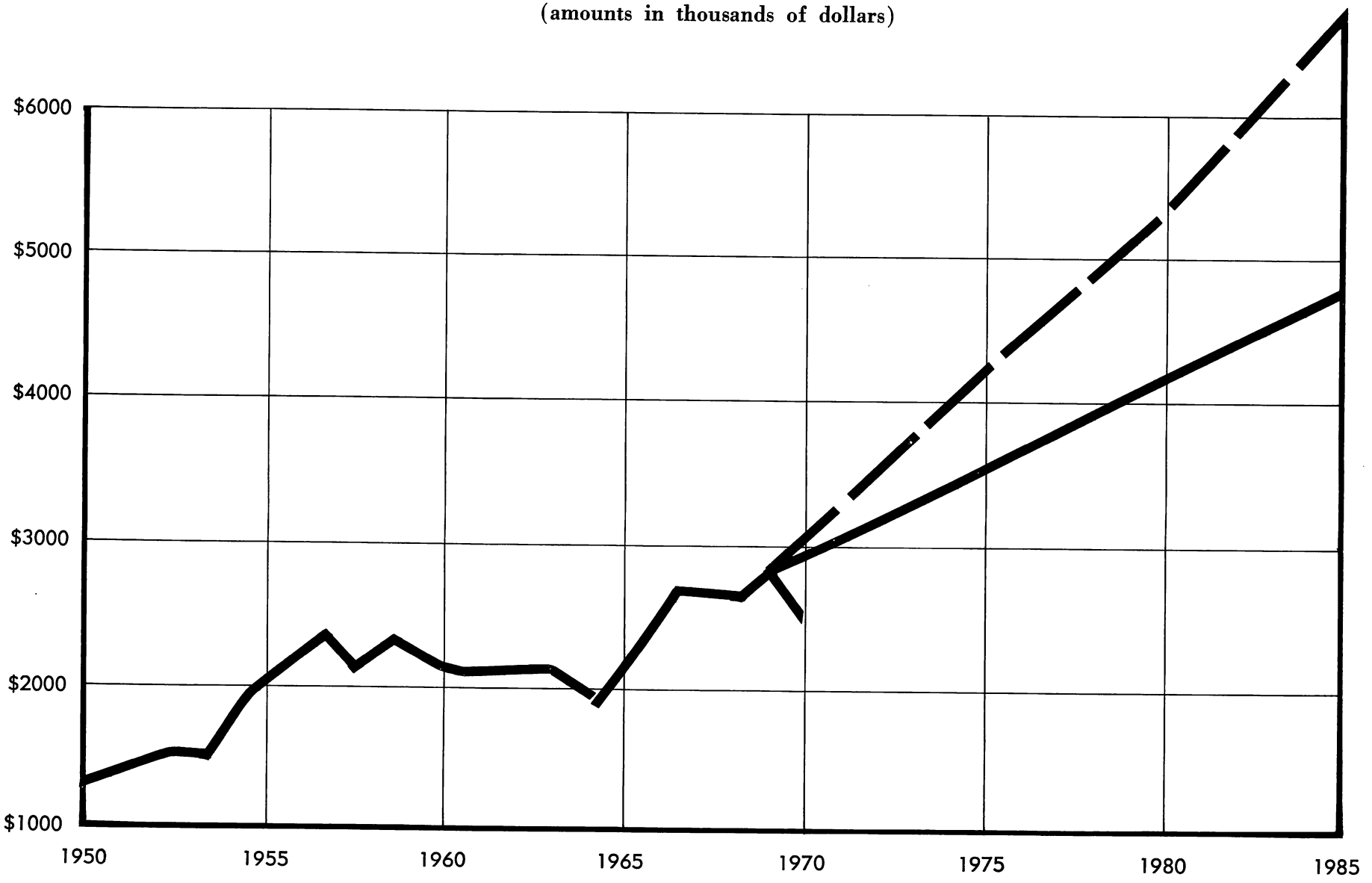
PROJECTIONS OF OIL SEVERANCE TAXES TO 1985

(amounts in thousands of dollars)



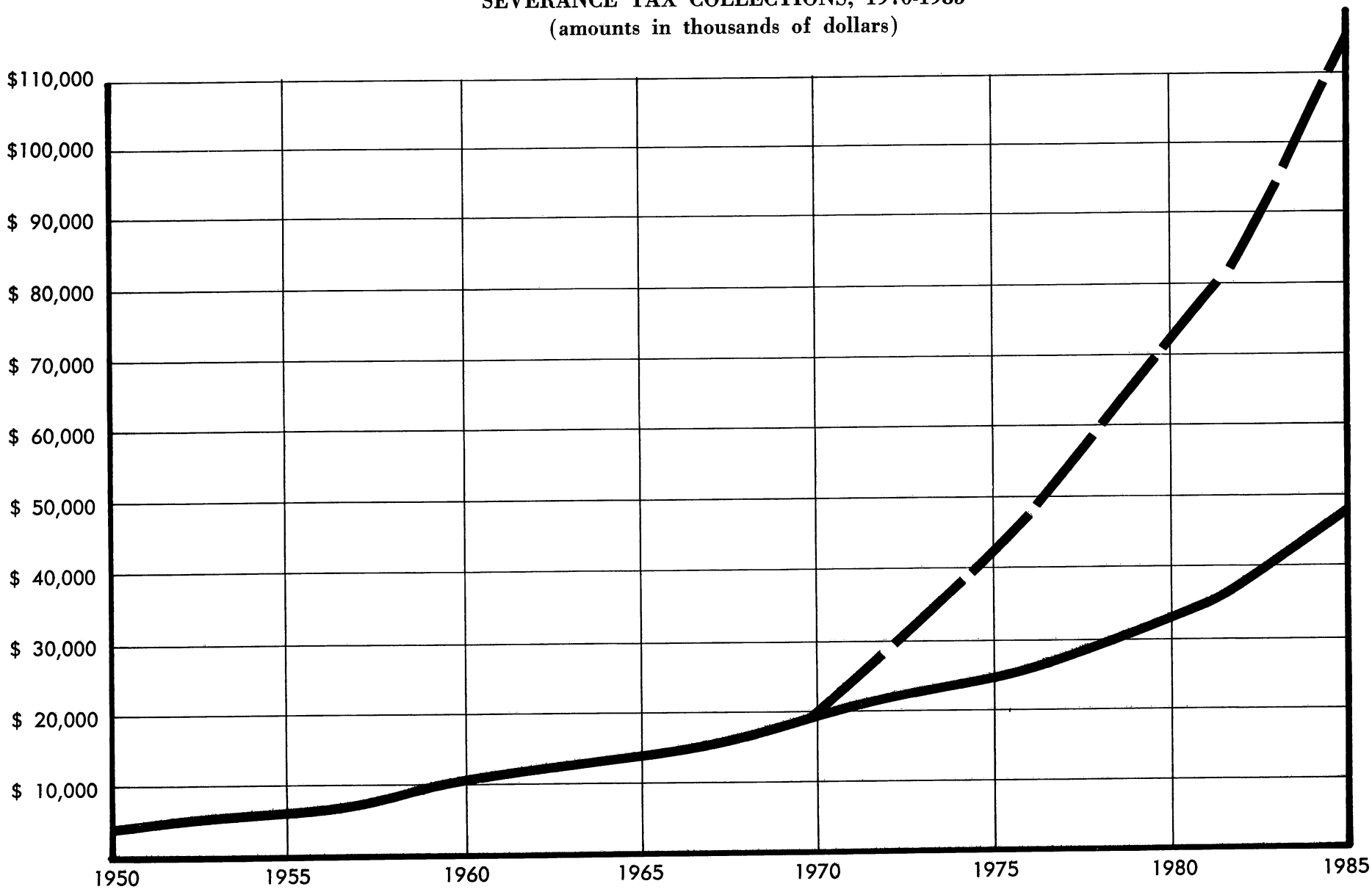
PROJECTIONS OF SULFUR SEVERANCE TAXES TO 1985

(amounts in thousands of dollars)



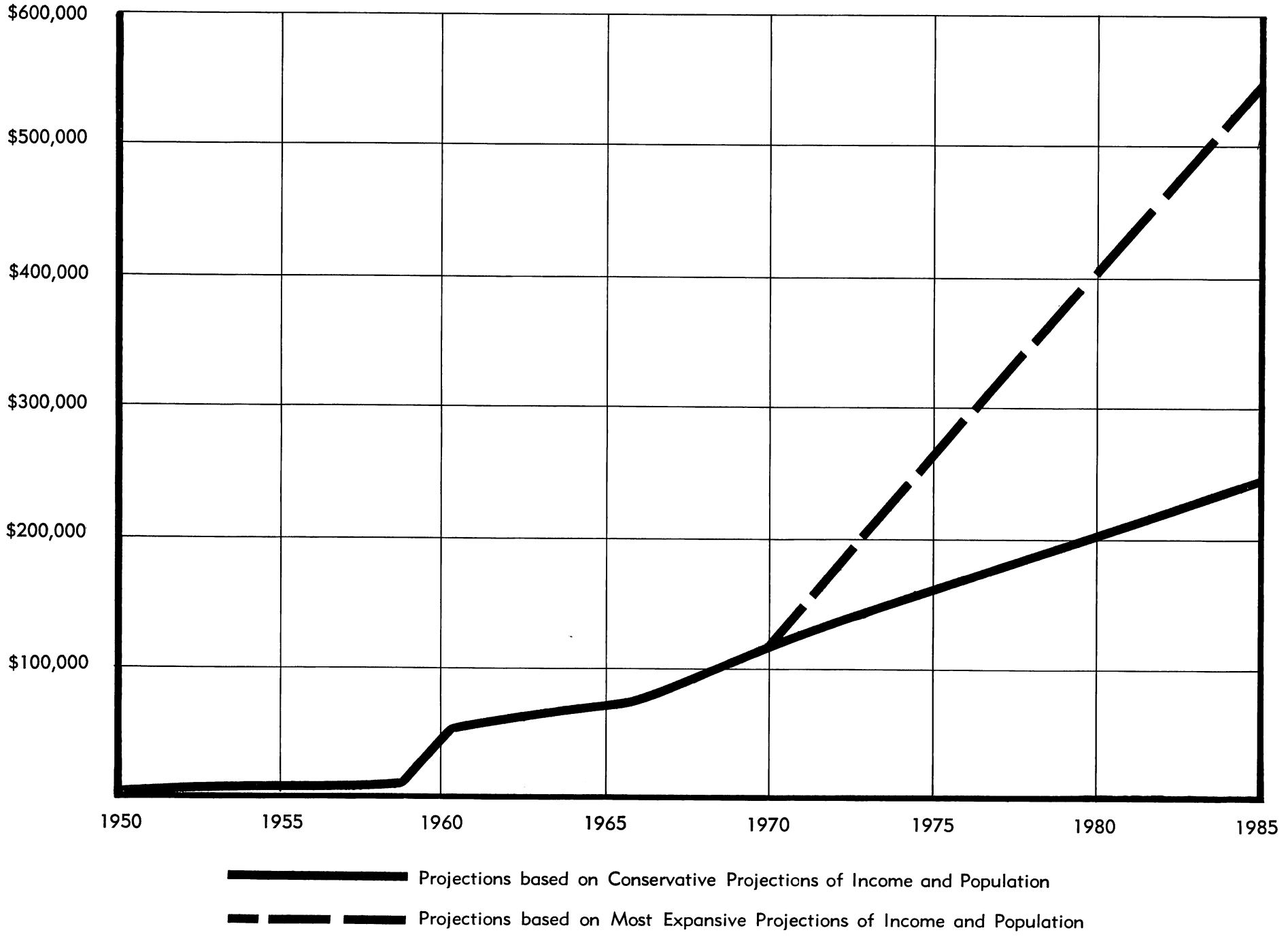
PROJECTIONS OF LOUISIANA STATE DISTILLATE SEVERANCE TAX COLLECTIONS, 1970-1985

(amounts in thousands of dollars)



PROJECTIONS OF LOUISIANA STATE GAS SEVERANCE TAX COLLECTIONS TO 1985

(amounts in thousands of dollars)



Now we may take logarithms of both sides of the equation to put it into a form in which we may estimate the elasticities by regression analysis.

$$(4)\ \ln R = a + e_1 \ln y + e_2 \ln N + e_3 \ln r$$

In those cases where the tax rate has not changed we must drop the tax rate variable. Using data for the last twenty years we have estimated these coefficients for each of the major state taxes. These coefficients are presented in Table A-1 Coefficients of Estimating Equations for State Taxes.

To estimate future revenues, let these coefficients be represented by e_1 and e_2, We have

$\ln R$ = constant + e_1 ln (income per capita) + e_2 ln (Population)

The computer printed out the plots of the actual and estimated values based on the estimated coefficients. (The plots are available in the Coordinating Council Office.) As an example, using these coefficients Tobacco Product Tax receipts were estimated for 1969. The estimated receipts were $32,600,000 compared to actual receipts of $33,128,000.

The calculations for this estimate are as follows

$$\begin{aligned}\ln R &= -11.7218 - 0.355145 \ln (y/N) + 3.03109 \ln (N)\\ &= -11.7218 - 0.355145\ (7.93020) + 3.03109\ (8.22819)\\ &= -11.7218 - 2.8164 + 24.9308\\ &= 10.4023\\ R &= \$32{,}600{,}000\end{aligned}$$

TABLE A-1

COEFFICIENTS OF ESTIMATING EQUATIONS FOR STATE TAXES

Tax	*Regression Constant*	*Income Per Capita*	*Population*	R^2
Sales	−0.1252	1.5288	0.0161	.9942
	(−0.06)	(8.70)	(0.04)	
Petroleum Products	−7.9162	−0.0608	2.3999	.9769
	(−3.44)	(−.31)	(5.23)	
Personal Income	−30.2063	1.2323	3.7816	.9652
	(−2.74)	(2.17)	(2.04)	
Corporate Income	−10.9756	0.9250	1.7211	.8956
	(−0.91)	(1.49)	(0.85)	
Alcoholic Beverages	4.5648	0.7835	−0.0574	.9627
	(1.94)	(3.97)	(−0.12)	
Tobacco Products	−11.7218	−0.3551	3.031	.9860
	(−6.72)	(−2.43)	(8.74)	
Severance, Total	−37.3764	−0.6975	6.7092	.9667
	(−6.15)	(−1.40)	(5.61)	
Oil	−1.3084	0.7658	0.8391	.9845
	(−0.61)	(4.33)	(1.98)	
Distillates	−41.7615	−0.5702	6.8128	.9810
	(−8.50)	(−1.41)	(7.04)	
Gas				
Sulfur	1.5203	0.8841	−0.0561	.7092
	(0.18)	(1.26)	(−0.03)	
Total Tax Structure	−10.0374	0.5065	2.3715	.9944
	(−5.82)	(3.59)	(6.99)	

Note: Figures in Parentheses are t-statistics.

TABLE A-1 (SUPPLEMENTAL)

Tax	*Regression Constant*	*Tax Rate*	*Income Per Capita*	*Population*	R^2
Gas Severance	−28.9065	.9862	.0031	5.3690	.9976
	(−2.99)	(18.75)	(.01)	(3.26)	
Gas Severance	−184.8510		−6.7422	30.3077	.9422
	(−7.84)		(−3.49)	(6.53)	

Note: The estimating equation for the gas severance tax including a rate variable provided a better fit (higher R^2). The projections based on this equation were not reasonable probably due to a large standard error. For purpose of projecting revenues from the gas severance tax the equation not utilizing the rate variable was used.

TABLE A-2
Income Elasticity of Major Louisiana State Taxes[a]

Tax	*Elasticity*
Sales	1.05
Petroleum Products	0.67
Income	
Personal	1.82
Corporate	1.11
Alcoholic Beverages	0.54
Tobacco Products	0.65
Severance, Total	1.47
Oil	.079
Distillates	1.59
Gas	n.a.
Sulfur	0.61
Total Tax Structure	1.05

[a] Income elasticity may be defined as the percent change in tax yield per 1 percent change in aggregate state income. Estimates based on tax yield and income data for the period 1950–1969.

Long Range Expenditure Projections for the State of Louisiana

by

JAMES A. PAPKE

Numerous studies have been made on the economic determinants of state government expenditures.[1] Of course, as a very practical matter, available revenue to finance state expenditure is the most important determining variable. At the budgetary level the question of whether expenditures are set and revenues raised to finance that level of expenditures or whether expenditure levels are set based on projected revenues is an important consideration. The issue to which this report addresses itself is, however, the projection of expenditures for various State functions considered from a demand for public services point of view. Basically, it is assumed that as the State's population grows and as the income of its residents increase there will be increased demands for State provided services. Based on historical trends the relationships between expenditure levels and population and income levels are estimated. Employing this information and projections of population and income for future years, projections of state expenditures are made. Since the data used in estimating the relationships between expenditures and population and income are actual expenditures, we are implicitly working with expenditure data which were constrained by the available revenues for their financing. Thus nique could have been employed which could have we expect to find a reasonable match between projected revenues and projected expenditures. We are aware, however, that in many cases the increased expenditure levels have been made possible only by increasing tax rates. Since the revenue projections of this study have been made assuming that the present tax rates and tax structures are continued into the future, the expenditure projections will help to point out any inadequacies in the existing tax structure to provide the necessary revenues to finance expenditures at desired levels. The analysis will also provide information on where tax increases or revisions in the tax structure are likely to be needed.

Although we can use historical relationships between expenditures and income and population to project future expenditures, it should be pointed out exactly what these projections represent. They are projections of what expenditures may be if certain economic conditions are met. They are not predictions of what expenditures will be in the future. It must be noted that future expenditures will depend upon several factors which affect the cost of providing services. One such factor is the price of goods and services which the State must purchase in order to provide services to its residents. Personal services (the labor component) are a large portion of total resources the State purchases and it is well known that labor costs are rising rapidly. The quality of State provided services is also an important factor in the cost determination. Empirically it has been found that as the income level of a state's residents goes up the demand not only for more but better state services increases. The techniques employed in this study to project future expenditure levels implicitly assume that changes in the unit cost of providing government services will on average be the same as they have been over time. It is also assumed implicitly that changes in the demand for government services induced by changes in income will be the same with respect to future changes in income as they have been with respect to past changes in income.

Alternatively, an expenditure projection techmade explicit assumptions about the effects of inflation on costs of providing government services and explicit assumptions about the effects of changing the quality of services on their costs.

[1] For example, see, Solomon Fabricant, *The Trend of Government Activity in the United States Since 1900*, National Bureau of Economic Research, New York, 1952; Glenn W. Fisher, "Interstate Variation in State and Local Government Expenditures," *National Tax Journal*, March 1964; Seymour Sacks and Robert Harris, "The Determinants of State and Local Government Expenditures and Intergovernmental Flows of Funds," *National Tax Journal*, March 1964; L. R. Gabler and Joel I. Brest, "Interstate Variations in Per Capita Highway Expenditures," *National Tax Journal*, March 1967; Ira Sharkansky, "Some More Thought About the Determinants of Government Expenditures," *National Tax Journal*, June 1967; Thomas F. Pogue and L. G. Sgontz, "The Effect of Grants-in-Aid on State-Intergovernmental Aid as an Expenditure Determinant," *National Tax Journal*, December 1968; M. Charles McIntyre, "Determinants of Expenditures for Public Higher Education," *National Tax Journal*, June 1969; and Ronald Gold, "Fiscal Capacities and Welfare Expenditures of States," *National Tax Journal*, December 1969.

This would require making some specific assumptions (really projections) of future price levels and specific assumptions regarding how much services would be improved. For example, we could take current expenditures in per capita terms and project future expenditures by multiplying by the ratio of future to present population and call it a constant cost projection. We could add to it, say, a 6 percent per year inflation factor and call it an increased cost projection. We could multiply one or both of the results of these projections by some improvement factor and call it an improved quality of service projection. Techniques such as these are often used, but they really neglect the interrelationships which exist among the economic variables.

THE TECHNIQUES OF PROJECTING EXPENDITURES

For each major category of State expenditure, regression analysis was used employing data from 1950 to 1969 to estimate the historical relationship between State expenditure and change in the level of the State's population and income per capita. This technique is basically the same as that used to project State tax revenues. The coefficients and some of the statistical properties of the regression equations are reported in Table 1. The coefficients are used to project future expenditures by employing three alternative sets of projections of population and income per capita. These sets of projections of population and income per capita are the same as those used to make the revenue projections. The reader is referred to the report on revenue projections for a description of these population and income per capita projections.* The three sets of expenditure projections may be regarded as conservative, high and a projection series which falls between the high and low extremes based on a growth rate in per capita income which has been sustained over a 20 year period and a population growth rate which is about the average of the available population projections. The sets of expenditure projections are presented in Table 2. The projec-

TABLE 1

COEFFICIENTS OF ESTIMATING EQUATIONS FOR STATE EXPENDITURES

Expenditure	*Regression Constant*	*Income Per Capita*	*Population*	R^2
Highways	−44.7464	−1.2326	8.1431	.9252
	(−4.86)	(−1.66)	(4.53)	
Welfare	−16.3097	−0.2869	3.7590	.9854
	(−7.07)	(−1.54)	(8.34)	
Local Government Support	−6.8744	0.7106	1.5188	.9551
	(−1.60)	(2.05)	(1.81)	
Education, Total	−24.3645	0.7982	3.8050	.9890
	(−6.59)	(2.67)	(5.27)	
Education, Higher	−28.6576	1.3265	3.6895	.9845
	(−5.43)	(3.11)	(3.58)	
Total General Expenditure	−19.8782	0.2832	3.8677	.9883
	(−6.55)	(1.16)	(6.53)	

Note: Figures in parentheses are t-statistics
Source: See text.

* See Long Range Revenue Projections for the State of Louisiana: 1975, 1980, 1985.

TABLE 2

PROJECTIONS OF MAJOR STATE EXPENDITURES, 1975, 1980 AND 1985
(amounts in thousands of dollars)

Expenditure	*1975*	*1980*	*1985*
		Series 1[a]	
Highways	$ 620,000	$1,040,000	$1,740,000
Welfare	374,000	513,000	706,000
Local Government Support	124,000	175,000	248,000
Education, Total	1,360,000	2,500,000	4,590,000
Education, Higher	552,000	1,160,000	2,420,000
Total General Expenditure	$2,900,000	$4,690,000	$7,550,000
		Series 2[b]	
Highways	$ 365,000	$ 483,000	$ 676,000
Welfare	278,000	335,000	406,000
Local Government Support	93,800	116,000	145,000
Education, Total	741,000	1,190,000	1,740,000
Education, Higher	304,000	481,000	764,000
Total General Expenditure	$1,920,000	$2,550,000	$3,450,000
		Series 3[c]	
Highways	$ 440,000	$ 661,000	$1,040,000
Welfare	314,000	416,000	557,000
Local Government Support	115,000	161,000	225,000
Education, Total	1,130,000	2,020,000	3,610,000
Education, Higher	465,000	944,000	1,910,000
Total General Expenditure	$2,420,000	$3,790,000	$5,920,000

[a] Series 1 projected on the basis of population series A from Table A-1 and income per capita series A from Table A-2.
[b] Series 2 projected on the basis of population series I-D from Table A-1 and income per capita series C from Table A-2.
[c] Series 3 projected on the basis of population series II-B from Table A-1 and income per capita series A from Table A-2.

tion series falling between the high and low extremes may be regarded as the most probable and graphs of these projections and past expenditures have been constructed. Actual projections were made only for the benchmark years, 1975, 1980 and 1985. The continuity exhibited in the graphs is simply linear extrapolation between benchmark years.

APPENDIX

TABLE A-1

PROJECTIONS OF THE POPULATION OF LOUISIANA, 1965–1985 (figures in thousands)

Series	*1965*	*1970*	*1975*	*1980*	*1985*
I-B[1]	3561	3819	4163	4570	5021
II-B[2]	3561	3822	4172	4591	5053
I-D[3]	3561	3766	3980	4232	4523
II-D[3]	3561	3769	3988	4249	4549
A	3580	3951	4374	4849	5380

[1] Series I-B assumes that gross migration rates of 1955–60 period will continue throughout the projection period and that national fertility rates will decline very modestly from present levels.

[2] Series II-B assumes there will be a convergence of the 1955–60 gross migration rates during the projection period, and makes the same assumption about national fertility as number one.

[3] Series I-D makes the same assumption about interstate migration as Series I-B; Series II-D, the same as Series II-B; both Series I-D and II-D assume substantial drops in the present level of national fertility.

Source: Series I-B, II-B, I-D, II-D: U. S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 375, "Revised Projections of the Population of States: 1970 to 1985." Series A: Louisiana State University in New Orleans, Division of Business and Economic Research, *The Population of Louisiana: Projections by Race, Sex and Age to 1985.*

TABLE A-2

PROJECTION OF THE INCOME PER CAPITA OF LOUISIANA, 1965–1985

Series	*1965*[1]	*1970*	*1975*	*1980*	*1985*
A[2]	$2079	$2943	$3847	$5028	$6573
B[3]	2079	3056	4387	6298	9042
C[4]	2079	2651	3193	3801	4480

[1] Actual figures.

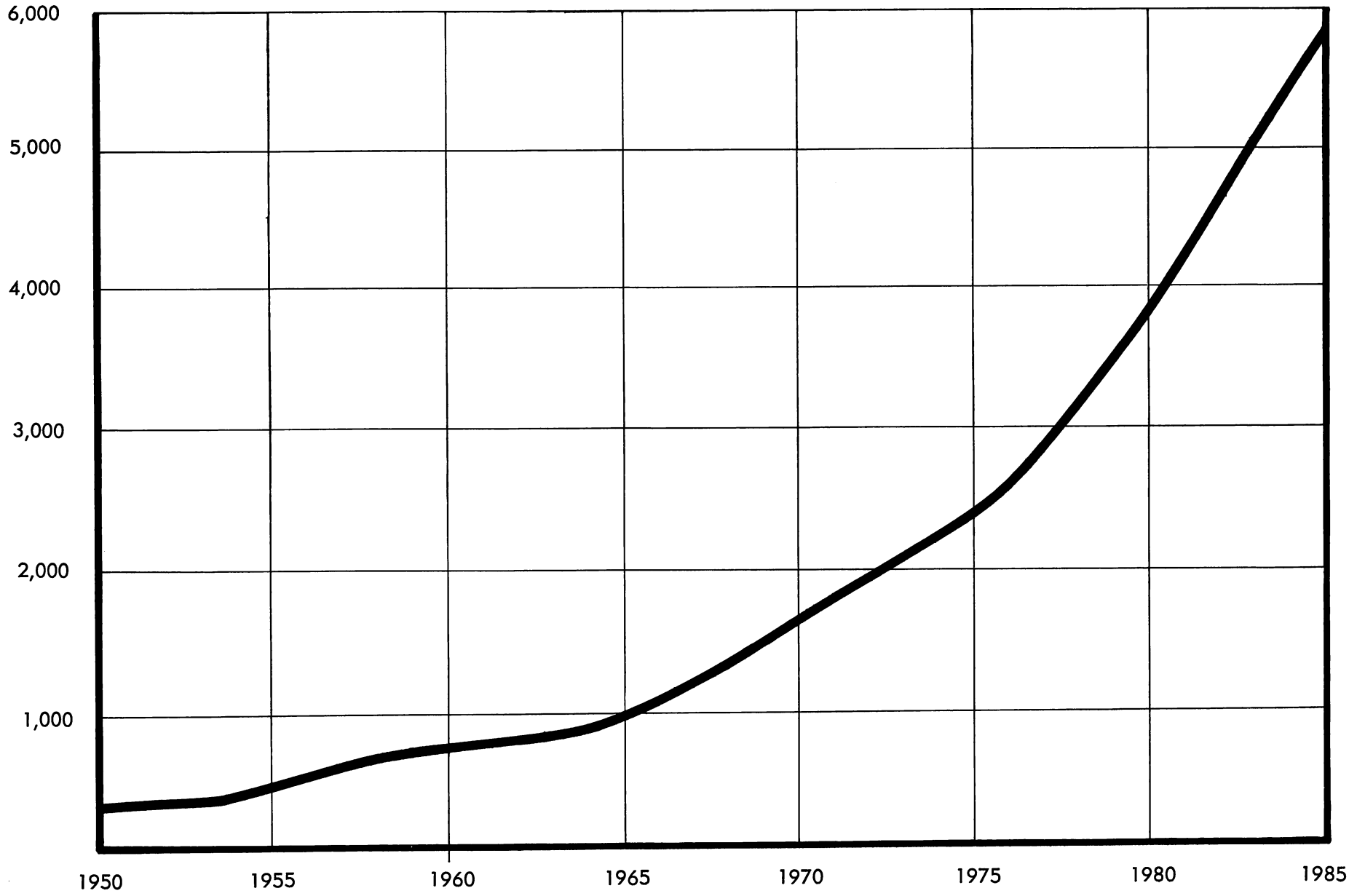
[2] Assumes an average annual rate of growth of 5.5 percent. Rate based on average yearly growth in per capita income, 1950–1969.

[3] Assumes an average annual rate of growth of 7.5 percent. Rate based on average yearly growth in per capita income, 1965–1969.

[4] Assumes a growth in per capita income of 1.28 percent per 1 percent growth in population. Rate based on trend over 1950–1968 period and projected based on population projections of Louisiana State University in New Orleans, Division of Business and Economic Research.

PROJECTIONS OF LOUISIANA STATE GENERAL EXPENDITURES

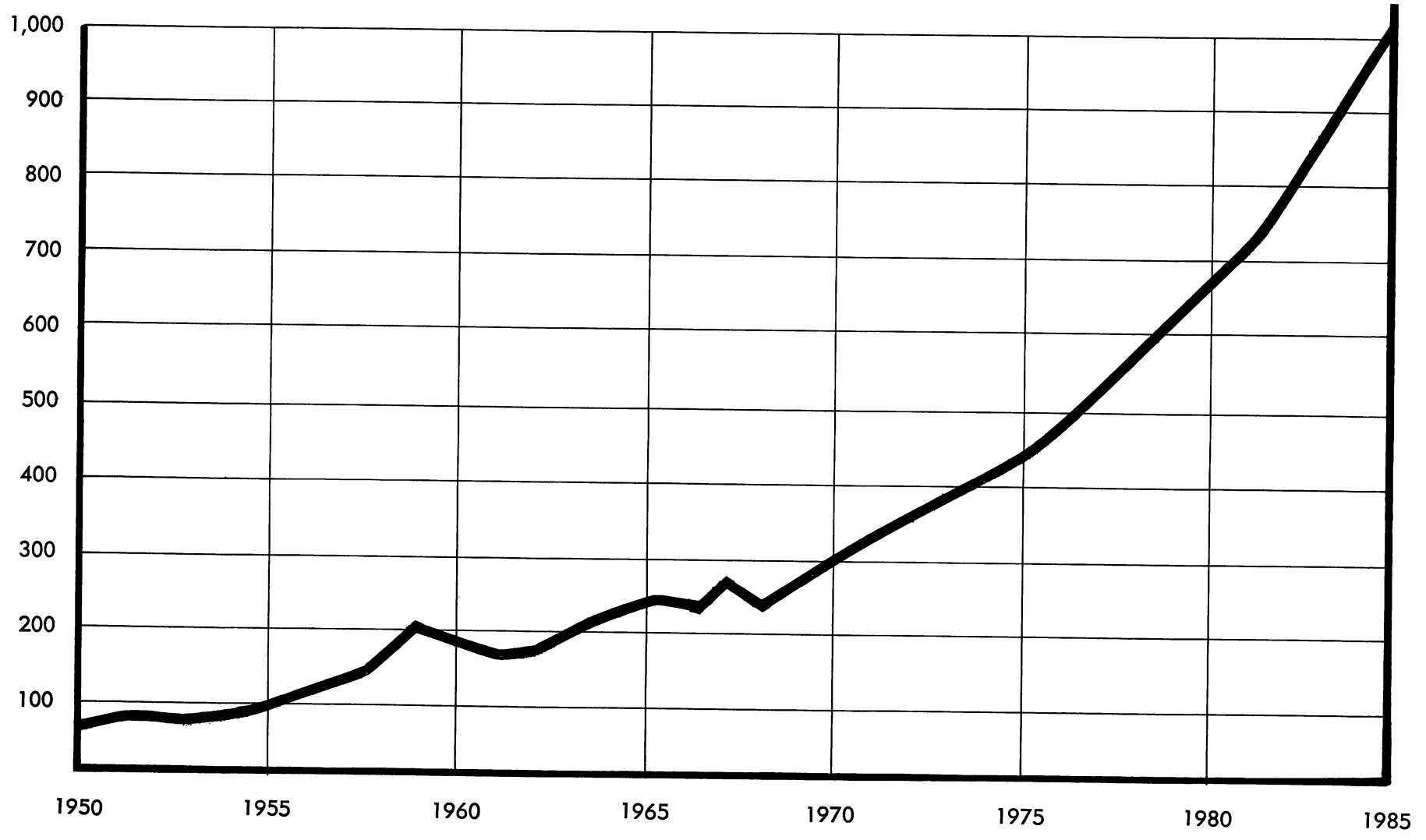
(figures in millions of dollars)



Source: **Compendium of State Government Finances** and Table 2.

PROJECTIONS OF LOUISIANA STATE HIGHWAY EXPENDITURES

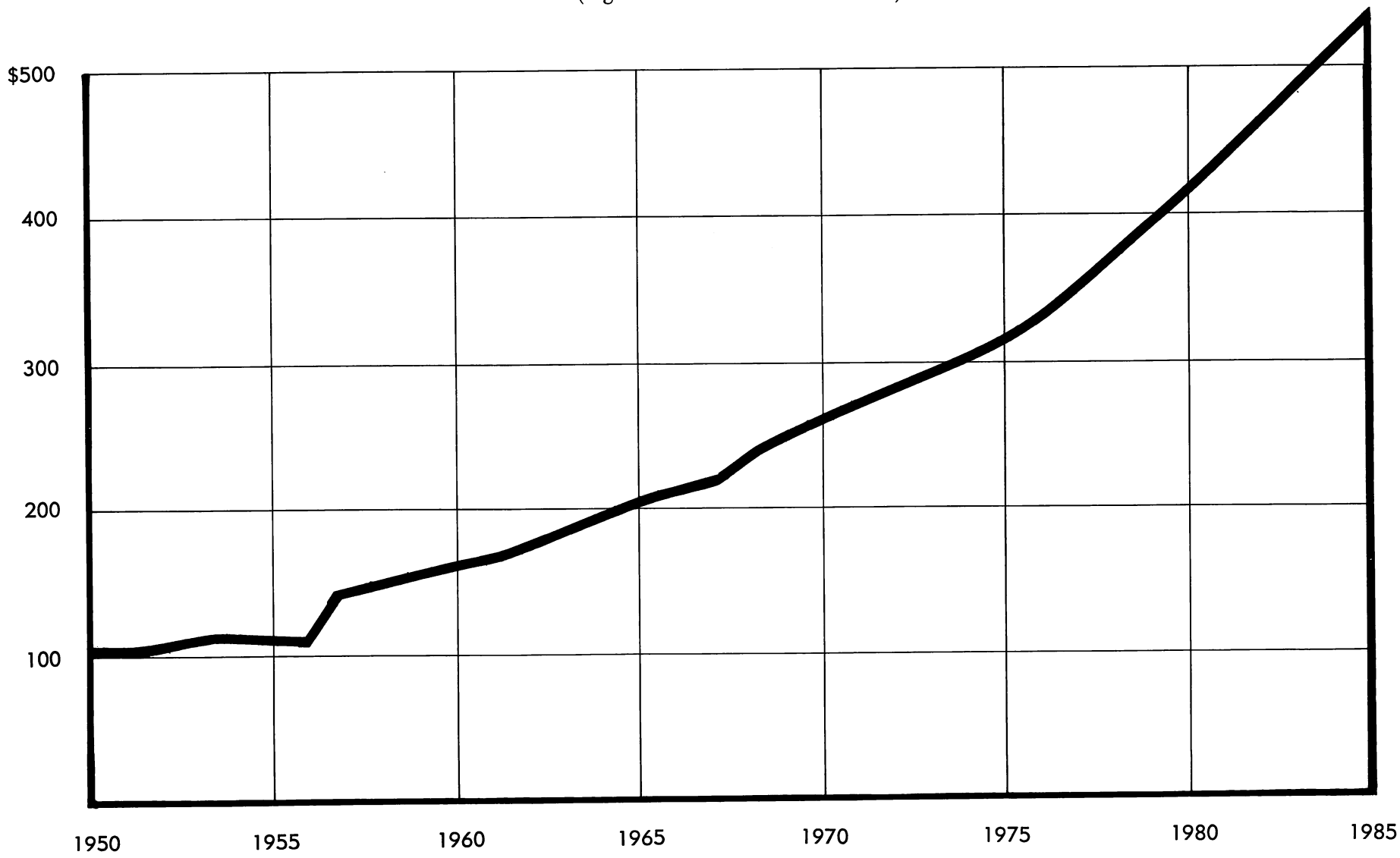
(figures in millions of dollars)



Source: **Compendium of State Government Finances** and Table 2.

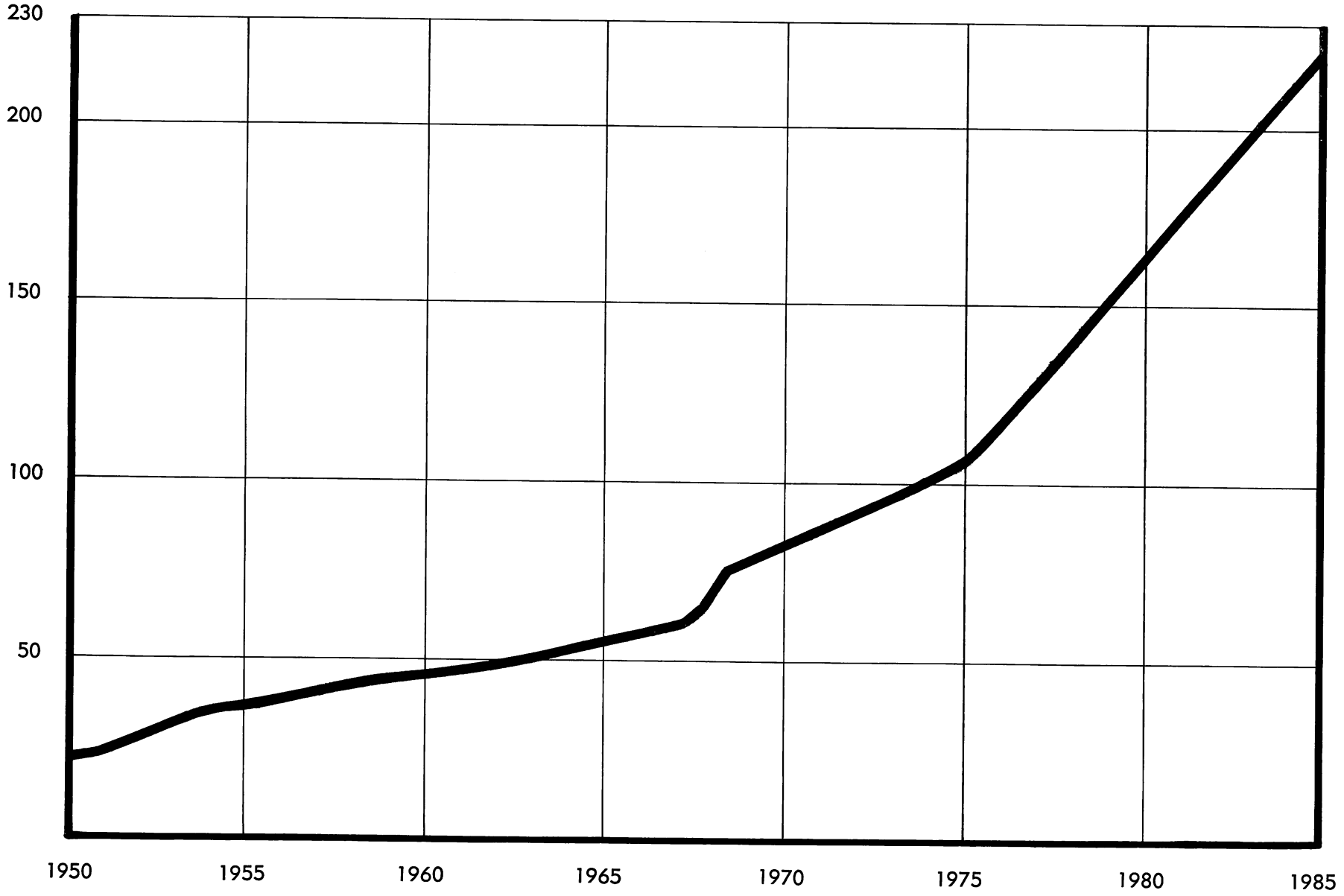
PROJECTIONS OF LOUISIANA STATE WELFARE EXPENDITURES

(figures in millions of dollars)



Source: **Compendium of State Government Finances** and Table 2.

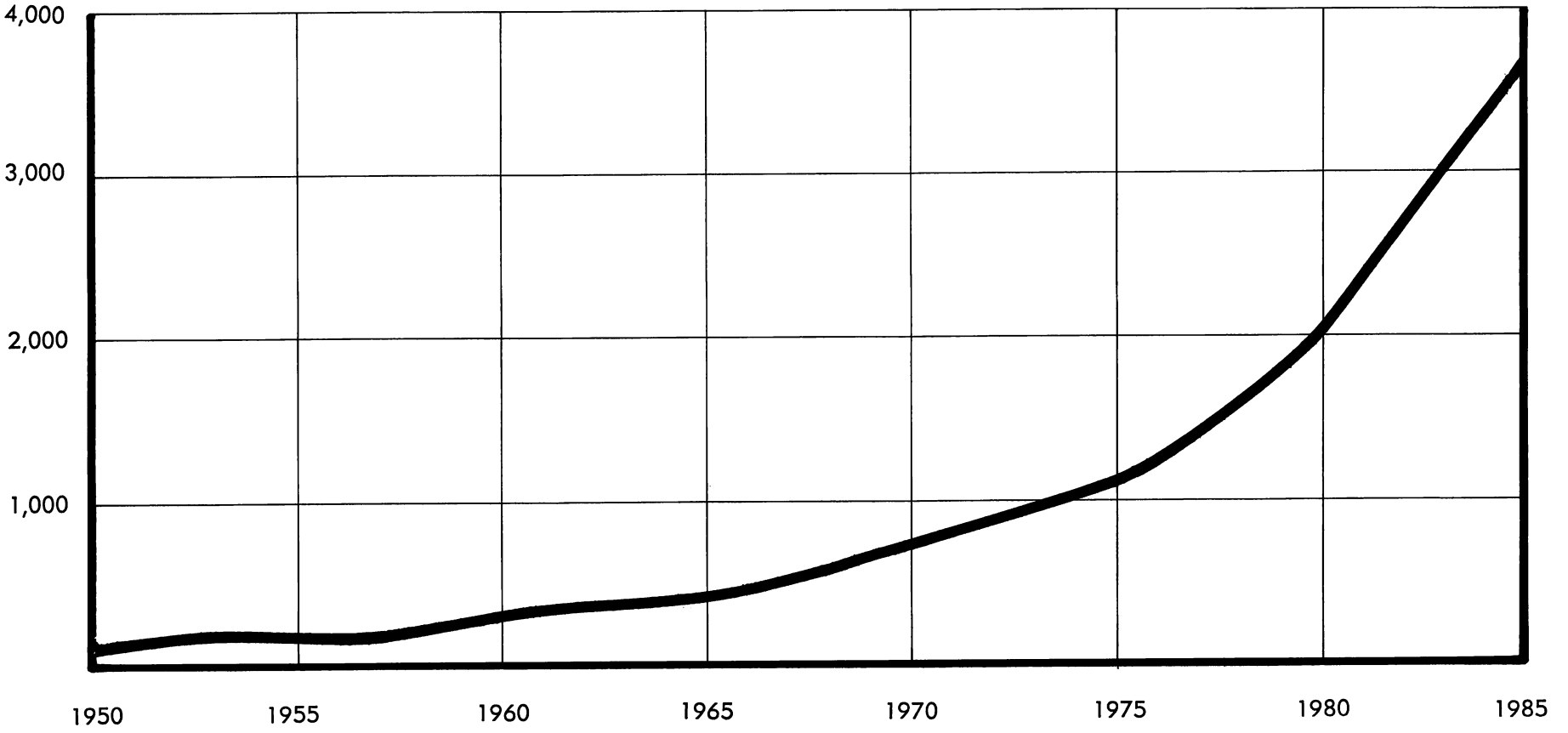
PROJECTIONS OF LOUISIANA STATE EXPENDITURES FOR SUPPORT OF LOCAL GOVERNMENT
(figures in millions of dollars)



Source: **Compendium of State Government Finances** and Table 2.

PROJECTIONS OF LOUISIANA STATE EXPENDITURES FOR EDUCATION

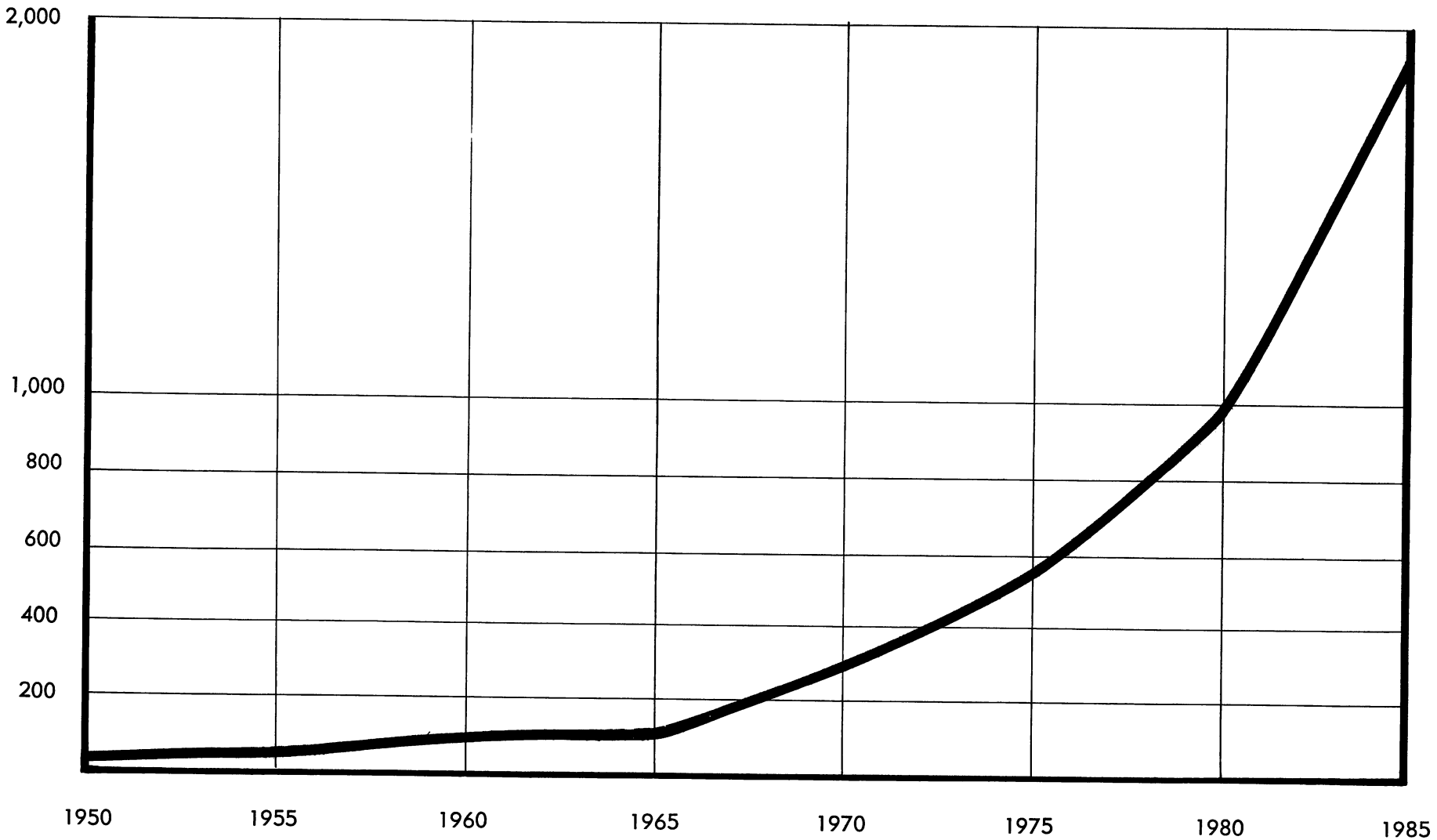
(figures in millions of dollars)



Source: **Compendium of State Government Finances** and Table 2.

PROJECTIONS OF LOUISIANA STATE EXPENDITURES FOR HIGHER EDUCATION

(figures in millions of dollars)



Source: **Compendium of State Government Finances** and Table 2.

TABLE A-3

EXPENDITURES OF THE STATE OF LOUISIANA, BY MAJOR FUNCTION AND YEAR
(figures in thousands of dollars)

Year	Total General Expenditures	Highways	Welfare	Gen'l Local Gov. Support	Education				
					Total	Inter-Governmental	Higher	Local Schools	Other
1950 ...	$ 333,928	$ 56,345	$105,949	$23,669	$ 91,151	$ 67,614			
1951 ...	361,732	65,920	98,840	23,604	98,682	67,160	$ 23,504		
1952 ...	385,792	71,839	102,308	26,992	103,086	70,352	24,789		
1953 ...	422,617	61,123	109,930	33,833	115,158	78,611	28,226		
1954 ...	429,868	76,045	109,007	34,217	120,035	81,342	29,835		
1955 ...	475,453	82,286	107,348	33,674	142,249	95,572	35,172		
1956 ...	550,538	114,287	115,065	35,830	156,887	100,800	42,384		
1957 ...	626,341	125,220	139,956	39,020	194,699	131,519	45,067		
1958 ...	691,322	153,531	145,622	41,075	213,800	140,270	57,867		
1959 ...	757,087	201,732	151,493	45,409	212,536	140,402	57,561		
1960 ...	785,602	184,176	162,554	45,345	242,240	161,741	64,744	$4,580	$11,200
1961 ...	794,711	165,941	165,345	47,089	261,744	171,356	72,349	5,261	12,800
1962 ...	838,279	173,230	177,433	49,099	276,811	182,159	75,022	6,206	13,400
1963 ...	889,626	206,597	187,836	50,156	287,004	182,588	85,786	4,832	13,800
1964 ...	998,222	223,721	195,301	54,327	319,638	199,077	98,319	6,454	15,800
1965 ...	1,036,383	235,323	202,932	55,906	334,656	219,215	93,105	6,697	15,639
1966 ...	1,141,371	226,249	207,870	61,859	426,581	273,325	123,909	6,787	22,560
1967 ...	1,308,298	276,381	214,024	64,306	497,977	292,988	170,737	7,860	26,392
1968 ...	1,388,877	243,616	233,826	74,428	548,732	323,991	196,097	7,233	21,411

Source: U. S. Bureau of the Census, *Compendium of State Government Finances*, designated years, U. S. Government Printing Office, Washington, D. C.

TABLE A-4

EXPENDITURES OF THE STATE OF LOUISIANA FROM DESIGNATED REVENUE SOURCES, BY MAJOR FUNCTION AND YEAR
(figures in thousands of dollars)

Year	Highways				Public Welfare & Pensions	
	Gasoline Tax	Lubricating Oil Tax	Special Fuels Tax	Vehicle Licenses	Beer Tax	Sales Tax
1950	$25,886	$1,395	$ 283	$ 6,306	$11,377	$ 44,466
1951	27,654	1,497	406	6,579	11,127	49,914
1952	30,170	1,537	573	6,723	11,587	53,938
1953	31,915	1,568	625	7,531	6,229	47,410
1954	35,503	1,631	655	8,099	6,002	29,608
1955	37,374	1,689	771	8,664	11,924	40,195
1956	42,139	1,836	979	9,474	6,445	54,652
1957	43,475	1,903	1,136	9,829	6,353	65,668
1958	45,028	1,901	1,360	9,996	6,704	68,322
1959	46,549	2,044	1,698	10,403	7,069	52,247
1960	48,283	2,105	1,996	10,736	7,437	56,859
1961	47,735	2,188	2,192	10,577	6,176	58,203
1962	49,780	2,090	2,567	10,821	13,805	59,145
1963	51,724	2,240	2,933	11,501	14,737	87,140
1964	54,270	2,298	3,285	15,112	15,206	93,211
1965	57,131	2,428	3,935	10,244	16,665	105,491
1966	66,834	2,525	4,595	17,450	17,497	124,846
1967	70,377	2,612	5,142	11,172	18,554	131,163
1968	73,639	2,636	5,593	17,511	19,093	140,534
1969	81,417	2,773	6,585	13,429	19,988	147,601

Source: Annual Reports of the Louisiana Department of Revenue.

TABLE A-4 (Cont'd)

EXPENDITURES OF THE STATE OF LOUISIANA FROM DESIGNATED REVENUE SOURCES, BY MAJOR FUNCTION AND YEAR
(figures in thousands of dollars)

	Education				*Homestead Exemptions**		
Year	*Corp. Franchise Tax*	*Severance Tax*	*Tobacco Tax*	*Sales Tax*	*Alcoholic Bev. Tax*	*Income Tax*	*Public Utilities Tax*
1950	$1,217	$ 46,122	$ 700		$4,379	$18,519	$1,527
1951	1,567	51,113	700		4,802	19,655	1,660
1952	1,567	55,566	700		4,886	22,466	1,787
1953	1,567	58,817	1,000	$7,364	4,846	18,286	1,989
1954	1,567	61,492	1,000	7,244	4,851	16,728	2,225
1955	1,567	59,921	1,000	16,076	4,784	18,829	2,347
1956	1,567	66,364	1,000	18,101	5,475	23,956	2,580
1957	1,567	75,479	1,000	14,591	5,947	28,784	2,727
1958	1,567	72,254	1,000	14,446	6,020	28,684	2,745
1959	1,567	102,932	1,000	31,360	6,021	29,434	2,917
1960	1,567	128,107	1,000	30,900	6,360	30,331	3,177
1961	1,567	138,887	1,000	26,503	6,042	33,468	3,225
1962	1,567	141,624	1,000	25,367	6,543	41,399	3,390
1963	1,567	154,451	1,000		6,563	35,297	3,468
1964	1,567	163,321	1,000		7,036	40,091	3,612
1965	1,567	169,680	1,000		5,061	50,121	3,814
1966	1,567	195,915	1,000		7,615	61,461	4,074
1967	1,567	204,543	1,000		8,440	69,454	4,222
1968	1,567	228,550	1,000		8,860	73,067	4,497
1969	1,567	230,820	1,000		9,221	78,345	4,812

* Surplus refunded to general fund.
Source: Annual Reports of the Louisiana Department of Revenue

Potential Revenue-Expenditure Imbalances: State of Louisiana

by

JAMES A. PAPKE

I.

Two earlier papers have provided long-range projections of Louisiana tax revenues and expenditures. This paper brings the findings of those reports together to explore any potential imbalances that may develop between State revenues and expenditures. The potential imbalances are discussed at the aggregate level. Because of the importance of earmarked revenue, however, it is possible that surpluses and/or deficits could occur in specific areas within the overall budget framework.

To project potential revenue-expenditures imbalances it was first necessary to make certain assumptions regarding the relationship between tax revenues and total revenues because tax revenues are a portion of total State revenues. Based on 1970–71 budget estimates, approximately 55.5 per cent of total State revenues, excluding borrowing, come from taxes. Although there is some year-to-year variation in this relationship, it is just slightly under the average for the last 20 years (56.2 per cent). Total State revenues have been projected assuming that this proportion of tax to total revenues remains constant over the relevant time period. This implicitly assumes that the level of such variables as Federal grants relative to State taxes will remain stable.

Total State tax revenues have been projected by assuming that the ratio of the collections of the major taxes for which projections were made to total tax revenues will remain constant. For 1970–71 the ratio of major to total was 93.6 per cent. Since recent tax changes were in the major tax category, it is entirely possible that this proportion may increase in the future. If so, there will be a slight upward bias to the total revenue projections.

II.

Three series of total revenue and total expenditure projections have been made. Each series is based on the same set of assumptions regarding growth in the State's population and per capita income as in the previous working papers on revenues and expenditure projections. Series 1 may be regarded as the high rate-of-growth series; Series 2 as the low rate-of-growth series; and Series 3 as a series falling between the two extremes. Table 1, presents the projections of total State revenues and expenditures. This table also provides projections of potential imbalances between revenues and expenditures.

III.

As shown in Table 1, based on the alternative revenue-expenditure projection models, the State of Louisiana will likely be confronted with potential deficits in its budgets over the next fifteen years. With the single exception of the early years (i.e., to 1975) under Series 3 assumptions, each projection results in a deficit. The projected deficits range from a low of $43 million (Series 2) in 1975 to a high of $1.1 billion (Series 1) in 1985. In the development of the Master Plan, the consequences of the existence of significant revenue imbalances on the future financing of post-high school education in Louisiana will have to be considered.

TABLE 1

PROJECTIONS OF TOTAL STATE REVENUES AND EXPENDITURES, 1975, 1980, 1985
(figures in millions of dollars)

	1975	*1980*	*1985*
		Series 1	
Revenues	$2,730	$4,390	$6,437
Expenditures	2,900	4,690	7,550
Surplus or Deficit	($170)	($300)	($1,113)
		Series 2	
Revenues	$1,877	$2,444	$3,2[illegible]
Expenditures	1,920	2,550	3,45[illegible]
Surplus or Deficit	($43)	($106)	($17[illegible]
		Series 3	
Revenues	$2,583	$3,656	$5,7[illegible]
Expenditures	2,420	3,790	5,920
Surplus or Deficit	$163	($134)	($124)

Source: See text.

Note: Figures in parentheses represent deficits. A discussion of the population and income assumptions underlying Series 1–3 is given in the two earlier working papers on revenue and expenditure projections.

Statistical Tables on Fiscal Capacity and Effort

by
DR. JAMES A. PAPKE

I.

The statistical tables included in this paper provide a convenient reference for "sizing up" the general Louisiana tax-revenue situation relative to other States and to the U.S. average.

At the outset, however, a *caveat* should be offered in interpreting the statistics, particularly on tax impact and effort. There is no simple way to answer the question whether or not State and local taxes in a particular State are "high" or "low" relative to those in other States. Can one hold, for example, that Louisiana State-local taxes at $280 per capita in 1968 (the latest year for which comparative data are available), were about equal to those in Ohio where they amounted to $277, when in the former case State-local tax receipts represented $11.60 per $100 of personal income while in the latter they absorbed only $8.70 per $100 of personal income? Because of the imprecision of any single measure, a combination of several indices is included here.

Finally, over time, differences among the States in the various impact and effort measures have narrowed markedly. The States in which tax receipts increased most over the last decade were generally those which ranked lowest in 1958. Also, States such as Louisiana in which economic expansion is bringing with it increases in population, income, and, necessarily, population density, are likely to be ones in which tax receipts will be rising more or less commensurately. These same economic and demographic structural changes tend to be positively correlated to expenditure levels. Thus, any attempt to characterize a particular State in terms of a specific tax impact or effort index for a single year is likely to be ephemeral. Trends, in short, are at least as important as current status.

II.

The major highlights of the compiled statistics follow:

1. In 1969, State taxes in Louisiana amounted to 7.9 per cent of personal income (Table 1) or, relative to population, to $207 per capita (Table 3). The equivalent data for 1968 were 8.2 per cent (Table 2) and $198, (Table 4) respectively.

2. On the basis of the relationship between State taxes and personal income, Louisiana ranked 7th from the top in the nation (28 per cent above the national average) in 1969 and 3rd in 1968 (41 per cent above the national average). Louisiana's rank on the per capita measure was twentieth in 1969 and fifteenth in 1968.

3. Tables 5 and 6 contain a composite index of relative State tax impact or effort. It is computed by dividing State taxes as a percentage of total personal income by per capita personal income. Thus, in contrast to the two previous measures, the composite index reflects the amount of personal income absorbed in State taxes *and* the level of per capita personal income. Louisiana ranked 7th in the nation in 1969 on the basis of this comprehensive index of tax effort; it ranked 3rd in 1968.

4. State *and* local taxes in relation to personal income and population are shown in Tables 7 and 8. Table 9 gives the composite index for total taxes. Because of the wide differences among the States in the distribution between levels of government of fiscal responsibility, data on combined State-local taxes provide a clearer picture of total tax impact and effort. In 1968 (the latest year for which total tax data are available), State *and* local taxes absorbed 11.6 per cent of personal income in Louisiana (16th in the nation) and amounted to $280 per capita (35th in the nation). The composite index placed the State of Louisiana fifth in the nation.

5. Because interstate tax comparisons do not reflect structural differences among the States in the components of their revenue systems (e.g., some States extensively employ user charges and other nontax sources as alternatives to taxes), Tables 10, 11, and 12 relate to State and local taxes *and* charges. As a percentage of State personal income, Louisiana State-local taxes *and* nontax receipts amounted to 15.8 per cent (ranked 11th in the nation), some 17 per cent above the national average. At $380 per capita, the State ranked 34th. In terms of the composite index (Table 12), Louisiana ranked fourth in the nation.

6. Table 13 contrasts State-local taxes as related to personal income of Louisiana, selected States, and the nation with specified characteristics. For example, of the six fastest growing States in the nation as measured by population growth between 1960–69, four recorded State-local taxes as a percentage of personal income, higher than Louisiana. When the characteristic is percentage growth in personal income, only Nevada of the six most rapidly growing States exceeded Louisiana in the amount of personal income absorbed in State-local taxes. Finally, when States are grouped according to growth measured by increases in per capita personal income (Section III of Table 13), Louisiana's percentage of State-local taxes to personal income exceeds the percentages of the six fastest growing States in the nation.

III.

As indicated at the outset of this memorandum, interstate comparisons of per capita tax payments or tax receipts expressed as a percentage of personal income should not be interpreted as anything more than indications of general magnitudes. To the extent that a relatively "high" level of public services accompanies a relatively "high" level of taxes, the notion that taxes are "too high" has little meaning. Further, and perhaps equally important, interstate tax comparisons of the type presented here indicate only arithmetic means arrived at by dividing taxes by population or personal income. They say nothing about the taxes borne by a single individual or group of individuals. The mean, consequently, may or may not be a good indication of the "typical" or "normal" amounts paid. Much depends upon the distributional pattern of tax payments by income groups, which, in turn, depends upon the nature of the tax structure.

Thus, the "structure" of taxes may be as important as the "level" of taxes. On balance, it is reasonable to expect that a relatively high level of tax payments, given a structure that is equitable and efficiently administered, may be preferable to low taxes which are contrary to widely-held notions of equity and which discriminate in their impact on businesses and individuals.

TABLE 1

STATE TAXES EXPRESSED AS A PERCENTAGE OF PERSONAL INCOME, 1969
(ranking from high to low)

	Per Cent	*Rank*	*State % related to U.S. avg.*
U.S. Average	6.2		100
Median State	6.5		106
Alabama	6.9	21	112
Alaska	6.3	31	102
Arizona	8.2	4	132
Arkansas	6.9	22	112
California	6.9	23	111
Colorado	6.0	36	97
Connecticut	4.3	47	69
Delaware	7.8	9	126
Florida	6.5	29	105
Georgia	6.5	26	106
Hawaii	10.7	1	173
Idaho	8.0	6	130
Illinois	4.4	46	71
Indiana	5.1	41	83
Iowa	6.5	28	105
Kansas	5.1	42	82
Kentucky	7.7	12	125
LOUISIANA	7.9	7	128
Maine	5.7	37	93
Maryland	6.5	25	106
Massachusetts	6.5	30	105
Michigan	7.0	20	113
Minnesota	7.5	14	122
Mississippi	8.2	3	133
Missouri	4.7	44	76
Montana	5.5	39	89
Nebraska	4.7	45	76
Nevada	7.1	18	115
New Hampshire	3.6	50	59
New Jersey	4.2	48	68
New Mexico	8.9	2	144
New York	7.1	17	115
North Carolina	7.4	15	120
North Dakota	6.2	33	100
Ohio	4.2	49	67
Oklahoma	6.5	27	106
Oregon	6.1	35	99
Pennsylvania	5.7	38	92
Rhode Island	6.2	33	100
South Carolina	7.3	16	119
South Dakota	4.9	43	79
Tennessee	6.3	32	102
Texas	5.1	40	83
Utah	7.1	19	114
Vermont	7.7	11	125
Virginia	6.6	24	106
Washington	8.1	5	132
West Virginia	7.8	8	126
Wisconsin	7.7	13	124
Wyoming	7.8	9	126

Source: Computed from U.S. Department of Commerce, Bureau of Census publications.

TABLE 2

State Taxes Expressed as a Percentage of Personal Income, 1968 (ranking from high to low)

	Per Cent	Rank	State % related to U.S. avg.
U.S. Average	5.8		100
Median State	6.4		110
Alabama	6.9	17	118
Alaska	5.9	30	102
Arizona	7.1	15	122
Arkansas	7.0	16	120
California	6.6	20	114
Colorado	5.8	31	100
Connecticut	4.3	46	74
Delaware	7.6	5	131
Florida	5.7	33	98
Georgia	6.4	26	110
Hawaii	10.0	1	172
Idaho	7.6	6	131
Illinois	4.2	47	72
Indiana	5.1	40	88
Iowa	5.9	29	101
Kansas	5.1	41	88
Kentucky	6.6	19	114
LOUISIANA	8.2	3	141
Maine	5.6	35	97
Maryland	6.0	28	103
Massachusetts	5.4	36	93
Michigan	6.5	21	112
Minnesota	7.3	11	126
Mississippi	7.2	13	124
Missouri	4.8	43	83
Montana	5.4	37	93
Nebraska	4.4	45	76
Nevada	6.5	22	112
New Hampshire	3.6	50	62
New Jersey	3.7	49	64
New Mexico	8.7	2	150
New York	6.5	24	112
North Carolina	7.3	12	126
North Dakota	6.4	25	110
Ohio	4.1	48	71
Oklahoma	6.5	23	112
Oregon	5.3	39	91
Pennsylvania	5.4	38	93
Rhode Island	5.6	34	97
South Carolina	7.2	14	124
South Dakota	5.0	42	86
Tennessee	6.2	27	107
Texas	4.8	44	83
Utah	6.9	18	119
Vermont	7.5	9	129
Virginia	5.8	32	100
Washington	8.1	4	140
West Virginia	7.6	7	131
Wisconsin	7.5	8	129
Wyoming	7.3	10	126

Source: Computed from U.S. Department of Commerce, Bureau of Census publications.

TABLE 3

Per Capita State Taxes, 1969 (ranking from high to low)

	Amount	Rank
U.S. Average	$209	
Median State	195	
Alabama	163	40
Alaska	255	9
Arizona	243	13
Arkansas	159	44
California	270	6
Colorado	194	26
Connecticut	180	31
Delaware	291	3
Florida	200	23
Georgia	178	32
Hawaii	364	1
Idaho	210	19
Illinois	174	33
Indiana	172	35
Iowa	212	18
Kansas	166	38
Kentucky	203	21
LOUISIANA	207	20
Maine	162	41
Maryland	244	11
Massachusetts	225	16
Michigan	257	8
Minnesota	247	10
Mississippi	170	37
Missouri	153	45
Montana	161	43
Nebraska	150	47
Nevada	275	5
New Hampshire	116	50
New Jersey	165	38
New Mexico	239	14
New York	291	2
North Carolina	194	26
North Dakota	171	36
Ohio	143	48
Oklahoma	184	30
Oregon	200	22
Pennsylvania	192	28
Rhode Island	219	17
South Carolina	173	34
South Dakota	139	49
Tennessee	162	41
Texas	153	46
Utah	195	25
Vermont	230	15
Virginia	198	24
Washington	288	4
West Virginia	191	29
Wisconsin	258	7
Wyoming	243	12

Source: Computed from U.S. Department of Commerce, Bureau of Census publications.

TABLE 4

PER CAPITA STATE TAXES, 1968
(ranking from high to low)

	Amount	*Rank*
U.S. Average	$183	
Median State	170	
Alabama	149	41
Alaska	218	9
Arizona	189	18
Arkansas	144	42
California	243	5
Colorado	176	23
Connecticut	169	27
Delaware	271	2
Florida	158	34
Georgia	161	31
Hawaii	312	1
Idaho	194	16
Illinois	158	33
Indiana	162	28
Iowa	183	20
Kansas	155	36
Kentucky	158	35
LOUISIANA	198	15
Maine	149	40
Maryland	200	14
Massachusetts	190	17
Michigan	216	11
Minnesota	224	8
Mississippi	138	44
Missouri	142	43
Montana	151	39
Nebraska	135	46
Nevada	228	7
New Hampshire	107	50
New Jersey	135	45
New Mexico	214	12
New York	246	4
North Carolina	176	24
North Dakota	162	30
Ohio	129	49
Oklahoma	170	26
Oregon	162	29
Pennsylvania	171	25
Rhode Island	183	19
South Carolina	154	37
South Dakota	134	38
Tennessee	145	48
Texas	131	47
Utah	177	21
Vermont	209	13
Virginia	159	32
Washington	268	3
West Virginia	177	22
Wisconsin	235	6
Wyoming	218	10

Source: Computed from U.S. Department of Commerce, Bureau of Census publications.

TABLE 5

INDEX OF IMPACT OF STATE TAXES, 1969
(ranking from high to low)

	Index	*Rank*
U.S. Average	1.68	
Median State	2.03	
Alabama	2.96	9
Alaska	1.52	42
Arizona	2.70	12
Arkansas	2.97	8
California	1.72	35
Colorado	1.78	32
Connecticut	1.08	49
Delaware	2.04	24
Florida	2.03	25
Georgia	2.34	17
Hawaii	3.04	5
Idaho	3.01	6
Illinois	1.11	48
Indiana	1.50	43
Iowa	1.99	27
Kansas	1.54	41
Kentucky	2.91	10
LOUISIANA	3.00	7
Maine	2.03	25
Maryland	1.75	33
Massachusetts	1.68	39
Michigan	1.90	28
Minnesota	2.25	21
Mississippi	3.95	1
Missouri	1.45	44
Montana	1.86	29
Nebraska	1.44	45
Nevada	1.79	31
New Hampshire	1.12	47
New Jersey	1.06	50
New Mexico	3.36	2
New York	1.71	36
North Carolina	2.78	11
North Dakota	2.26	19
Ohio	1.18	46
Oklahoma	2.26	19
Oregon	1.84	30
Pennsylvania	1.65	40
Rhode Island	1.74	34
South Carolina	3.08	4
South Dakota	1.69	38
Tennessee	2.44	15
Texas	1.70	37
Utah	2.53	13
Vermont	2.52	14
Virginia	2.13	23
Washington	2.20	22
West Virginia	3.15	3
Wisconsin	2.28	18
Wyoming	2.43	16

Source: Computed from U.S. Department of Commerce, Bureau of Census publications.

TABLE 6

INDEX OF IMPACT OF STATE TAXES, 1968
(ranking from high to low)

	Index	*Rank*
U.S. Average	1.84	
Median State	2.00	
Alabama	3.19	7
Alaska	1.58	43
Arizona	2.61	14
Arkansas	2.22	22
California	1.80	33
Colorado	1.85	31
Connecticut	1.08	49
Delaware	2.09	24
Florida	2.00	26
Georgia	2.52	17
Hawaii	3.00	8
Idaho	2.95	10
Illinois	1.12	48
Indiana	1.60	41
Iowa	1.90	30
Kansas	1.67	40
Kentucky	2.72	11
LOUISIANA	3.34	3
Maine	2.11	23
Maryland	1.75	34
Massachusetts	1.52	44
Michigan	1.91	29
Minnesota	2.34	21
Mississippi	3.80	1
Missouri	1.60	41
Montana	1.95	27
Nebraska	1.43	45
Nevada	1.81	32
New Hampshire	1.18	47
New Jersey	1.01	50
New Mexico	3.51	2
New York	1.73	36
North Carolina	2.99	9
North Dakota	2.57	16
Ohio	1.28	46
Oklahoma	2.46	18
Oregon	1.73	36
Pennsylvania	1.69	38
Rhode Island	1.68	39
South Carolina	3.25	6
South Dakota	1.93	28
Tennessee	2.59	15
Texas	1.75	34
Utah	2.65	12
Vermont	2.65	12
Virginia	2.07	25
Washington	2.30	22
West Virginia	3.26	5
Wisconsin	2.38	20
Wyoming	2.43	19

Source: Computed from U.S. Department of Commerce, Bureau of Census publications.

TABLE 7

STATE AND LOCAL TAXES EXPRESSED AS A PERCENTAGE OF STATE PERSONAL INCOME, 1968
(ranking from high to low)

	Per Cent	*Rank*	*State % related to U.S. avg.*
U.S. Average	10.8		100
Alabama	9.5	40	88
Alaska	9.1	45	84
Arizona	12.5	7	116
Arkansas	9.7	35	90
California	13.4	3	124
Colorado	11.7	15	108
Connecticut	9.1	47	84
Delaware	9.8	34	91
District of Columbia	9.1	46	84
Florida	10.4	29	96
Georgia	9.8	33	91
Hawaii	13.6	1	126
Idaho	12.4	9	115
Illinois	8.9	50	82
Indiana	9.7	38	90
Iowa	11.4	19	106
Kansas	10.7	25	99
Kentucky	9.5	41	88
LOUISIANA	11.6	16	107
Maine	10.5	27	97
Maryland	10.7	24	99
Massachusetts	11.2	20	104
Michigan	11.0	21	102
Minnesota	12.8	5	119
Mississippi	10.8	22	100
Missouri	9.1	44	84
Montana	12.1	13	112
Nebraska	10.5	28	97
Nevada	12.2	12	113
New Hampshire	9.1	48	84
New Jersey	9.6	39	89
New Mexico	11.5	17	106
New York	13.2	4	122
North Carolina	9.9	32	92
North Dakota	12.4	8	115
Ohio	8.7	51	81
Oklahoma	10.2	30	94
Oregon	10.5	26	97
Pennsylvania	9.4	42	87
Rhode Island	10.1	31	94
South Carolina	9.4	43	87
South Dakota	12.3	10	114
Tennessee	9.7	37	90
Texas	8.9	49	82
Utah	11.7	14	108
Vermont	12.5	6	116
Virginia	9.7	36	90
Washington	11.5	18	106
West Virginia	10.7	23	99
Wisconsin	12.3	11	114
Wyoming	13.5	2	125

Source: Computed from U.S. Department of Commerce, Bureau of Census publications.

TABLE 8

Per Capita State and Local Taxes, 1968
(ranking from high to low)

	Amount	*Rank*
U.S. Average	$338	
Median State	322	
Alabama	205	48
Alaska	335	21
Arizona	332	22
Arkansas	200	51
California	488	2
Colorado	352	16
Connecticut	357	14
Delaware	348	19
District of Columbia	376	11
Florida	289	34
Georgia	245	43
Hawaii	421	4
Idaho	315	30
Illinois	330	24
Indiana	305	31
Iowa	356	15
Kansas	322	27
Kentucky	227	46
LOUISIANA	280	35
Maine	276	37
Maryland	358	13
Massachusetts	396	6
Michigan	367	12
Minnesota	392	7
Mississippi	204	49
Missouri	272	38
Montana	340	20
Nebraska	324	26
Nevada	429	3
New Hampshire	271	39
New Jersey	349	18
New Mexico	382	9
New York	503	1
North Carolina	237	45
North Dakota	316	29
Ohio	277	36
Oklahoma	266	41
Oregon	319	28
Pennsylvania	298	33
Rhode Island	331	23
South Carolina	201	50
South Dakota	327	25
Tennessee	227	47
Texas	243	44
Utah	301	32
Vermont	351	17
Virginia	269	40
Washington	381	10
West Virginia	249	42
Wisconsin	386	8
Wyoming	405	5

Source: Computed from U.S. Department of Commerce, Bureau of Census publications.

TABLE 9

Index of Impact of State and Local Taxes, 1968
(ranking from high to low)

	Index	*Rank*
U.S. Average	3.42	
Median State	3.67	
Alabama	4.39	13
Alaska	2.43	48
Arizona	4.60	8
Arkansas	4.62	7
California	3.66	27
Colorado	3.73	25
Connecticut	2.29	50
Delaware	2.69	46
District of Columbia	2.21	51
Florida	3.65	28
Georgia	3.86	23
Hawaii	4.08	17
Idaho	4.82	3
Illinois	2.37	49
Indiana	3.04	40
Iowa	3.67	26
Kansas	3.50	30
Kentucky	3.92	21
LOUISIANA	4.72	5
Maine	3.95	20
Maryland	3.13	39
Massachusetts	3.16	38
Michigan	3.27	36
Minnesota	4.11	16
Mississippi	5.70	1
Missouri	3.04	40
Montana	4.38	14
Nebraska	3.41	33
Nevada	3.40	34
New Hampshire	2.98	43
New Jersey	2.62	47
New Mexico	4.64	6
New York	3.51	29
North Carolina	4.06	18
North Dakota	4.99	2
Ohio	2.71	45
Oklahoma	3.86	23
Oregon	3.43	32
Pennsylvania	2.95	44
Rhode Island	3.03	42
South Carolina	4.25	15
South Dakota	4.75	4
Tennessee	4.05	19
Texas	3.24	36
Utah	4.49	11
Vermont	4.42	12
Virginia	3.46	31
Washington	3.27	35
West Virginia	4.58	9
Wisconsin	3.90	22
Wyoming	4.50	10

Source: Computed from U.S. Department of Commerce, Bureau of Census publications.

TABLE 10

State and Local Taxes and Charges Expressed as a Percentage of State Personal Income, 1968

	Per Cent	Rank	State % related to U.S. avg.
U.S. Average	13.5		100
Alabama	13.1	31	97
Alaska	17.0	4	126
Arizona	15.9	9	118
Arkansas	12.3	39	91
California	16.1	8	119
Colorado	15.0	17	111
Connecticut	10.7	49	79
Delaware	13.6	27	101
District of Columbia	10.5	51	78
Florida	13.8	25	102
Georgia	13.3	30	99
Hawaii	16.6	5	123
Idaho	15.7	13	116
Illinois	10.5	50	78
Indiana	12.2	40	90
Iowa	14.4	20	107
Kansas	13.4	29	99
Kentucky	12.6	34	93
LOUISIANA	15.8	11	117
Maine	12.4	36	92
Maryland	13.0	32	96
Massachusetts	12.9	33	96
Michigan	13.8	24	102
Minnesota	16.3	6	121
Mississippi	14.4	21	107
Missouri	11.3	46	84
Montana	15.6	14	116
Nebraska	13.5	28	100
Nevada	16.2	7	120
New Hampshire	11.2	48	83
New Jersey	11.4	44	84
New Mexico	17.1	3	127
New York	15.8	10	117
North Carolina	12.5	35	93
North Dakota	19.1	1	141
Ohio	11.2	47	83
Oklahoma	14.2	22	105
Oregon	14.1	23	104
Pennsylvania	11.3	45	84
Rhode Island	11.8	43	87
South Carolina	12.3	38	91
South Dakota	15.8	12	117
Tennessee	12.4	37	92
Texas	11.9	42	88
Utah	15.4	15	114
Vermont	15.1	16	112
Virginia	12.1	41	90
Washington	14.9	18	110
West Virginia	13.6	26	101
Wisconsin	14.9	19	110
Wyoming	18.6	2	138

Source: Computed from U.S. Department of Commerce, Bureau of Census publications.

TABLE 11

Per Capita State and Local Taxes and Charges, 1968

	Amount	Rank
U.S. Average	$421	
Median State	406	
Alabama	281	47
Alaska	623	1
Arizona	424	20
Arkansas	253	51
California	587	3
Colorado	453	14
Connecticut	421	22
Delaware	483	10
District of Columbia	434	18
Florida	384	33
Georgia	332	41
Hawaii	514	6
Idaho	399	28
Illinois	392	30
Indiana	387	32
Iowa	449	15
Kansas	406	27
Kentucky	302	45
LOUISIANA	380	34
Maine	326	42
Maryland	436	16
Massachusetts	456	13
Michigan	461	12
Minnesota	498	7
Mississippi	273	48
Missouri	336	38
Montana	436	17
Nebraska	416	25
Nevada	570	4
New Hampshire	333	40
New Jersey	414	26
New Mexico	417	24
New York	601	2
North Carolina	299	46
North Dakota	485	9
Ohio	356	37
Oklahoma	373	35
Oregon	429	19
Pennsylvania	358	36
Rhode Island	388	31
South Carolina	263	50
South Dakota	419	23
Tennessee	269	49
Texas	323	43
Utah	397	29
Vermont	421	21
Virginia	334	39
Washington	496	8
West Virginia	317	44
Wisconsin	467	11
Wyoming	558	5

Source: Computed from U.S. Department of Commerce, Bureau of Census publications.

TABLE 12

INDEX OF IMPACT OF STATE AND LOCAL TAXES AND CHARGES, 1968 (ranking from high to low)

	Index	*Rank*
U.S. Average	4.28	
Median State	4.67	
Alabama	6.06	8
Alaska	4.55	29
Arizona	5.85	11
Arkansas	5.86	10
California	4.39	31
Colorado	4.78	24
Connecticut	2.70	50
Delaware	3.71	42
District of Columbia	2.55	51
Florida	4.84	23
Georgia	5.23	17
Hawaii	4.98	22
Idaho	6.10	6
Illinois	2.80	49
Indiana	3.82	39
Iowa	4.63	27
Kansas	4.38	32
Kentucky	5.19	19
LOUISIANA	6.43	4
Maine	4.67	26
Maryland	3.80	40
Massachusetts	3.64	44
Michigan	4.06	38
Minnesota	5.23	17
Mississippi	7.59	2
Missouri	3.78	41
Montana	5.64	13
Nebraska	4.38	32
Nevada	4.52	30
New Hampshire	3.67	43
New Jersey	3.11	48
New Mexico	6.90	3
New York	4.20	37
North Carolina	5.13	21
North Dakota	7.68	1
Ohio	3.49	47
Oklahoma	5.37	15
Oregon	4.60	28
Pennsylvania	3.55	45
Rhode Island	3.55	45
South Carolina	5.56	14
South Dakota	6.10	6
Tennessee	5.18	20
Texas	4.34	34
Utah	5.91	9
Vermont	5.35	16
Virginia	4.32	35
Washington	4.23	36
West Virginia	5.83	12
Wisconsin	4.72	25
Wyoming	6.20	5

Source: Computed from U.S. Department of Commerce, Bureau of Census publications.

TABLE 13

STATE AND LOCAL TAXES EXPRESSED AS A PERCENTAGE OF PERSONAL INCOME—SELECTED STATES WITH SPECIFIED CHARACTERISTICS

I. MOST RAPIDLY GROWING STATE AS MEASURED BY POPULATION INCREASE, 1960–1969:

	Population Increase (Per Cent)	*1968 State and Local Taxes Per Cent of Personal Income*
LOUISIANA	14.5	11.6
Nevada	60.2	12.2
Arizona	30.0	12.5
Florida	28.3	10.4
Hawaii	25.4	13.6
Alaska	24.9	9.1
California	23.7	13.4
United States	12.6	10.8

II. MOST RAPIDLY GROWING STATES AS MEASURED BY PERSONAL INCOME INCREASE, 1960–1968:

	Personal Income Increase (Per Cent)	*1968 State and Local Taxes Per Cent of Personal Income*
LOUISIANA	84.1	11.6
Nevada	113.8	12.2
Florida	101.4	10.4
Georgia	95.8	9.8
Maryland	92.7	10.7
South Carolina	92.3	9.4
Virginia	92.1	9.7
United States	71.5	10.8

III. MOST RAPIDLY GROWING STATES AS MEASURED BY PER CAPITA PERSONAL INCOME INCREASE, 1960–1968:

	Per Capita Personal Income Increase (Per Cent)	*1968 State and Local Taxes Per Cent of Personal Income*
LOUISIANA	59.9	11.6
South Carolina	72.8	9.4
Mississippi	72.7	10.8
North Carolina	70.7	9.9
Georgia	69.7	9.8
Arkansas	69.2	9.7
Kentucky	68.0	9.5
United States	54.4	10.8

Source: U.S. Department of Commerce.