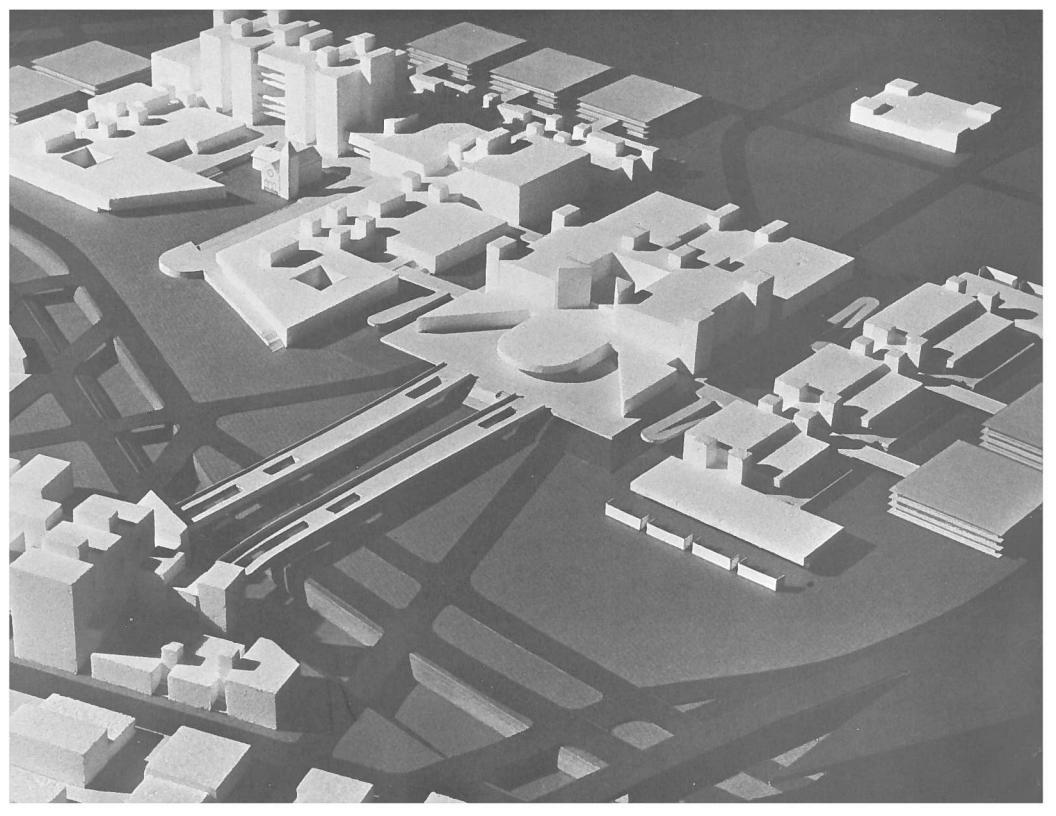
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Hier er Education Center Auraria Area Denver Colorado A Concept Report



Foreword

A proposition of disarming simplicity is now before the citizens of Colorado, and particularly of the five-county Denver Metropolitan Area.

The proposition is this: Shall a number of public institutions of higher education make their permanent homes on a common site in the near-downtown area?

The proposition is simple, because the answer must be simply "Yes" or "No."

It is disarming, because the answer will set the parameters for these important issues:

- Whether Denver and Colorado will sponsor the potentially most important innovation in public higher education in the United States in the last third of the 20th century.
- Whether the educational needs of many thousands will be served in a traditional manner or in a uniquely responsive manner.
- Whether the ideal of mobility vertical mobility and horizontal mobility will be particularly well served.

The proposition has been developed by a Working Committee of the Metropolitan Denver Council on Higher Education, a consultative body representing public and private higher education institutions located in Denver, appointed by the Colorado Commission on Higher Education. Members of the Working Committee are Dr. Frank C. Abbott, executive director of the Commission; Dr. Paul A. Elsner, director, Community College Division, State Board for Community Colleges and

Occupational Education; Dr. Leland B. Luchsinger of the Community College of Denver; Dr. Robert D. Gilberts and James Galloway of the Denver Public Schools; Dr. Kenneth Phillips and Dr. Robert D. O'Dell of Metropolitan State College; Roland Rautenstraus and James M. Bowers of the University of Colorado; James D. Braman Jr., director of planning for the City and County of Denver; and J. K. Smith, executive director of the Regional Council of Governments.

The Working Committee has had the professional assistance of Lamar Kelsey & Associates of Colorado Springs, architects and planners.

Many complex problems remain to be worked out before firm and binding decisions can be taken on the concept. Nevertheless, because a great deal of public interest has been aroused by the proposition, it is timely to lay before interested citizens the outlines of the plan as the Working Committee has considered it, with some of the benefits that may flow from acceptance as well as some of the dangers to be avoided.

This booklet presents those outlines and those considerations. It does not intend to be exhaustive and all-inclusive, but touches the main elements in the questions weighed by the Working Committee within the disciplined structure provided by Lamar Kelsey & Associates. It touches them candidly, inviting the deliberation and the reaction of all concerned Coloradans.

The booklet is written by Jack Gaskie, for two decades an editorial specialist in Colorado educational matters, in close collaboration with Lamar Kelsey and Dr. Abbott.

Concept and

Reality

A Higher Education Center for the Denver Metropolitan Area is, as of this moment, only a concept, a dream.

But it is grounded on reality. That firm reality is both of the present and of the future.

In the present, certain public institutions of post-high school education exist in the Denver area. They have been created according to law; in purpose and program they have received definition and direction; they are growing, rapidly and inexorably.

In the near future, each of them will attain very substantial size. Each will require very substantial resources from the State; each will make very substantial contributions to thousands of individuals, and through them to the State.

These are the realities, present and future.

The concept of a Higher Education Center takes off from these realities. It contemplates the present status and the inevitable future of these institutions, and it examines a logical question:

Would it be a good idea to group these institutions in the same patch of geography? Would this proximity benefit the future and the strength of these institutions; of the individuals they will serve; of the metropolitan area; of the state? Or would this proximity be harmful to future strength and development? Or would it be neutral? The Working Committee of the Metropolitan Denver Council on Higher Education has reached the conclusion that this geographic proximity would serve well the interests of those most deeply concerned, if the problems and the concerns that have surfaced during its consideration can be adequately met. The caution of this statement is not to be taken as a half-hearted endorsement. Rather, the endorsement of the concept is full-hearted and enthusiastic; the members of the Working Committee see great benefits flowing from the Higher Education Center. The caution is meant to make it quite clear that the Committee has

pondered the negative aspects as well as the positive; that it recognizes the roadblocks; and that it knows that these roadblocks must be removed or bypassed if the Higher Education Center is to become an effective reality. It is convinced that these roadblocks can be overcome.

It has reached this conclusion after studies and discussions with the institutions involved, with metropolitan area officers, with its own special consultant, and with a large number of distinguished educational and planning consultants brought together to examine the question.

The essential finding of the Working Committee is that the Higher Education Center would serve educational goals. This has constantly been the focus of the Committee: The end product of the process of higher education.

But there are also pragmatic and economic reasons for the conclusion. Student for student, course for course, building for building, some money can be saved through establishment of such a Center. It may be relatively little money, but it is some. Much more importantly, a higher quality of education can be delivered through such a Center, dollar for dollar. And, practically, the Center can be of great importance in the always knotty problem of phasing physical facilities to meld with the growth in student body.

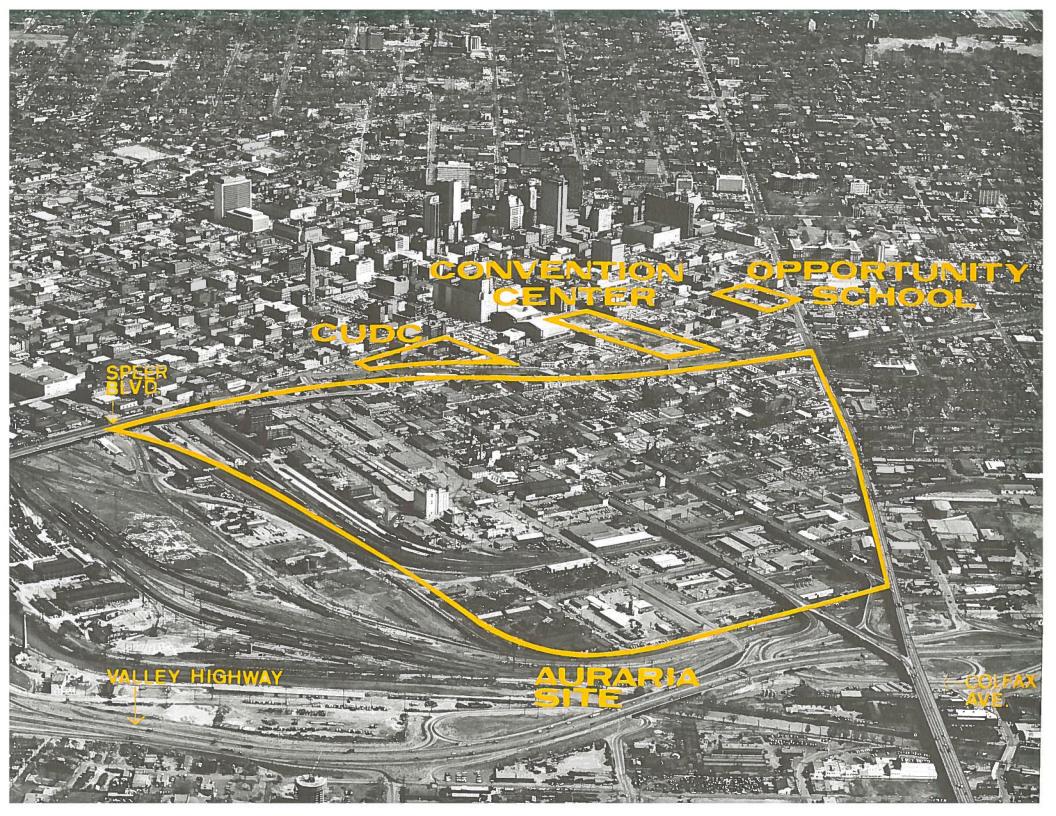
This booklet summarizes the factual analysis and the conclusions of the Working Committee and of its principal consultant, Lamar Kelsey & Associates. The full, detailed report of Lamar Kelsey on which it is based is available in the offices of the Commission on Higher Education for those whose interest runs deep. This booklet is intended to answer the likely questions and to paint, in broad strokes, the mission proposed for the Higher Education Center.

The strokes are broad for two principal reasons. One reason is to

keep the outline clear. The other is that the process of defining the Higher Education Center has started well and vigorously, but it is not nearly finished. The institutions and the agencies involved are now, as they have been for some months, discussing the details, bringing the concept into ever clearer focus. If the Higher Education Center is to function as envisioned, this process of definition and redefinition will go on as long as the Center exists. Even in the conceptual phases, each milestone of agreement reached reveals a vista of many high-roads and byroads to pursue. When the concept becomes a reality — when the Center is in being — each year of experience undoubtedly will point the way to yet more avenues of educational advance to be followed. It is important to keep in mind that the proposed Higher Education Center is a distinctive and unique adventure for public higher education; its like does not exist. It is impossible, therefore, to paint its implications in full.

Nor does the Working Committee presume to give to the institutions involved any detailed "Thou shalt" or "Thou shalt not." The precise relationships of the institutions involved are not spelled out. They are described in a general way — somewhat akin to the Articles of Confederation, pledging "a firm league of friendship," but not a great deal more. This deliberate vagueness recognizes the value of relative autonomy for institutions of higher education, and their reluctance to abandon any part of that autonomy unless they can see this as the route to otherwise unattainable goals. In the fullness of time, the institutions may, like the States, see that a loose friendship is less advantageous than steps to "form a more perfect union." The Working Committee and this booklet point to this possibility in the discussion of developmental sharing, but are content to leave the development to the fullness of time rather than attempting to specify it now.

This summary, then, is not to be read as a full and completed plan but as the outline of the concept and of the initial steps to be taken in creating the Higher Education Center.



The Site

The proposition considered by the Working Committee has been the concentration of institutions on and near the Auraria site.

In general terms, Auraria is located immediately west of downtown Denver. It lies between the Platte River and Cherry Creek just north of West Colfax Avenue. Thus at the confluence of the two bodies of water that are responsible for the location of Denver, it is the historic heart and beginning place of Denver. It was the site of the city's first public school, of its first hotel, of its first water system, of its oldest surviving church structure.

Though the cradle of the city, it has in this century faded into an ill-kept, economically depressed and esthetically offensive part of the city. It is now an admixture of marginal and deteriorated business, industrial and residential usages, an obvious target for massive improvement through Urban Renewal.

The focus of the Working Committee on this area was the result of events, not of intuition.

The primary event was the decision of the trustees of Metropolitan State College, after lengthy study of many alternatives and the consultation of experts, to build the permanent campus of that institution on the Auraria site. This decision mirrored the earlier recommen-

dation of the Denver Planning Board. It reflected also the urban commitment of Metro State; to realize fully its special characteristics and objects, the college had to be in the core city.

The Colorado Commission on Higher Education approved the Auraria site for Metropolitan State College, stipulating that the site must become available for that use without the expenditure of state funds.

With this decision by the trustees and approval by the Commission, still closer study of the Auraria site began. One of the most immediately apparent facts was this: The Auraria site took in the west bank of Cherry Creek. Already near this area was the location of the Denver Center of the University of Colorado, which now approaches the east bank of Cherry Creek and has plans for expanding to the east bank. Close to both sites is Emily Griffith Opportunity School, the adult education and occupational education arm of the Denver Public Schools.

This propinquity naturally focused attention on the basic questions faced by the Working Committee: Is it good for the institutions to be so close to one another? If it is good, should the principle be extended so that others will also be close? If they are to be close to one another, what does this mean in terms of their programs and their building plans? These questions required examination of the institutions and their missions.

The Institutions

The examination focused on these public educational institutions, which either are or might be in the general downtown area:

- 1. The Denver Center of the University of Colorado, founded in 1912, now owns 1.55 acres at 14th and Arapahoe Streets, with 227,494 gross square feet of space converted to educational facilities from other uses. It operates under the same admission policies as the principal campus of the University at Boulder. These policies, the most restrictive in the state, in general operate to assure that only students with a high level of preparation and intellectual promise are admitted. The emphasis of the Center is shifting to the graduate and upper division levels. As of fall 1968 it had 1266 Full Time Equivalent (FTE) students in its day program and 1899 FTE students in its evening program.
- 2. Metropolitan State College is a 4-year college stressing the arts and sciences and urban-related technical and professional programs. Since its opening in 1965 it has also offered occupational education programs of less than baccalaureate degree length and quality, in the absence of a community college. With community colleges now developing in the area, Metro State will begin to phase out these programs. It will also change its admissions policy, now open door, to one more concerned with the preparation and promise of admitted students, moving to some such policy as restricting admissions to the upper one-half or two-thirds of the high school graduating class. Its admissions will then represent midground between the stringent re-

quirements of the university center and the open door policy of the community college.

Metro State is now operating in leased quarters in the downtown Denver area very close to the proposed permanent site in Auraria. Its leases expire in the summer of 1973. In fall 1968 it had 3410 FTE students.

3. Community College of Denver. The recently authorized Community College of Denver will operate on three or more campuses. The first campus, in Adams County, started operation in fall 1968 in leased buildings. The second and third campuses are scheduled to open in 1969 and 1970. One of these may well be in the downtown Denver area; and it is this campus that is involved in the Higher Education Center.

The Community College is to be an open-door college. It will divide its programs between occupational sequences, which will prepare students for specific jobs or careers, and college transfer programs offering the first two years of general collegiate education after which students can transfer for the final two years to a college or university. It will also concentrate on the educational needs of adults in occupational courses designed to fit them for better jobs or to keep them up-to-date on the requirements of their present jobs, and in general courses. The fall 1968 enrollment of the Adams County branch was 1222 FTE students. The Community College enrollment of a potential downtown branch is estimated to reach 8333 FTE (day and evening) within two decades.

Anticipated Growth

Each of these institutions will grow enormously over the next several decades, no matter where it is located in or near Denver. The institutions and the Commission expect growth of this order within two decades, or around 1990:

Denver Center of the University of Colorado: 12,400 head count students; 8060 FTE students, of whom 4836 will be daytime students and the rest evening.

Metropolitan State College: 31,250 head count students; 25,000 FTE students, of whom 20,000 will be in the daytime program.

Community College, downtown branch: 11,900 head count students; 8333 FTE students, of whom 5000 will be daytime students.

This rapid growth will, for the most part, represent an intensification of the growth of institutions of higher education since World War II. The growth is a product of larger numbers of college-age youths; of an increasing proportion of young people winning the high school diploma; of an increasing proportion of these diploma-winners opting for further education; and of a constantly growing number of adults becoming aware of the need for continuing education. The growth will also demonstrate the truth that, in educational terms, supply creates demand: The creation of institutions open to young people produces a market of young people eager to learn.

Taken together, some 55,500 individual men and women will enroll in these three institutions. A large number of these will be part-time students, and many will attend evening classes. Their daytime pro-

gram enrollment will be 29,836 FTE students.

It is logical to ask, "Why, in heaven's name, take them together? Each institution in its own right will be from big to huge. What is to be gained by putting them together?"

A fair question — and one the Working Committee, with the institutions and the consultants, confronted.

But a precedent fact must be kept in mind. Two of these institutions have already chosen to locate themselves close together: The Denver Center of the University of Colorado, and Metropolitan State College.

The Denver Center of the University is where it is — at 14th and Arapahoe, across the street from Auraria, planning to acquire land down to the east bank of Cherry Creek.

The trustees of Metropolitan State College have chosen Auraria for the permanent site of the college. The site includes the west bank of Cherry Creek, directly opposite the University Center.

Thus the University Center and the 4-year college are contiguous. The question becomes a sharper one: "Is there any point in moving the Community College into this same area? Is there any point in developing the sites on a joint or shared basis? Are there educational or financial or other objectives to be gained?"

It must not be overlooked, either, that principal elements of the Denver Public Schools are close to this area: The adult-centered, occu-

pational education-centered Emily Griffith Opportunity School and the present West High School, which may become a city-wide school specializing in advanced science and in sophisticated occupational programs under a plan now undergoing review. Though the nature of the relationships of the public schools and the institutions of higher education remains to be worked out in detail, it is certain that this proximity can but help whatever kind of relationship is developed.

Each of the three institutions of higher education will have space needs in proportion to its enrollments. At a rough calculation of 150 gross square feet per FTE daytime student, their needs by 1990 will be of this order:

Denver Center of the University: 725,400 square feet. Metropolitan State College: 3,000,000 square feet. Community College, downtown: 750,000 square feet.

Of this space requirement, only the 227,494 square feet owned by the University Center now exists. At a rough calculation of \$25 per square foot, the three institutions will ultimately need some \$106 million worth of buildings — plus, of course, site acquisition and preparation, equipment, outdoor physical education space, parking, land-scaping and the usual associated costs.

Facing state commitments of this order, the Working Committee embarked on the studies demanded by the question of the wisdom of massing these millions of square feet and these thousands of students in one area.

The Study Procedure

The Working Committee began studies of the feasibility of joining three institutions on one large site in mid-summer, 1968. On its recommendation, in September the Commission engaged Lamar Kelsey & Associates, architects and planners of Colorado Springs, as principal consultant.

With a supplemental grant from the Educational Facilities Laborator-

ies, the Commission was able to engage the short-term assistance of a number of planners and of educational officials with experience in multi-institutional planning and operation. Among the special advisors on programming and planning were Jonathan King of Educational Facilities Laboratories; Frank J. Matzke and John G. Litynski of the New York State University Construction Fund; Warren Rovetch of Campus Facilities Associates; and Sam B. Zisman of San Antonio, planning consultant. Among the special educational advisors were Louis T. Benezet, president of the Claremont University Center of Claremont, California; William M. Birenbaum, president of Staten Island Community College, New York; Joseph Cosand, president of St. Louis Junior College District; and Charles R. Longsworth, vice president of the new Hampshire College, Amherst, Mass., an institution sponsored by three private colleges and the University of Massachusetts.

Work was accelerated beyond any normal schedule because of the urgency of the decisions involved. A controlling factor is the situation of Metropolitan State College, with its downtown leases scheduled to expire in summer of 1973, and therefore with construction of the first elements of its permanent campus a priority item. Before an intelligent construction schedule could be approved for Metro State, it was necessary to take a first cut at the question whether it would exist alone or in company with other institutions; and therefore speed was required in the study.

Lamar Kelsey & Associates were able to make oral-visual presentations in November, and to produce a written feasibility study and planning report in December. This report, available in the office of the Commission, describes the sharing concept as feasible and indeed full of promise; and the Auraria site, with its tie across Cherry Creek to the University of Colorado Denver Center, as suitable.

There are qualifications in the written report, as there are in the minds of all who have studied the concept. Some go to questions of single focus, such as enlargement of the Auraria site, the role of Urban Renewal, the traffic flow to the campus as a complication to the normal downtown traffic flow. The important qualification, though, is one of

spirit and intent: And the conclusion is that sharing will work well, and will serve the interests of the students, the area and the state in a new and promising degree if the principals in the venture enter into it with intelligent enthusiasm.

Distinctive Institutions

The concept of sharing examined by the institutions and the consultants is not one of melding of the three institutions into one.

Each should and will retain its identity and its distinguishing characteristics. Indeed, it is the differences among the institutions that give sharing its particular value. These are not three institutions with interchangeable student bodies and faculties, any one of which could expand to perform the functions of the others. Their characteristics are clear and sharp: The Community College, admitting and attempting to help anyone with a high school diploma or the equivalent, emphasizing occupational courses, confining its college transfer program to the lower division; the Denver Center of the University of Colorado, with stringent admission requirements and concentrating on upper division and graduate work; Metropolitan State College, largest of the three, and midway between the other two in its admissions requirements and in its range through lower and upper division.

Perhaps the differences are too sharp and clear. For, despite the differences, the institutions have a very large and important area of similarity: They are engaged in higher education, the majority of their clientele are in that age group known as college age. There should, in a rationally open system, be a large and constant movement among them.

Part of that movement should be linear and predictable. That is, the graduate of the college transfer program in the Community College should be able to transfer to upper division work at either the 4-year college or the university center; the graduate of Metropolitan State College should be prepared to register for graduate work at the University Center.

But another very important portion of that movement should be non-linear and unpredictable. Humans acting less than totally rationally at all times, measurements being far short of infallible, admissions directors admitting to lack of omniscience, many of the thousands of students will find themselves in the wrong institution, taking the wrong sequence of courses in pursuit of the wrong career. They should be able, quickly and easily, to set the matter right — to move, for instance, off the occupational education track in the Community College to the teacher preparation track at Metropolitan State College; or off the arts and science track of Metropolitan State College to the engineering track at the University Center; or off the engineering track at the University Center to the engineering technology track at the Community College.

This is what the "three-legged stool" approach in Colorado's public higher education is supposed to accomplish: To provide an appropriate place and sequence for every qualified applicant, and to make movement and transfer among the legs easy and smooth.

It is not easy and smooth, in Colorado or elsewhere. It is possible; and with determined effort on the part of the Commission and the institutions, it will become easier and smoother. But it still represents a major wrench for the individual, and a major effort for the institutions.

Putting three quite different institutions in the same general piece of geography will not of itself make this kind of movement smooth and easy. But it should make it usual and inevitable. It should expose students to the students and the faculty and the programs of other institutions and when appropriate, make them want to move; it should put the officials of the institutions into that kind of close association which can lead them to take the steps necessary to make the movement smooth and easy.

Even more than these formal transfers from one institution and one program to another, the geographic proximity will make possible cross-registrations. Think, for instance, of the student enrolled in petroleum engineering technology at the Community College, and in his second year offered a job with a firm in one of the oil-producing

countries of the Mideast. He wants to learn Arabic. He can't at the Community College: but he can at the Denver Center of the University of Colorado. The geographic proximity, and an easy spirit of cooperation between the institutions, make it possible for him to sign up for the Arabic courses at the University Center while completing his technological work at the Community College. Or, if there are a number of such students at the Community College or at Metro, the University Center can readily lend them a professor of Arabic. The graduate engineering student at the University Center can take at the Community College or at Metro undergraduate courses in technological or other fields that he thinks would be useful to his career and which is not offered at the Center; the business student at Metropolitan State College can sign up for a sophisticated course in monetary policy offered at the University Center. Faculty, of course, will find similar advantages in the proximity of colleagues of the other institutions: Whether their interest is precise research or general discussion, they will find their options broadened and their reach lengthened by the extraordinary concentration of human resources made possible by the Higher Education Center. In addition to colleagues, they will also find in the Center more supporting materials and equipment - more books, more audio-visual aids, more sophisticated technological support — than they could have at a free-standing single institution.

These flows back and forth across institutional lines of both students and faculty are not all pre-determined and pre-ordained by the existence of the Higher Education Center. Some, like the ready transfer from one kind of institution to another, are already state policy and will simply be heightened at the Center, not introduced. Others, like cross-registration and exchange of faculty, are at this moment foreseen as logical and desirable results, but are not mandated. They are left to the developing awareness of the institutions and of their personnel to perfect. The institutions are not being given a constitution to observe, but articles of confederation establishing a firm league of friendship from which to pursue, as they see best, their individual and joint futures.

Even were there to be little formal flow across institutional lines, the geographic proximity of the three institutions would serve a highly useful socio-educational function in bringing together groups which now, to the misfortune of the republic, have too little to do with one another.

There now tends to be too much stratification in types of institutions of higher education. The stratification reflects and carries forward the separations that have occurred previously on socio-economic lines.

The general pattern is this:

- The young person from the prosperous family is well prepared and motivated for higher education, and economically able to pay his way wherever he chooses. His choice often is the university, or the expensive small college.
- The young person from the economically depressed family is often poorly prepared and poorly motivated. If he succeeds in completing high school and in reaching higher education, it may be at the institution closest to him in geographic terms, least costly to attend, and giving him the chance to hold a job. This is often the community college.
- The young person of median family income often has median preparation and median motivation. He is likely to choose the institution median between the expensive and perhaps distant and the inexpensive and most accessible; and this is often the nearest state-supported 4-year college.

There are, of course, exceptions by the hundred to this pattern. But, in gross and global terms, it does remain true that the majority of college youth choose their institution according to the socio-economic postion of their families. While it would be simple-minded to assent to the notion of hierarchy of status among types of institution, it remains true that, by and large, different types of institutions draw from different socio-economic backgrounds. The mingling of backgrounds which sometimes occurs at the senior high school level often dissolves back into more homogeneous backgrounds in institutions of higher education.

Institutions, recognizing this as a weakness, often take heroic measures to overcome it, such as special scholarships for those from economically disadvantaged and racial minority backgrounds. In this way they can promote a limited degree of the mix they recognize as ideal.

The Higher Education Center will produce the desired mix without such special efforts. It will gather in the one geographic area the different kinds of institutions, promoting the broad interplay which is recognized as useful to education and of service to a democracy.

Facilities Shared and Unique

The concept of the Higher Education Center is that each of the three institutions will have its distinctive home — that collection of buildings and spaces which is usually called, for an institution of higher education, a campus: And that the three institutions will share a fourth cluster of buildings, spaces and facilities.

These components are visualized as initial possibilities for the shared cluster:

INSTRUCTIONAL

- Communications Center (for large group lecture)
- Science Center (for highly specialized laboratories or units such as a planetarium)
- Conference Center (to be coordinated with the Denver Convention Center)

LIBRARY

- Specialized and "back-up" collections
- Media production center for audio-visual and television materials
- Central acquisition and processing facilities

STUDENT ACTIVITIES

- Performing Arts Center
- Museum-gallery
- Recreation center
- Special guidance and counseling facilities
- Specialized health services
- Book store

ADMINISTRATION

- Data processing center
- Purchasing

FACULTY

Faculty club

SERVICES

- Receiving-warehouse
- Physical plant department
- · Heating plant-utilities
- Campus security
- Some food processing, storage and preparation

HEALTH/PHYSICAL EDUCATION/RECREATION

· Activity and service spaces used for these functions

OTHER SPACES

- Landscaping for entire campus
- Parking

As can be readily seen, most of these shared spaces serve functions which are supportive of or in a sense peripheral to the day-to-day workings of the instructional process. Those day-to-day workings are, for the most part, carried on in classrooms, laboratories and faculty offices: And each institution will have its own classroom, laboratory and faculty office space in its own campus area.

So, too, each institution will have library facilities; and the cluster library would exist to serve and to bolster the functions of each of the component libraries. Any of the institutions might need a little theater to support its program; but the Performing Arts Center would serve the needs of all institutions for a large theater, while at the same time acting as a magnet for the non-college community.

The shared cluster will also act as a distribution center: Distributing books to the individual libraries; preparing and distributing educational television and other audio and visual materials; distributing food and supplies.

The concept of relationships of the three institutional clusters and the shared cluster is indicated on the illustration on page 13.

This listing of possible shared spaces is useful, though far from final. As the Higher Education Center moves from concept to reality, the actual listing of initial shared spaces will probably be something like this listing. The use of the first increments of space, both unique and shared, will teach the users lessons that will determine the spaces that will be shared in the second increment. It must be remembered that the Center is conceived of essentially as an open-ended arrangement, responsive to conditions over time and expressive of the growing sophistication of the users.

Ultimately, it is anticipated that as much as 30% of total space in the Higher Education Center may be in shared facilities. Depending on arrangements for scheduling, it may prove advantageous to share — for example — substantial portions of physical education spaces, which on a typical campus requires about 16% of the space needed for all programs. In general, spaces that will be fully and efficiently utilized by any of the cooperating institutions would be located within institutional clusters. Most (though not all) of the instructional space would be there, whereas most of the central service areas would be in the shared cluster or clusters.

Percentages must not be permitted to obscure the realities they represent. The realities are very big indeed. If we use this model and assign 30 per cent of building space to the shared cluster, it will consist of more than one million square feet. The Metropolitan State College cluster, on this model, will be on the order of more than two million gross square feet, and the other two clusters somewhat smaller.

Identity and Flexibility

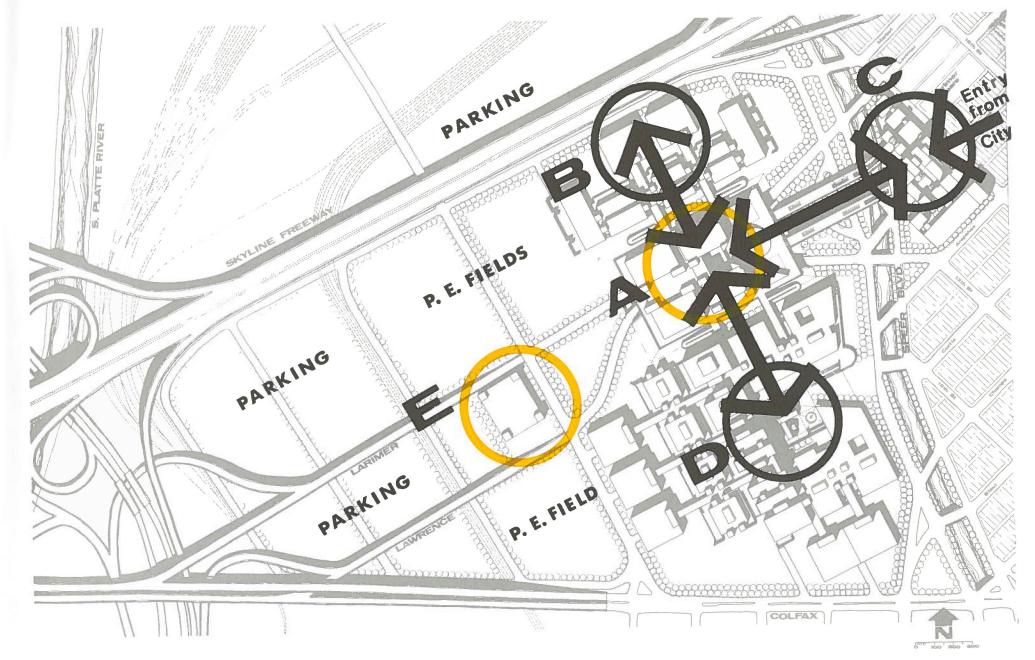
The great size of the physical facilities reinforces the warning already given by the large sizes of the student bodies: In both educational terms and in design terms, extreme care must be exercised to bolster the spirit of identity. This means the identity of the student body of each institution with that institution, despite the existence of the shared campus. It also means the identity of each individual student with a small group of his colleagues, despite the thousands by whom

he will be constantly surrounded. All concerned with developing the concept of the Higher Education Center — the planning team, the representatives of the institutions, the principal consultant and the special consultants — have emphasized this need for identity with the utmost seriousness.

The emphasis would be required whether or not the three institutions were contiguous and sharing some facilities. For each institution, as has been pointed out again and again, will be large: By 1990, the University Center will have 12,400 head count students, the Community College 11,900, the 4-year college 31,250. Each will have the seeds of its own trouble in these numbers unless it can meet the need for identity. Putting the three together may increase the danger to some degree; but it will also so emphasize the danger that it will make imperative the concentration of educational and design intelligence on turning the danger into opportunity. Here is an opportunity to plan for preserving humane qualities in large enterprises, and to build for these qualities, from the very outset.

A principal element of the construction must be flexibility. Stressing both the need for identity and the rapid changes taking place in educational techniques and technology, the Lamar Kelsey & Associates planning report says:

"For many years, construction technology has prevented us from achieving this kind of truly flexible educational space. This no longer holds true. We now have at our finger tips, demountable partitioning systems which can be moved quickly and economically from one location to another; ceiling, mechanical and electrical systems which permit relocation of heating, cooling, ventilating ducts and lighting fixtures as required by partition changes; long span structural bays which will help keep columns out of the way; and other urgently needed construction media which will permit the architect to design his educational spaces in such a manner that they may be shaped, reshaped, opened, closed and generally shoved around in almost any direction by the space requirements of the educational programs which they house. The planners urge that this kind of space flexibility be programmed into every appropriate area of the Higher Education Center's buildings."



RELATIONSHIPS

KEY

A Shared Buildings B CCD

CUDC

Metro

Shared Service Building

Financial Considerations

The Higher Education Center is proposed primarily for educational reasons: The conclusion of the Working Committee, after study and consultation, that a higher level of education can be offered at the Center than at three dispersed institutions.

Despite the concentration on educational quality, there is also sound financial reason for the Center.

It is apparent that there will be some saving in gross over-all space resulting from sharing. The precise amount is impossible to ascertain until more detailed plans are drawn. Indications, both from preliminary analysis and from the advice of special consultants who have worked with institutions sharing facilities, are that a relatively small percentage of space will be saved. An important point here is that the scale is so large that any saving is of some size: Each percentage point saved means some 45,000 gross square feet the state will not have to build. This is a substantial space saving, and worth pursuing even were it the only potential saving: but it is not. Savings in construction dollars may be less significant than longer range savings in operating budgets.

The Center should support savings simply because it concentrates space and therefore concentrates the use of resources. This saving should be realized in a variety of operations — in site preparation, in heating-cooling, in campus security, in purchasing, in maintenance of grounds.

These are dollar savings. It should be kept in mind that they are subsidiary to the real purpose of such a Center, which is educational value. This value will be expressed in two principal ways:

• Dollar for dollar, higher quality can be provided through a shared Center than through three detached institutions.

• The sharing concept will permit phasing. Construction and expansion plans are always based on projections of numbers of students; and even the most sophisticated projection system is far from 100 percent accuracy. If the projections are off — if, for instance, at a given date the numbers at the 4-year college are less than anticipated and the numbers at the 2-year college more than anticipated — the propinquity of the institutional cluster — and the concept of sharing will permit an easy solution. Similarly, highly specialized facilities can be built at an earlier date than justified by the demand at any single institution because of the demand generated by the confederation of institutions.

Cost Estimates

A first rough cut at total costs for the Higher Education Center can be made, based on the model of unique space and shared space described in the preceding section. Again, it is emphasized that this estimate is not offered as the cost of the Center as it will be, because nobody now knows with precision what that will be; but rather, as the reasonable cost of the model of the Center described here for purposes of analysis.

The cost estimates that follow rest on these assumptions:

- 1. Building space and cost. The Denver Center of the University of Colorado will require 170 gross square feet per daytime FTE student at a cost of \$27 per foot; Metropolitan State College, 150 gross square feet per daytime FTE student at \$25 a foot; Community College, 140 gross square feet per daytime FTE student at \$23 a foot; the shared cluster, 150 gross square foot per daytime FTE student at \$25 a foot.
- 2. Costs are at 1968 levels.
- 3. <u>Buildings are</u> conceived as ranging in height from two stories to eight stories.

- 4. Parking is computed at one parking space per 2.5 FTE daytime students in a combination of surface and structure parking.
- 5. The local or state share of the cost of acquiring the necessary land is reported.
- 6. The site can be expanded beyond the combined Auraria-University Center acreage to reach a desirable total of 208.5 acres.
- 7. The traffic access problem for the Center and for downtown will be solved the viewpoint taken after study by the Traffic Engineering Division of the City and County of Denver.
- 8. Roof top plazas will be used for some outside horizontal pedestrian circulation.
- 9. <u>Environmental/Expansion</u> land is provided both for beauty and and for potential sites of future buildings.

Under these assumptions, the total construction cost for the Higher Education Center at its maximum size — that is, somewhere around 1990 — would be some \$134 million in 1968 dollars.

Of this sum, buildings would take about \$105 million. Metropolitan State College buildings would cost about \$51 million, Community College buildings around \$11 million, Denver Center of the University of Colorado buildings around \$9 million, the shared cluster around \$33 million, and plaza development some \$2 million.

Other principal cost elements would be as follows: Estimated local cost of land \$16 million; outdoor health, physical education and recreation development \$1 million; parking \$10 million; and circulation and environmental expansion space, \$1 million.

The first increment of construction, designed to provide the necessary space by 1973 when the Metropolitan State College leases expire and when, therefore, the need for a permanent campus is urgent, would cost around \$60 million.

Of this, \$41 million would be in buildings - \$19.5 million for Metro

State, \$4 million for the Community College, \$17 million for the shared cluster, \$1 million for plaza development. Other cost elements would be a maximum of \$16 million in local cost for all the land required for the entire Center on the expanded site that is proposed; \$300,000 for health, physical education and recreation; \$1 million for parking; and \$1 million for circulation and for environmental/expansion space.

Statistics and Individuals

The figures reported in this booklet are all very large: Tens of thousands of students, millions of square feet of space, tens of millions of dollars.

They are large by necessity, because the subject matter is higher education in a large, populous and education-conscious metropolitan area.

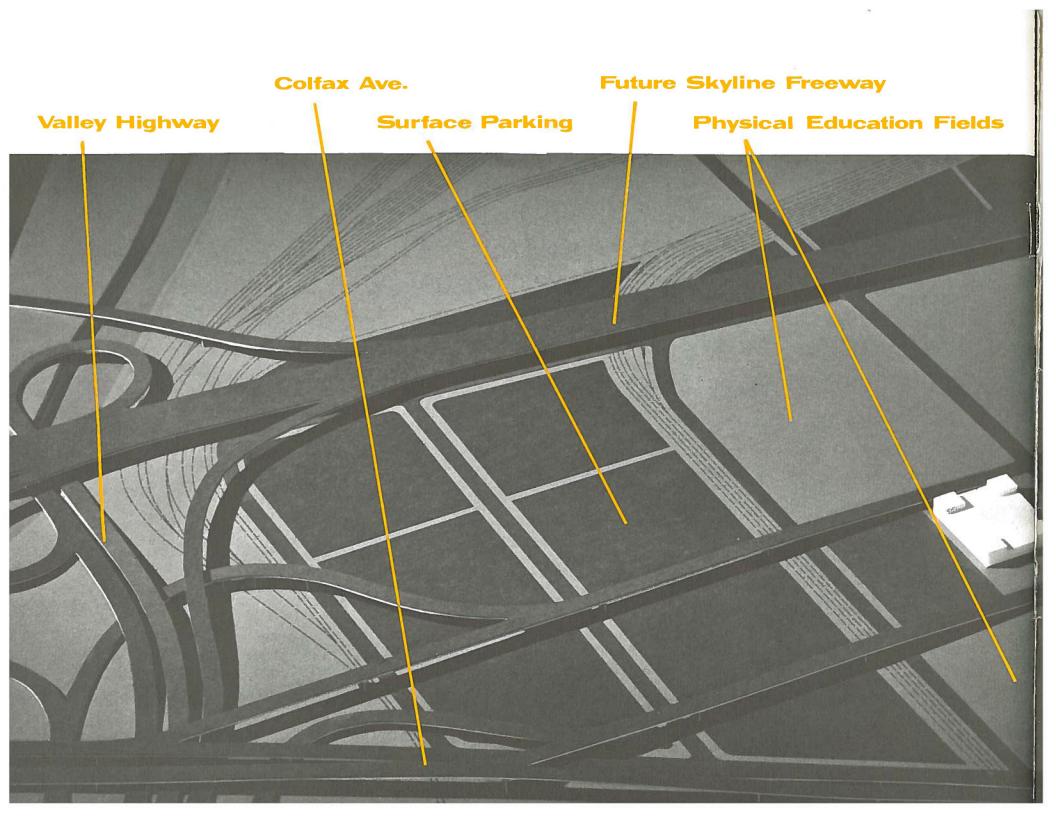
Figures sometimes exert a deadening influence. Talk about them enough, and they begin to sound as if they have some meaning and existence of their own.

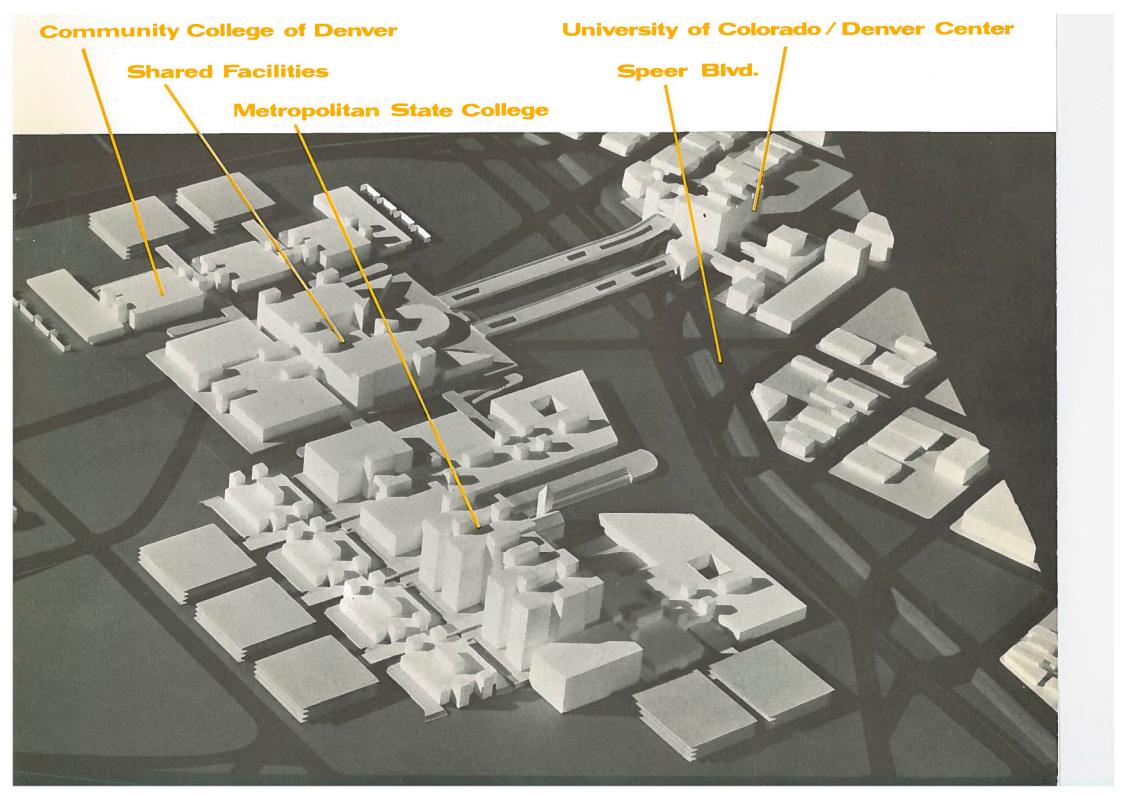
They don't.

They refer to other things: The space necessary for people, the dollars necessary to produce that space, but most of all — people.

This has been the focus the Working Committee has tried to keep steady. The only question it has permitted has been one variant or another of this: "What's best for the people who will be the students of these institutions in 1973 and 1980 and 1990 and on into the 21st century?"

The Committee doesn't suggest that it has hit upon the design that is the only one that will work for those people. It does believe that the four Denver institutions are onto a great thing: That the concept of the Higher Education Center can add significantly to the worth of the education those people will have.







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