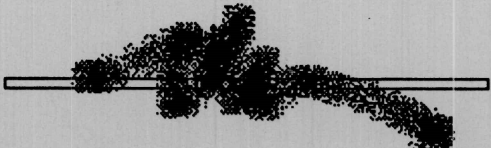




*Working Toward  
Careers*

*October 1991*

Survey Findings  
of the Employment Interests  
and Experiences of Cambridge  
High School Youth



Citywide Youth  
Employment Office

Cambridge Community  
Development Department

Cambridge Public Schools

# WORKING TOWARD CAREERS

*Survey Findings of the Employment Interests  
and Experiences of Cambridge High School Youth*

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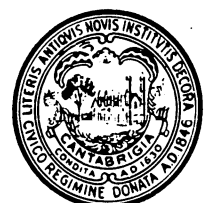
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The Citywide Youth Employment Office is a collaborative project of Cambridge's Department of Human Service Programs and Cambridge Community Services.

# WORKING TOWARD CAREERS

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October, 1991  
Cambridge, Massachusetts



## INTRODUCTION . . . . .

By the winter of 1991, young workers were feeling the squeeze of a depressed regional economy. As adult unemployment rates rose, businesses were less and less apt to hire young people. The youths' relative inexperience and need for temporary positions put them at a disadvantage in a tight labor market. At the local level, Cambridge's youth employment agencies had extensive waiting lists of youths ready and willing to work. The agencies were providing training to help these young people find and keep work, but they were facing increasing obstacles gaining access to the job market.

A shrinking pool of opportunities was causing the city's future work force — young people, ages 14-21 — to miss out on their introduction to the world of work and the acquisition of work-related skills. Subject to the ebbs and flows of the economy, young people were becoming increasingly alienated from the work culture around them.

In order to assist Cambridge's young job seekers, the Planning Committee of the Citywide Youth Employment Office (established in October 1990) sought to understand the scope of the problem — How many young people needed work? How many wanted summer jobs vs. year-round employment? What kind of training do they need? How are they finding jobs? What are the long term implications of young people not finding work?

These questions lead to the design and implementation of The Cambridge Youth Employment Survey and to this publication — *Working Toward Careers*. The results of this study not only document the need for youth employment services in Cambridge, but also highlight the importance of expanding work opportunities for youths.

The results paint a picture of a community of young people not only eager to work, but forced to work because of economic circumstance. It demonstrates that over a third of Cambridge's public high school students seek summer jobs and that over 1,500 of them want to work during the school year.

The issues in this report have long-term implications for more than Cambridge's young people. Cambridge's future economic strength depends upon the quality of its work force. In emerging industries, work force quality is a leading concern affecting the success of local businesses. Nurturing that future labor pool by exposing young people to engaging work experiences is important for future workers and employers alike - and is even more critical during a recession.

There are concrete steps we can take to improve the employment prospects for Cambridge youth. The recommendations that conclude this report provide a vision for overcoming some of the obstacles delineated by the following survey results.

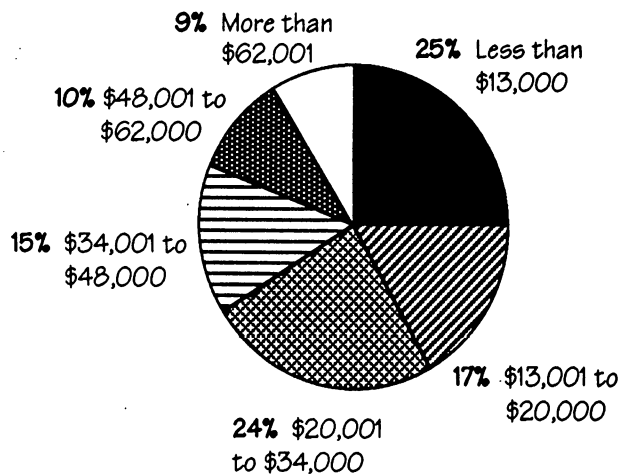
## METHODOLOGY . . . . .

This study was conducted at Cambridge Rindge and Latin School in January and February 1991. It was designed and implemented by the Planning Committee of the Citywide Youth Employment Office (CYEO), the Community Development Department (CDD), and the Cambridge Rindge and Latin School (CRLS). The survey was conducted in the home rooms of all students grades 9 through 12. A total sample of 970 students responded to the 17-question survey. These 970 students represent a cross sample of CRLS students reflecting a diversity of race, age, family income, academic achievement, and origin.

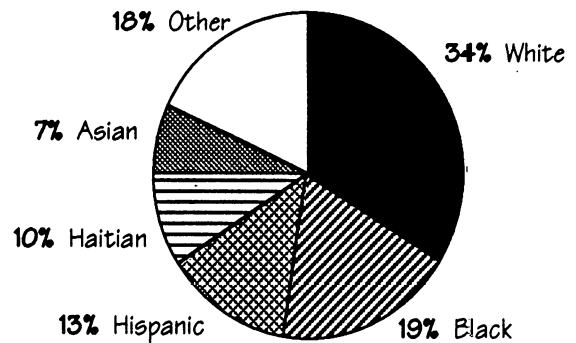
## DEMOGRAPHICS . . . . .

The following charts indicate characteristics of the survey sample of students.

Family Annual Income as Described by Students



Ethnic Origins as Reported by Students



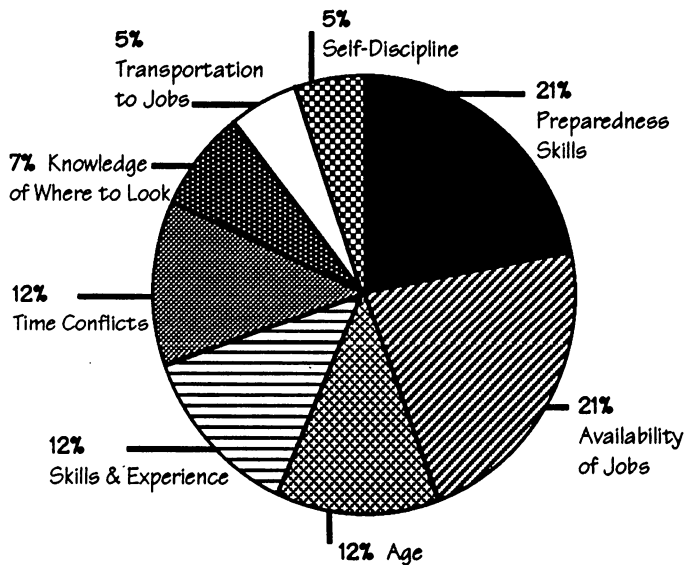
## DESIRE TO WORK . . . . .

In large numbers, young people are asking for help finding work and receiving the training necessary to enter and secure part-time and summer jobs in today's job market. Students of all income levels, ages, and ethnic backgrounds expressed an eagerness to work, with particular interest in part-time jobs during the school year. Eighty-three percent of the respondents stated that they would like a job.

After-school jobs are more popular than summer jobs, with three-quarters of the student body looking for after-school jobs while about two in five seek summer employment only. Interestingly, this was the reverse case for Asian youth, where

more than two thirds wanted summer jobs, and only slightly more than half sought after-school employment.

How Students Rank their Biggest Obstacles to Finding a Job



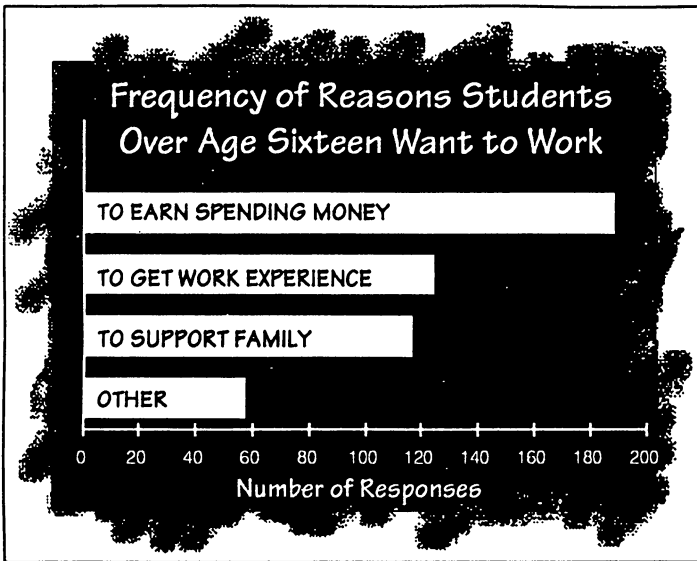
Eighty-five percent of those students interested in finding a job expected to need help. Deficits in communication skills, confidence, general job application etiquette, and other "work survival" skills were among the most frequently cited obstacles to finding a job among Cambridge's high school teens.

Among reasons for not working, the survey uncovered considerable variation among ethnic groups. Of those who had not had a job before, Blacks and Haitians were most likely to state that they had tried to find one unsuccessfully, but

wanted to work. Of those who were not working by choice, Whites and Asians predominated. About one third of both Whites and Asians without jobs were unemployed by choice, compared to 21 percent of Blacks and only 5 percent of Haitian students.

## REASONS FOR WORKING . . . . .

Work for many young people at Cambridge Rindge and Latin School (CRLS) is an economic necessity. Over a third of high school students over age 16 count on their part-time and summer earnings as a means of supporting their families. For students living in families with incomes of under \$13,000, 56 percent count



on their pay as a contribution to the family livelihood.

Work for all young people — regardless of income — has become an important part of growing up. Although most youths work to earn spending money, more than one in three want to work in order to gain work experience.

On the whole, students have realistic expectations for the hourly wage they will receive once they are working. Sixty-four percent of students interested in finding work expected to earn a wage between \$5 - \$7.50 per hour.

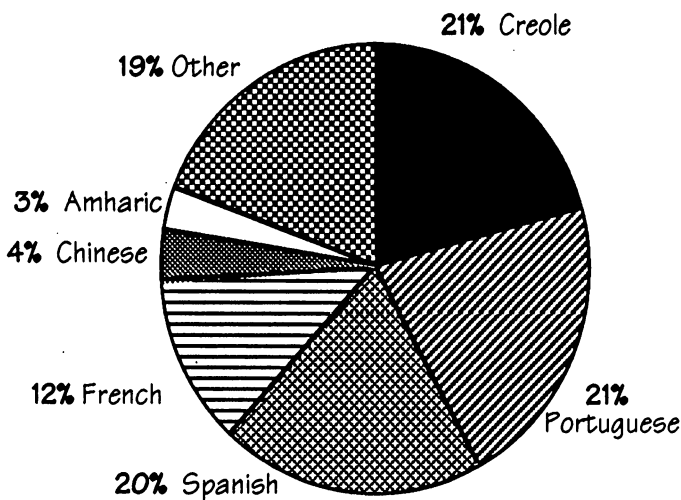
## LIMITED-ENGLISH SPEAKING STUDENTS . . .

Of students who seek work, those who appear to confront the greatest obstacles are students with limited-English speaking abilities. Almost a third of CRLS's linguistic minorities stated that they do not speak English fluently, thus providing

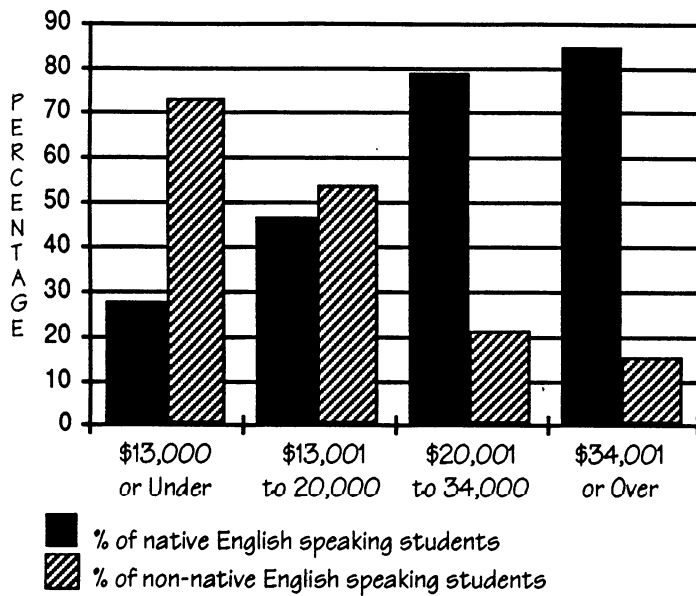
a major obstacle to gainful employment. Compared to the general school population, of which 71 percent had held at least one job before, only 56 percent of limited-English speaking students had worked before.

Limited-English speaking students are also more apt than the general school population to belong to the group which views work primarily as a means toward supporting their families. The survey results point to a strong correlation between low-income families and students who identify themselves as non-native language speakers. For example, 45 percent of Hispanics and 53 percent of Haitians seek jobs primarily to contribute to their family incomes.

Languages Other than English Spoken by Students



Family Income of Students Who Say that English is not their First Language



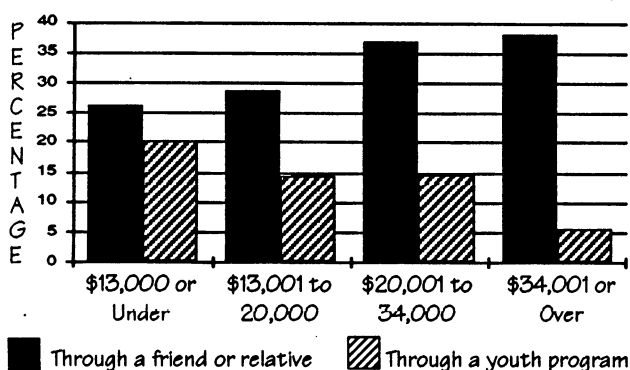
Almost all students (94 percent) for whom English is not a first language expect to need help finding work, as compared to 85 percent of the total CRLS population. Their number one obstacle to finding a job is *not* the poor economy, but a self-reported lack of preparation and understanding of how to access the working world. In addition, 16 percent cite insufficient skills and experience as a major obstacle, and 13 percent of linguistic minorities report that not having a green card is the principal obstacle to finding work. Among certain ethnic groups, this number is higher. For example, 28 percent of Asian students said that not having a green card is their number one obstacle to finding work.

## MAKING THE WORK CONNECTION . . . . .

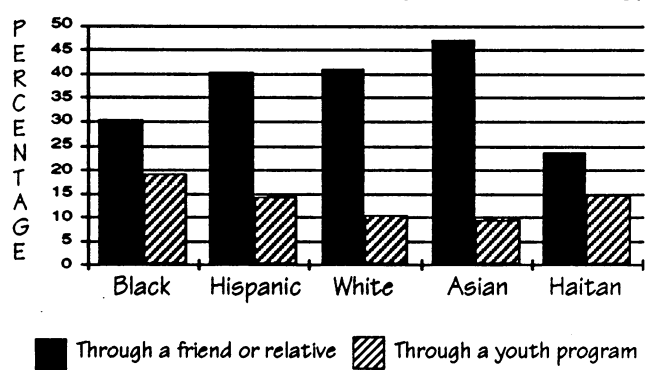
Students with higher family incomes are more likely to get work through family connections than students from lower income families.

Only 26 percent of students from families with incomes below \$13,000 got their last job through family contacts, whereas 38 percent of students from families making over \$34,000 found their jobs through friends or relatives. The use of family networks varied among ethnic groups as well: For example, 47 percent of Asian students tapped family connections compared to 24 percent of Haitian students.

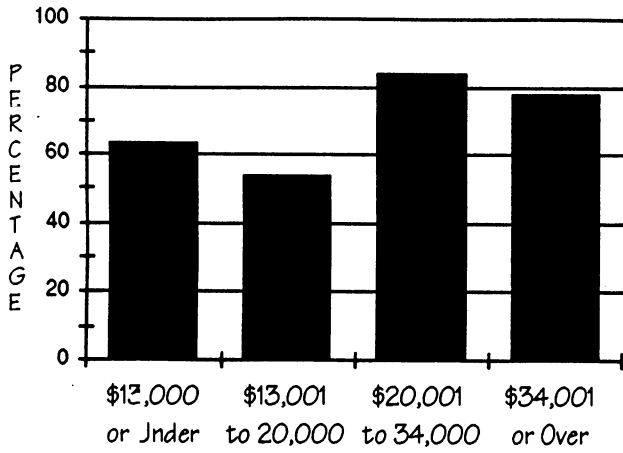
How Students Have Found Jobs (Based on Income)



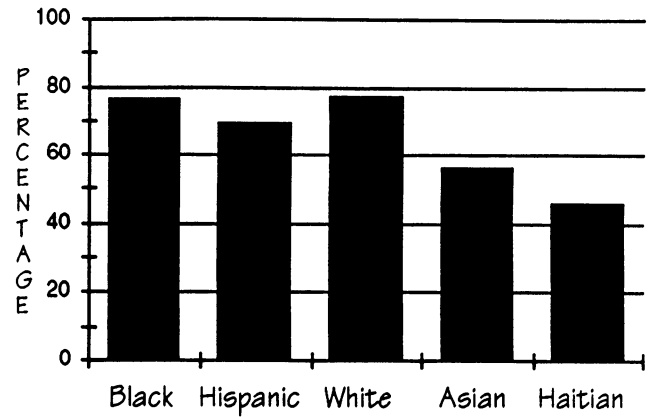
How Students Have Found Jobs (Based on Ethnicity)



Percentage of Students Who Have Held at Least One Job Before (by Income)



Percentage of Students Who Have Held at Least One Job Before (by Ethnicity)

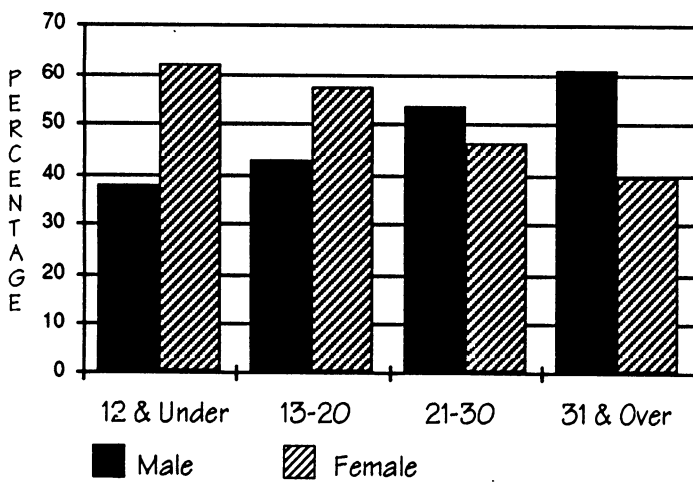


Similarly, the students who use the services of local youth employment programs located at the high school and in the community are primarily from low-income families. Thirty-eight percent of the students from low-income families (under \$20,000 per year) stated that they found their last job through a local youth employment agency or a CRLS employment program. Minority groups were also more likely to use the services of youth employment programs.

## WORK AND ACHIEVEMENT . . . . .

In general, students who work during the school year tend to work 20 or fewer hours per week. Only about one quarter of working students work more than 20

Hours Worked by Gender



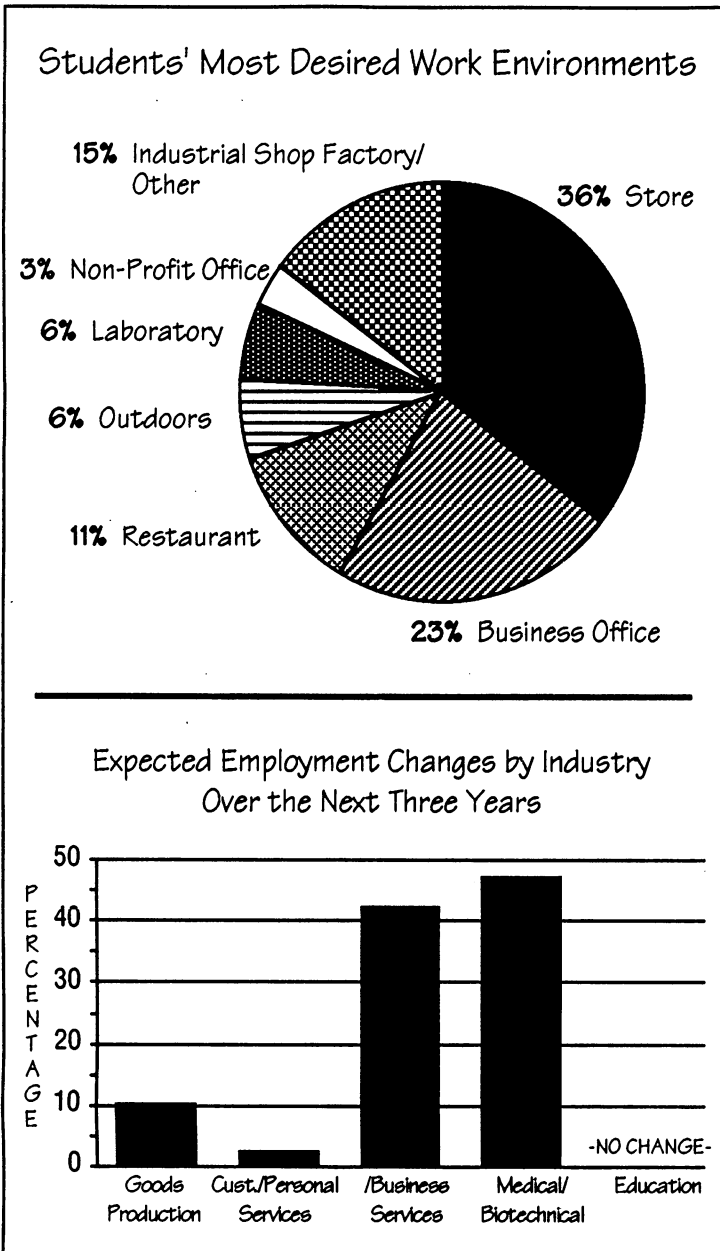
hours per week. Restricting the number of hours students work while in school does appear to enhance school performance. Only about one in eight working students with grades in the A's or B's worked more than 20 hours while one third of the working students with GPA's of C or lower worked more than 20 hours per week.

Among male and female students, girls are more apt to spend what has been traditionally considered an acceptable amount of after-school hours working (20 hours and under), while boys are more likely to exceed this standard. Of those

who work under 13 hours a week, 62 percent are girls. Of those working over 30 hours weekly, 61 percent are boys.

## CAREERS AND JOB CHOICES . . . . .

At a time when Cambridge economic planners project that local growth will take

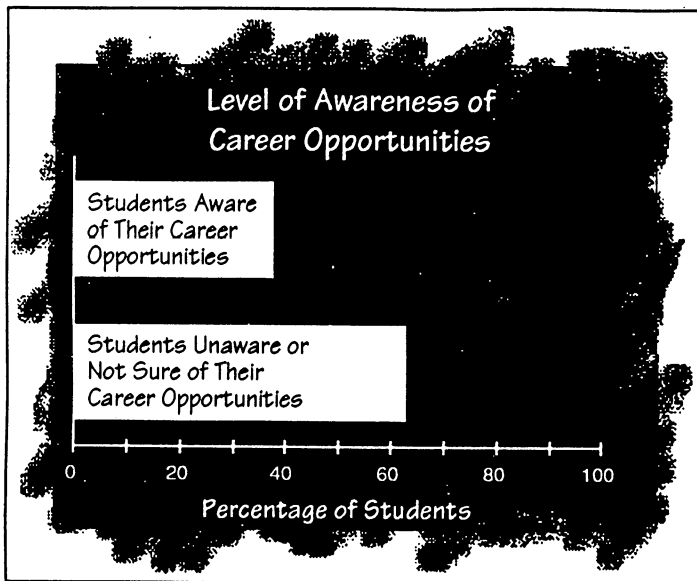


place in industries such as Biotechnology, Software, Allied Health, and Environmental Planning, job openings for youth are disproportionately clustered in fields with much less growth potential. Further, young people state overwhelmingly a preference for working in local retail shops, business offices, and restaurants. Only 9 percent of all students said they would prefer to work in a science or health laboratory, although this area of employment is expected to increase in Cambridge.

Since many of the entry-level jobs in the identified "growth fields" require education beyond a high school diploma, it is not unusual that high school students are neither drawn to nor recruited into these industries. Yet, this apparent "mismatch" between Cambridge's industry mix and the preparation of its future work force raises important questions about whether more can be done to introduce and expose young people to these growing industries.

A striking fact about young Cambridge residents is that the overwhelming majority (80 percent) work in Cambridge compared to less than 15 percent of adult resident workers. Indeed, most

CRLS students experience their first introduction to work in a Cambridge company. These companies, in essence, are a training ground for local high school students.



All students, and particularly those who do not plan to go onto college, claim to have little knowledge of the career opportunities available to them. Over half of all students do not consider themselves knowledgeable about career opportunities.

## THE "NON-COLLEGE BOUND" . . . . .

For those students who will enter the work force directly after high school — the “non-college bound” — almost two-thirds (63 percent) state that they have little or no knowledge about the careers they might pursue. While this may be quite usual for students at such a young age, it can cause difficulties for those students who graduate in June without a sense of where they might go for promising

employment. Without guidance, many youth will navigate the job market through trial and error, building a haphazard job history and career experience.

These self-identified “non-college bound” (15 percent of the CRLS population) also rate themselves lower on academic and work-related skills than their college-bound counterparts. Just under half rate themselves as good in academics. Forty-one percent of this group state that they have fair or poor reading and

literacy skills and 55 percent rate themselves fair or poor in math. These “non-college bound” students will be less academically prepared for work than the average CRLS student. Yet almost 3/4 of the “non-college bound” students expect to remain to live and work in Cambridge after graduation, as compared to 60% of their college bound peers.

### Non-College Bound Students

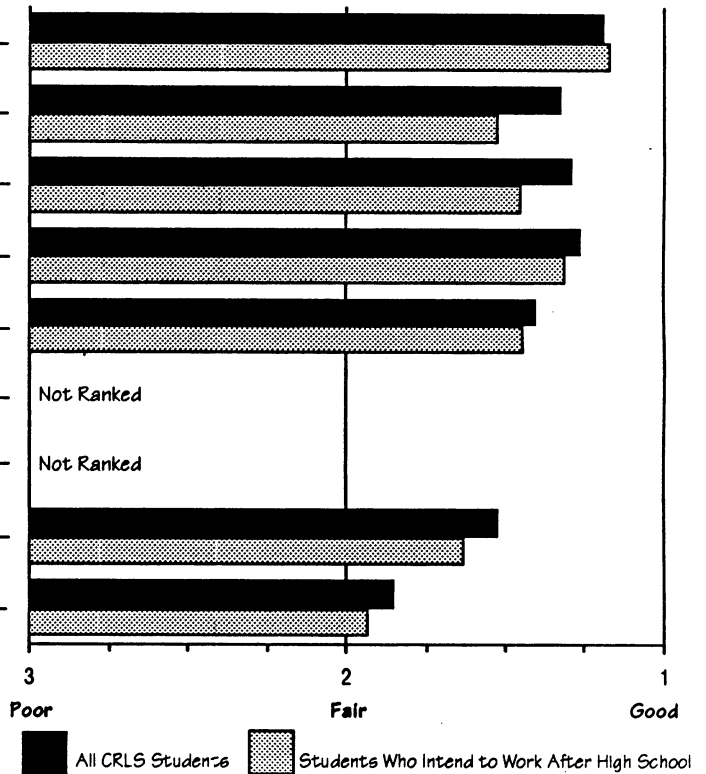
- ◆ Equal number of young men and women
- ◆ Students are disproportionately low-income
- ◆ 33% come from families with incomes of \$20,000 a year or less (compared to 18% of school population)
- ◆ 73% expect to live and work in Cambridge after high school (compared to 61% of school population)

**How Companies Rank Obstacles to Job Performance for Workers in Non BA Positions from most serious to least**



- 1) Work Attitudes/Willingness to Learn
- 2) Communication Skills
- 3) Reading/Literacy
- 4) Teamwork/Cooperation Skills
- 5) Academic Preparedness
- 6) Job Specific Skills
- 7) Ability to Adapt and Learn
- 8) Math Skills
- 9) Computer Skills

**How CRLS Students Rate Themselves on the Same Traits**



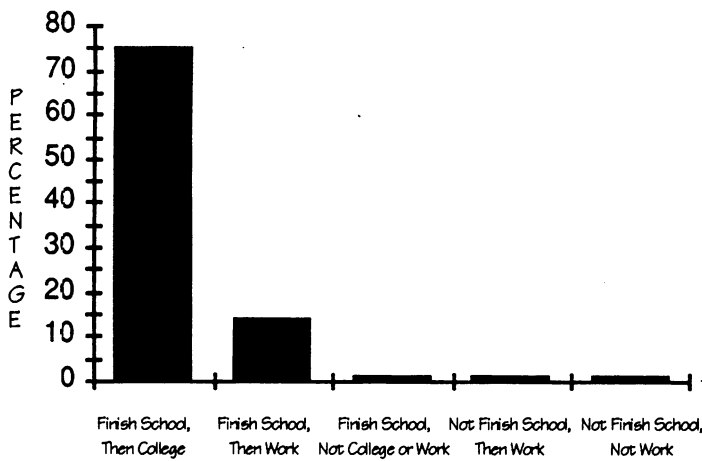
**SKILLS AND SELF-ASSESSMENT . . . . .**

On the whole, CRLS students rated themselves high in the “soft skills” needed to succeed in the work place, but they were less confident in their self-assessment of

academic preparation in math and computer skills. Ironically, a recent survey of Cambridge businesses indicates a dramatic mismatch between employer perceptions about entry level workers and how students assess themselves on the same issues.

The survey data reveals that students’ self-expectations are not necessarily reflective of actual educational trends in Cambridge. For example, while 91 percent of CRLS students said they expected to graduate, according to 1990 Cambridge Public Schools data, only 79

**Students' Expectations of Educational Achievement**



percent ended up receiving their diplomas last year. Seventy-eight percent of the respondents stated that they expected to attend college, but in 1990, 61 percent of past CRLS students were accepted at two and four-year universities (it is unclear how many attended and remained in post-secondary institutions). This suggests that students set high expectations for themselves but are often not able to meet their goals.

## **RECOMMENDATIONS . . . . .**

The data indicates the need for action to address growing problems and points to some clear directions for Cambridge decision makers. Specifically:

- ❖ **Cambridge Employers: Create more work opportunities for youth.**

For most Cambridge Rindge and Latin School Students, work has become an integral part of their lives — as an economic necessity, a way to gain valuable experience, or to earn spending money. Work provides a training ground for the future work force, and it can be tapped as a rich educational resource. Mutual benefits arise for employers who train and maintain youth employees. They benefit from a productive, energetic worker. Correspondingly, students who learn and earn begin to see exciting possibilities for themselves in the working world.

- ❖ **Schools, Youth Employment Programs, and Community Agencies: Increase activities aimed at helping youth to find jobs and to learn job-readiness skills.**

An overwhelming number of CRLS students want to work (83 percent) and, of that group, over 85 percent expect to need help finding employment. Even in this poor economy, the number one obstacle cited by students over 16 to finding a job was “lack of preparedness skills.” This data makes a strong case for incorporating more job search assistance and job-readiness training into the offerings of the school. For example, CRLS students would benefit from classes and workshops which cover the basics of how to apply for and keep a job, how to get the most out of a position, and how to get along with supervisors.

- ❖ **Youth Employment Service Providers and Policy-Makers: Target youth employment services to limited-English speaking students.**

Current youth employment programs cannot easily adapt to the needs of growing numbers of limited-English speaking populations. Recent funding cutbacks have all but diminished bilingual employment counselors, or special educational programming for students who need ESL training as well as employment. Further, with relatively high levels of unemployment, local employers are less willing to work with limited-English speaking youth than they used to be when employees were harder to find. These factors combine to leave these youngsters with few options at a time when they and their families are truly in need.

- ❖ **Youth Employment Service Providers and Policy-Makers: Target youth employment services to those most in economic need.**

Youth employment services should be especially focused on helping students from low-income families who count on their wages as an essential part of the family budget. Not only do these youth need the money to support their families, but they are less inclined than their wealthier counterparts to find jobs through family connections, friends, or on their own.

- ❖ **Businesses, Schools, and Youth Employment Agencies: Work to strengthen communication between employers and educators.**

There is currently no correlation between students' knowledge about career opportunities and the fact that they work. Yet, the work place can be a place where young people learn about the range of career paths available to them, meet and establish relationships with supervisors, and learn skills to help them access further employment. These links can be strengthened by encouraging one-to-one coaching between employers and youth employees, creating forums at the high school where youth can share concerns about work and learn from their experiences, and involving businesses in the training of youth. These steps will help to insure that the student is not the sole link between the school and the work place.

- ❖ **Schools, Youth Employment Agencies, Economic Development Planners, and Employers: Teach students, especially the "non-college bound," about their local career options and introduce them to the growth areas of the Cambridge economy.**

Students, particularly those not bound for college, demonstrated a genuine lack of knowledge about the careers open to them. By building bridges between companies with growth potential and youth early on, students will broaden their knowledge of what is available to them. These "bridges" can include high school

apprenticeship programs, work site internships, and other cross-generational work and educational experiences.

❖ **Schools and Youth Employment Service Providers:**

Educate students on the “soft skills” needed to succeed in a work environment.

Where students rate themselves high on “soft skills,” businesses recently surveyed by the city’s Community Development Department disagree. These employers state that poor work attitude, lack of cooperation, and teamwork are a major problem with new hires, and with youth in particular. At the same time, few of those companies surveyed have hired teens through the local youth employment programs which train young people in some of the “soft skills” needed at the work place. With more interaction and intensive training efforts, youth employment agencies, schools, and businesses may find a way to help young people learn and succeed at work.

# **BUILDING A COALITION FOR A WORKING CAMBRIDGE**

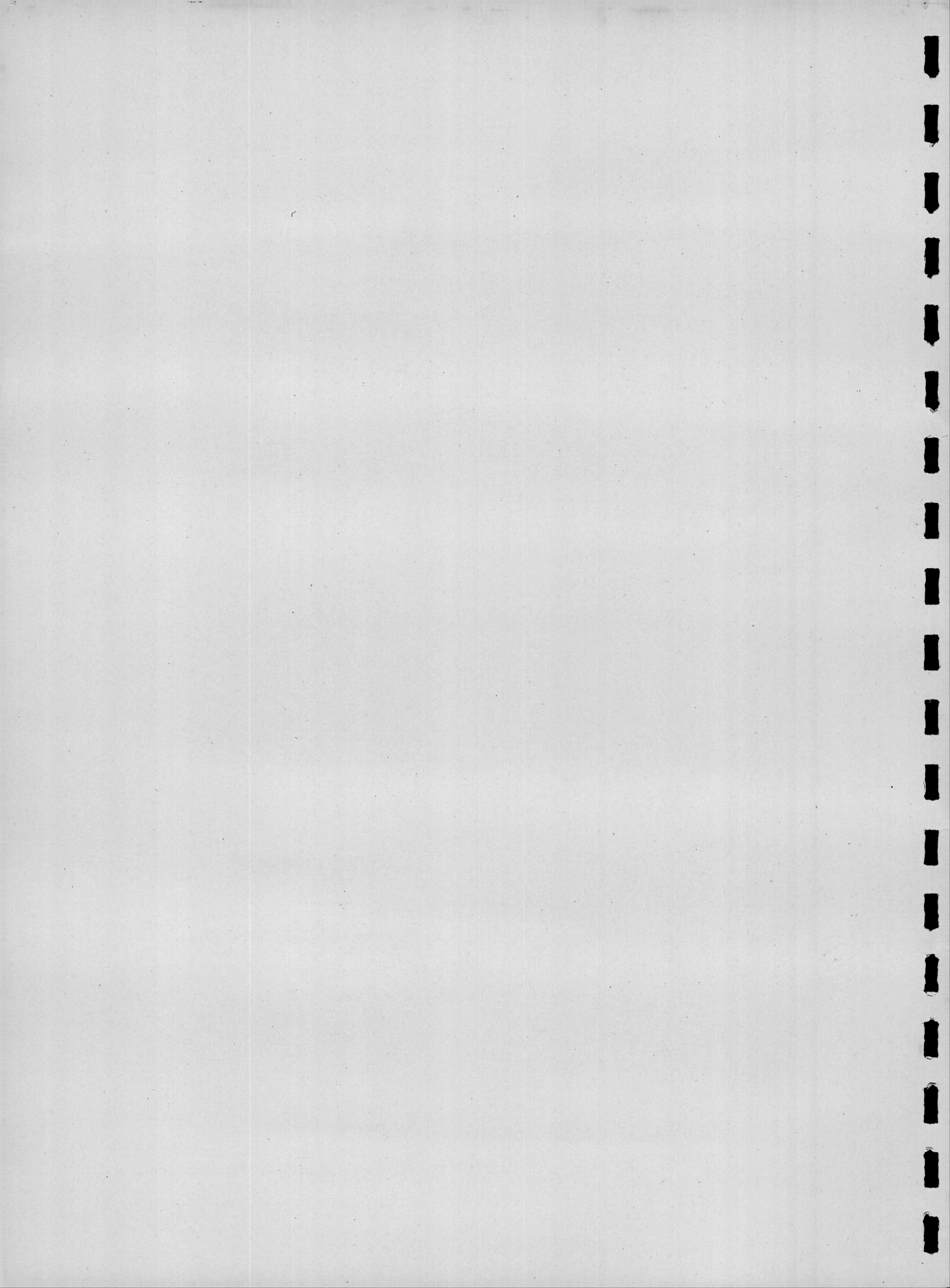
**Collaborative Planning for  
Education and Employment**

**EXECUTIVE SUMMARY**

**prepared by  
JUDITH LEFF**

**for  
COUNCILOR JONATHAN MYERS**

**May 31, 1991**



# **BUILDING A COALITION FOR A WORKING CAMBRIDGE**

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## EXECUTIVE SUMMARY

This report is about needs, resources, and potential strategies for developing a comprehensive, integrated, collaborative education and employment system in Cambridge. Such a system would prepare Cambridge residents - in-school and out-of-school youth and adults - for identified growing occupations and careers in the Cambridge area labor market. Its dual goal would be to meet residents' needs for jobs with career opportunities and employers' needs for skilled, qualified workers. Development of such a system requires a collaborative effort among educators, employers, city government, labor, community organizations and residents to pool the considerable resources in the community and ensure various needs are met.

### THE NATIONAL CONTEXT

The United States is the only major industrialized country without an organized system to prepare people for the work force. In this country, a liberal arts college education traditionally has been considered the best path to a rewarding position in the labor force. Therefore, public policy has emphasized providing opportunities for more people to obtain higher levels of academic education.

However, this policy emphasis ignores some important realities about what preparation actually is needed for work, and also neglects the needs of over half of our youth, as well as our present workers. Seventy percent of the U.S. work force will not need a baccalaureate degree to qualify for the work they do.<sup>1</sup> Most workers will need high school level competency in literacy, computation, reasoning, problem solving and other skills. Many will need post-secondary level training in technical skills.

Nationally 17% of high school students now drop out before graduation, and 12% of graduates do not attain high school level competency. Only 48% of high school graduates in the U.S. attend any college, and only 18% receive 4-year college degrees.<sup>2</sup> The vast majority of America's youth (over 60%) will be in the full time workforce by age 20. Only a small proportion of these young people will be adequately prepared for skilled jobs with career opportunities.

In this country, instead of a systematic policy for work and career preparation for all people, there is a patchwork of inadequately supported programs, providing hit-or-miss services. Most young people flounder in the labor market for years before finding career paths. Many people remain chronically underemployed.

In contrast, countries such as Germany, Denmark and Sweden provide extensive work-related education for young people. Seventy percent of German youth and 50 percent of Swedish youth participate in apprenticeships and other intensive vocational education and training after completion of compulsory schooling at ages 15 or 16. This training lasts from 2-4 years. German apprenticeships provide "dual system" training - combining classroom-based and workplace-based learning.

### Attitudes are Changing in the U.S.

There is growing recognition by educators, employers and public policy planners that part of our education objective must be to prepare people for jobs and career development. The human service perspective is that education systems must prepare students for the transition

from school to work by ensuring they achieve competency in basic education skills and in specific occupational skills. Remedial education must prepare adults, or out-of-school youth, who have not developed basic or specific work skills during their formal education. Retraining should be available for all adults, to enable them to upgrade skills needed for better job performance and for career development.

The business perspective holds that to increase competitiveness, enterprises must become more productive. New technologies increase productivity, but the greatest determinant is a trained, skilled workforce. Companies that invest in new production and process technologies and development of a trained, multi-skilled, self-reliant work force are often referred to as "high performance" companies. Although these firms are a small minority of U.S. companies today, they are considered the vanguard for the nation's future economy. Increasingly, employers and trade associations are urging changes in public education to respond to the need for high-skilled workers, and some companies are actively involved in working on these changes.

The federal government also has increased its efforts to guide and support work-related education initiatives. Several research and development projects, as well as demonstration projects in a number of cities, are being sponsored by the Departments of Labor and Education.

The economic needs of the national economy and employers are now coinciding with the education and job training goals of human service providers. Employers, educators, and human service advocates, as well as community residents, all have something to gain from bridging the gap between the education system and the work place. To achieve this will require collaborative strategic planning by all of these parties, with the assistance of government.

## THE SITUATION IN CAMBRIDGE

Cambridge is an ideal place to develop a comprehensive, integrated education and employment system, because its residents and local employers need this and the city is rich in resources to achieve it.

### Resident Needs

Two population groups in particular need better preparation for work and career development: Youth (ages 14-21) - including in-school youth, high school dropouts and older youth who are not going to college; and Adults - especially poor people, people with limited education, (on public assistance or underemployed), and recent immigrants.

As in the rest of the country, all Cambridge young people need better preparation to make the transition from school to work more smoothly and to plan for careers. The greatest immediate need for job and career preparation is for youth who either drop out of high school or do not pursue post-secondary education. Of the 640 students entering Cambridge Rindge and Latin High School in 1987 (the class of 1991), about 140 dropped out before graduation and roughly 250 more will not be in post-secondary school by Spring, 1992. In other terms, over 60% of the CRLS class of 1991 will probably be in the work force by early next year.<sup>3</sup>

The greatest needs identified for Cambridge youth are:

- o tracking and status assessment of out-of-school youth, particularly older youth

- o more exposure to occupational, career and work place options
- o increased work experience opportunities while in school
- o integration of academic and vocational learning; classroom-based work and work site experience
- o integration of secondary and post-secondary education and training options
- o increased remedial opportunities (both classroom and work-based) for high school drop outs and graduates who require further basic education to qualify for jobs
- o increased and coordinated information about available jobs and employment assistance services

Adults who particularly need integrated education and employment services are: poor residents and people with limited education, including many Black residents, ethnic minorities, people on public assistance and others; and recent immigrants. By all measures, Black and other minority group members achieve lower education levels and have higher unemployment and underemployment rates than whites. The majority of Cambridge newcomers are poor (an estimated 60% are low income by federal definitions) and have little education. Most recent immigrants with jobs are underemployed, earning low wages in entry-level service sector jobs. Many recent immigrants from Haiti, Central and South America have little or no formal education. Also increasing numbers are illiterate, in both English and their native languages

The greatest needs identified for adult residents are:

- o increased ESL and literacy training in native languages
- o increased Adult Basic Education (ABE) classes; emphasis on preparation for GED or Adult Diploma
- o specialized skill training, preferably with a work-based component, to prepare for jobs beyond the entry level
- o work readiness training - counseling, job development, placement, etc.
- o comprehensive ongoing social support services (health care, child care, etc.)
- o skill training while employed to enable advancement out of entry level jobs and career development

### Employer Needs

As in the rest of the country, many jobs in Cambridge-based firms - especially those with career opportunities - now require new or more complex skills. A recent survey of Cambridge employers by the Community Development Department (report to be issued by summer, 1991) found that many Cambridge-based employers are increasingly investing in worker training - providing courses in-house, purchasing training from vendors and providing tuition reimbursement for individuals. The following needs were most often expressed by employers:

- o higher competency levels in basic education and work behaviors among applicants for entry level jobs
- o more workers trained in technical specialties to meet particular occupational skill requirements
- o workers adaptable to learning new skills and work modes - able to work in teams, solve problems, set work goals, plan and manage work
- o ways to expand training opportunities for their employees; joint public/private education and training programs
- o information about how Cambridge schools and other education resources could prepare people for their industry needs

- o economic development assistance to help decrease costs of doing business in Cambridge and enable local expansion -

## **Resources**

Cambridge has many resources to create a comprehensive, integrated collaborative education and employment system. The city government is committed to serving both the social needs of its citizens, and promoting economic development to provide public revenues, jobs and other resources. The school department, particularly the high school (including Rindge School of Technical Arts), operates a number of programs which acquaint students with careers and workplaces, and provide employment opportunities.

Within the Human Services Department, the Cambridge Youth Employment Program is coordinating and expanding employment and training opportunities for young people and increasing collaboration on these concerns between the public and private sectors. The Community Learning Center is providing remedial education and job training for older youth and adults, particularly immigrants. The Community Development Department has collected and analyzed labor market information essential for education and employment system planning. It also conducts economic development planning, which helps determine industrial and job growth in the city.

The community also has a well developed infrastructure of employment and training agencies and programs. Nearly 150 community-based programs and private non-profit organizations provide a range of services to youth, adults, public income recipients, members of various ethnic and linguistic groups, the handicapped and others. Many of these services are assisted and coordinated by Cambridge Community Services.

The Cambridge Partnership for Public Education supports the public schools by serving as broker with the private sector and educational institutions to secure and direct resources and expertise to the school system. Employment Resources, Inc. contracts with the city to provide job counseling, work readiness training, job development, recruitment and placement services to low income residents.

Community colleges, other colleges, technical schools and university extension schools provide rich resources for pre-baccalaureate level technical education. These resources are currently untapped in any structured way by the Cambridge education system.

## **Employer Involvement**

The diverse local economy provides a variety of occupational opportunities, at all skill levels, for which residents can be prepared. A number of local employers have contributed time, funding, and expertise, through the Cambridge Partnership, Cambridge Youth Employment Office, and other conduits to education and employment efforts. The fact that many employers are now calling for and investing in expanded worker education and training provides an opportunity to further develop collaborative relationships. The resources of employers - as information sources for planning, personnel for collaborative system development, and sources of education for students, teachers, planners, and administrators - have barely been tapped.

## **Unmet Needs: A System is More than the Sum of Its Programs**

Despite the many programs, and significant start of information collection and program coordination, several major problems persist. Large resident groups and many area employers are not having their education and employment needs satisfied. Some resources are being underutilized - especially sources of education and skill training outside the public school system (community colleges, technical schools, work site training).

In some cases, poorly functioning programs, or insufficient supply of programs (e.g.: not enough ESL or ABE classes) are the source of the problem. **However, unmet needs are caused primarily by lack of linkages among programs and program goals, and by lack of information required to set goals and develop programs. In short, unmet needs are caused by lack of some components that comprise a comprehensive integrated education and employment system.**

Major persistent shortcomings which need to be addressed are:

**Education Goals not Oriented to Employment Needs** - as in the U.S. nationally, the Cambridge education system does little to prepare students for the realities of the world of work. Such education should include career and work place awareness, work experience, work readiness training and work skill training as parts of the universal curriculum, beginning in the elementary grades

**No Mechanisms Exist for Assessing and Credentialing Students' preparedness for employment** - the S.A.T.s and Achievement Tests measure students' preparedness for entry into college, but no measures of students' preparedness for employment exist. Credentialing methods used in other countries provide young people with parameters for achievement, and universally accepted standards which ensure students, as well as educators and employers, that they are ready for employment.

**Few Linkages Between Secondary and Post-Secondary Education to Provide Non-College Bound Youth Opportunities for Further Learning** - Many people are trapped in low-wage jobs because they lack skills needed to qualify for better ones. Most jobs with career opportunities require skill training beyond high school, in community colleges, technical schools or work site programs. Also many jobs in local high growth sectors, such as health care and biotechnology production, require licensure, usually acquired after 1-3 years post-secondary education.

**Funding Cuts Have Left Publicly Supported Programs Unable to Provide as much Services as their Clients Need / Lack of Financial Resources, or Inefficient Use of Resources in the Private Sector has Limited Provision of Work-Related Education and Training** - Employers and public education and training programs might better meet their mutual goals of preparing people for jobs and careers if they pool their resources and coordinate their expertise and services.

**There are insufficient linkages between education/employment goals and Economic Development Planning** - Local and regional economic development should promote provision of the numbers and types of jobs needed by community residents. This should not be done by trying to attract new industries from other regions, but by working to strengthen the diverse industries and firms already located in Cambridge - particularly those that provide good jobs and career opportunities.

**Insufficient information is available to enable resident and employer needs, education objectives, and economic development to be coordinated** - None of the problems identified above can be addressed without sufficient information about needs, resources and potential strategies to achieve goals. Although much information has been collected and distributed by various bodies in Cambridge, more is needed if any but the most short sighted goals are to be attempted.

**The greatest need for Cambridge is not more programs (although needs for additional programs may be identified).** New programs, by themselves, will not meet the education and employment needs of residents or employers. **What is needed is a system that integrates programs, and program goals, with each other and with employer and economic development goals.** System development requires additional information, planning and coordination.

### **A "COALITION FOR A WORKING CAMBRIDGE": HOW WOULD IT WORK?**

A successful system would include a variety of programs and other components that are linked together in ways that complement and reinforce the performance of each. In this way, a system is quite different from a collection of unintegrated programs. Crucial elements include:

- o **commitment by all major participants in the community involved in education and/or employment to work as a team to set goals, develop programs and other system components, implement programs, and obtain support for the system**
- o **a central steering committee, comprised of representatives from all participant groups, to set guidelines, oversee system development and operation and mediate between groups**
- o **capacity to collect, analyze and distribute information** - about the needs, resources, resource gaps, industry and labor market trends, qualifications required for specific occupations, etc. to ensure that programs meet needs
- o **staff to manage information, administration, fundraising and other tasks required to keep system operating**

The actual objectives of the system would be set by the coalition. Based on experiences in other countries, and some prototypes in the United States, the following steps might be taken:

1. analyze resident education and employment experience, needs
2. inventory existing education (K-12 and post-secondary) and employment programs/services and ability to meet needs
3. analyze area industry and labor market trends
4. identify area "industry clusters" that are expanding and will offer good jobs to focus initial system development on
5. analyze occupations in those industries, qualifications required to enter them, and career opportunities they offer

6. set qualification standards to be met for entry into these industries and occupations
7. develop curriculum to prepare all students for future work and provide alternative education options; curriculum would be developed collaboratively by educators, employers and others and would combine classroom and work based learning at the secondary and post-secondary levels
8. establish credentialing procedures to certify that students have met performance criteria during high school and at point of entry into the workforce
9. Create central data base of job openings, qualifications required, and career opportunities for use by job developers, workers and employers

### **How Might Cambridge Begin?**

Cambridge could develop a system in stages, beginning with some components and expanding over time. Here's how it could begin:

1. address some short-term goals - such as increasing the number of ESL and ABE classes for youth and adults, and improving the existing job development and placement system for youth and adults (which the city already has begun).
2. concentrate on one or two industries or "industry clusters" - from existing information, it seems that allied health care industries is a promising industry cluster; this would include various technical (and possibly some direct care) occupations in hospital laboratories, medical laboratories, biotechnology firms and medical instruments firms
3. develop curriculum components that prepare people in general work skills needed by employers across industries; these skills include ability to manage resources (time, money, materials, etc.), think creatively, problem solve, utilize information, work in teams, be open to continual learning, and utilize technical equipment and tools
4. develop curriculum components that orient younger students to the world of work and career options; classroom visits by people in various occupations, visits to various workplaces, reading and discussing literature and case studies about work, short term internships in local firms or community agencies and other first hand experiences

All of the organizations currently providing education and employment services and resources, and community residents, would play active roles in a "coalition for a working Cambridge." These include the Mayor and City Council, School Department, Community Development Department, Human Services, Department, Cambridge Youth Employment Office, Community Learning Center, Employment Resources, Inc., Just-A-Start, Cambridge Community Services, Cambridge Partnership for Public Education, area Employers, Cambridge Chamber of Commerce, trade associations, nearby community colleges, other colleges and technical schools, labor unions and others. These roles are outlined in the body of the report.

## RECOMMENDATIONS

1. Cambridge should develop a comprehensive, integrated, collaborative education and employment system.
2. Representatives from the city's major education and employment providers should decide collectively what goals to prioritize (short-term vs. long term, resident groups, etc..) and what resources (staff time, funding, etc.) to commit to system development
3. Roles to be played by each of the system participants should be clearly identified and accepted by all members of the coalition
4. If the city decides to develop an education and employment system, it should begin by focusing on one major industry cluster - the allied health care industries seem like a good sector to target
5. Planning should begin with a thorough analysis of the Cambridge and regional labor market, particularly in the industry cluster(s) to be targeted; this will require close cooperation between the city and area employers.
6. Additional information about needs of residents also should be collected; in particular, the status and needs of older youth (ages 18-22), who have graduated or dropped out of high school and are not in school must be documented
7. Information about related national policy development and pilot programs and systems operating in other cities and regions should be studied to assess what might be useful for Cambridge's planning effort.
8. The system should contain certain elements to ensure that people going through it will be qualified for real jobs and career opportunities; these elements include:
  - o development of a broad range of basic education, personal, interpersonal, and specific technical skills
  - o qualification standards for entry into each industry and occupation, to establish goals for curriculum development and individual achievement
  - o certification exams and competency certificates, to determine and document students' preparedness to enter next stage of education or the work force
  - o career and workplace awareness development (ideally beginning in the elementary grades)
  - o integration of "vocational" and "academic" learning, to make clear relationships between intellectual and practical work
  - o combined classroom-based and work-based learning, so that school and experiential learning are used to inform and augment each other
  - o exchange of teachers and employees of local firms, so that each can experience and learn from the other's "world"

o linkages between secondary and post-secondary education to provide continuum of technical education for students beyond high school, but less than 4 year college level

o provisions for adults - either current or new workers - to learn basic skills or upgrade skills to improve career opportunities; the same components offered to young people in schools can be offered to adults in community-based organizations, post-secondary schools, or work places

9. An education and employment system must be closely linked to the city's economic development strategy; the creation, retention and expansion of key industries and firms is essential to the success of any human resource strategy
10. Because system development, or even some system components will require substantial finances, supplemental funding should be sought from outside the city budget; the federal government, private foundations and area companies are all sources of funding

## ENDNOTES

1. National Center on Education and the Economy, Commission on the Skills of the American Workforce, America's Choice: High Skills or Low Wages, June 30, 1990.
2. U.S. Government Accounting Office, Training Strategies: Preparing NonCollege Youth for Employment in the U.S. and Foreign Countries, May, 1990, pg. 23
3. Figures obtained from data and calculations from data in Cambridge School Department, Key Results: The Cambridge Public Schools' Strategic Plan, 1990-1991



# OFFICE OF THE CITY CLERK

CITY OF CAMBRIDGE

CITY HALL, CAMBRIDGE, MASSACHUSETTS 02139

JOSEPH E. CONNARTON  
CITY CLERK

(617) 349-4260

JOHN E. FLYNN  
DEPUTY CITY CLERK

JANUARY 16, 1992

**TO: MICHAEL ROSENBERG  
ASSISTANT CITY MANAGER FOR COMMUNITY DEVELOPMENT**

**FROM: JOSEPH E. CONNARTON** *JEC*  
CITY CLERK

**SUBJECT: CITY COUNCIL HEARING FOR MONDAY, JANUARY 27, 1992 AT 7:00  
P. M.**

Pursuant to the attached order which was adopted at the City Council meeting held on January 13, 1992, the City Council has scheduled a public hearing for Monday, January 27, 1992 at 7:00 p. m. in the Sullivan Chamber, City Hall.

The purpose of this hearing is to review information gathered by the Community Development Department, the Economic Development Committee of the City Council and the Youth Employment Office relative to shaping city policies on employment and training.

You have been requested to attend this hearing at this time.

Thank you for your cooperation in this matter.

c.c. Robert W. Healy, City Manager



# City of Cambridge

36.

IN CITY COUNCIL

January 13, 1992

## COUNCILLOR MYERS

WHEREAS: The issue of employment of city residents has generated much interest and discussion on the part of the City Council; and

WHEREAS: Over the past two years a great deal of research and work has been done by city departments in this area which would be useful for the Council in its deliberations on the topic; now therefore be it

RESOLVED: That the City Council schedule a hearing on Monday, January 27, 1992 at 7:00 p.m. for the purpose of hearing information that has been accumulated by city departments, particularly, the Community Development Department, by the Economic Development Committee of the City Council, and the City Youth Employment Office, so that the City Council can have this information at its disposal in shaping city policies on employment and training.

In City Council January 13, 1992.

Adopted by the affirmative vote of nine members.

Attest:- Joseph E. Connarton, City Clerk.

A true copy;

ATTEST:-

A handwritten signature in cursive script that reads "Joseph E. Connarton".

Joseph E. Connarton  
City Clerk



# City of Cambridge

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January 13, 1992

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In City Council January 13, 1992.

Adopted by the affirmative vote of nine members.

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A true copy;

ATTEST:-

Joseph E. Connarton  
City Clerk

Consent Myers

36

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Therefore be it resolved that the City Council schedule a hearing on Monday, January 27 at 7:00 p.m. for the purpose of hearing the information that has been accumulated by city departments, particularly, the Community Development Department, by the Economic Development Committee of the City Council, and the City Youth Employment Office, so that the City Council can have this information at its disposal in shaping city policies on employment and training.



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City Council JAN. 13 1992  
Adopted by the affirmative vote  
of 9 members

Joseph E. Conroy  
City Council

CONSENT ORDER # 36

*SFF*

Councillor Myers re: policy on shaping  
city policies on employment and training.

In City Council,

January 13, 1992

*Order adopted  
Hearing scheduled  
for 1/27/92 at 7:00pm.  
1/25/92  
hearing held.*