Workers and Facilities, Systems and Values: A Study of Sheltered Employment with Options for the Future

Conducted for
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This project involved a comprehensive examination of the sheltered workshops in St. Louis County which employ persons with developmental disabilities. The analysis considered the workshops at three levels, as individual facilities, as an employment system, and as a sub-system within the broader service system serving persons with developmental disabilities in St. Louis County.

There are seven sheltered workshops in St. Louis county: Canterbury Enterprises, Florissant Valley North, Florissant Valley West, ITE, Lafayette Work Center, Universal, and WAC Industries. The two Florissant Valley shops are part of a single corporate structure. Each of the others operate as separate corporations. All the workshops are incorporated as not-for-profit companies with their own board of directors. The names of the workshops have been removed from this summary from this point on.

Context: Review of Relevant Literature

If you take even a cursory look at the literature on sheltered workshops in the United States clear trends are apparent. The period from 1960 through the middle of the 1980s, was a time in which the literature on workshops was both large and rich. You find frequent articles like Nelson's (1965) "Industrial operation of the sheltered workshop" and Whitehead's (1976) "Planning and organizing a sheltered workshop for mentally retarded persons," which describe how to organize and run an efficient, effective workshop operation. There are articles from this period on improving production (for example, Caddick, 1979; Pallotta-Cornick and Martin, 1983). And many can be found on the blending of psychology and business practices to increase the productivity of workers with disabilities (for example, Logan, 1971; Watson, 1972; Robinson, 1982; Rosine and Martin, 1983; McNally, 1984).

With the advent of the movement to promote employment of persons with developmental disabilities in the competitive labor market, a clear and quite sudden change appears in the literature. Strong criticism began to appear, and it was primarily from within the rehabilitation community. Representative articles include "Sheltered workshops: financial and philosophical liabilities" (Schuster, 1990); "Sheltered work environment: a dinosaur in our midst?" (McLoughlin, Garner, & Callahan, 1987) and "The sheltered workshop dilemma: reform or replacement" (Whitehead, 1986). These were built upon earlier criticisms that had led to the change in scholarly attitudes as well as a change in related federal policies (see, for example, Greenleigh Associates, 1976, Mallas, 1976, and Conte, 1982). As a result, the "how-to" and "best-practice" literature, to the extent that it dealt with sheltered workshops at all, tended to describe how best to close them (for example, Murphy and Rogan, 1995; Block, 1993; Hagner and Murphy, 1989) or how to convert them to competitive employment programs (for example, Maxwell, 1986; Parent, Hill, & Wehman, 1989; Albin, Rhodes & Mank, 1994; Murphy and Rogan, 1995).

The weight of the competitive employment movement was such that it was easy to think that sheltered workshops would soon disappear altogether from the service system radar scope. But this, obviously, has not occurred, as most states continue to operate dual-track employment systems (McGaughey et al., 1995), with sheltered workshops representing half or more of most states' employment programming for persons with devel-

opmental disabilities. In part this has resulted from the practical difficulties of turning supported employment programs, which could be shown to succeed quite well in demonstration situations, into full-blown service systems. In part it has resulted from the unrealized goals of some competitive employment programs, in which workers continue to lead lives that are marginal and not fully integrated in their communities. And in part it resulted from the steadfast tenacity of parents and other advocates, including workshop managers and boards, who continued to insist that sheltered workshops should remain a viable option, especially in the new era of consumer choice, available to persons who prefer it.

However, while sheltered workshops continue to occupy a substantial position within service systems they are underrepresented in the research and best practice literature which continues to be dominated by advocates of competitive work, such as Wehman and Mank, and continue to be subjected to criticism (such as, Mirenda, 1996). For the most part, articles on sheltered workshops that are positive in tone are likely to be found in the popular media (such as, Lewis, 1993; Blakely, 1997) and/or to be expository in nature (such as, Black, 1992; Miller, 1993). A 1986 literature review (Benson et al.) concluded, "the literature appears to be void of material relating to products and services and contracting practices of sheltered workshops, only a few educational programs have emerged for marketing personnel from these workshops, and low expectations appear to have a perpetuating effect."

Nonetheless, useful articles written within the last dozen years can be found that provide useful and practical guidance for workshop operators. Examples include Harrelson's (1986) "Innovation in the products and services of sheltered workshops," Kimberly and Rottman's (1987) "Environment, organization and effectiveness, a biographical approach," and Menz et al. (1987) "Training needs of rehabilitation facility administrators." Each of these articles tend to emphasize the key role of management, especially management willing and able to be innovative and dynamic. Also emphasized is the need to conduct adequate market analyses and to broaden thinking beyond simply industrial products to include the service sector as well.

In addition, others offer prescriptions or descriptions of new models of doing business, such as Smith and Russo's (1989) discussion of production consortiums, Taninecz's (1996) description of a sheltered workshop developed within an industrial plant, Rosen's (1993) description of a model, "second generation" workshop (in which a for-profit, integrated industry is spun off from an existing sheltered workshop), Boschee's (1995) examples of social entrepreneurship (as in the affirmative industry model), and the model of "scattered employment of a sheltered nature" (Paukert, 1996).

This last citation comes from an European Community seminar in Prague, which brought together experts from within the disability and workshop fields throughout Europe to discuss current practices and emerging trends in sheltered workshops. The seminar was intended to share practical lessons learned and methods and models that work. The impetus was the desire for persons in former Iron-Curtain, Eastern European countries to learn from their colleagues in the west. Prior to the collapse of the curtain, sheltered workshops in Eastern Europe essentially all employed a single, totally segregated model, in which persons with developmental disabilities were kept separated and marginalized from the rest of society. The seminar presented examples and models of workshops as places of transition, mutual collaboration, rehabilitation and service.

Another current and promising resource from Europe is an R&D project on workflow management which has spun off a follow-on application to sheltered workshops (Robinson, 1997). This project involved the development of computer software that facilitated cooperation among workshops in different cities ("very effectively interlinking the operations of each enterprise, integrating the capabilities of each so as to create a single unit, a virtual enterprise"). The objective of the project (called "WeDoIt") is "to establish a new joint business, to target sales activities on new markets, and to get support both for re-engineering existing processes and for designing new business processes."

Accepting the current reality in which workshops are not only an option available to consumers but likely to remain a major element in the employment system, it becomes paramount that efforts are made to ensure that 1) the well-being of consumers are a cornerstone of these operations, 2) that they are an integrated part of the service system, and 3) that they are run in an efficient and effective manner, and do not, as a result, unnecessarily drain resources needed elsewhere.

A Summary of Findings and Conclusions

In other states and in other countries, sheltered workshops are sometimes called rehabilitation facilities. The term rehabilitation indicates that a facility is in some way to be understood as a place of transition, where something is taught and learned, skills are assessed and improved, so that an individual can achieve a greater measure of his or her competencies and move on to a more stable, normative employment situation. That the term used in Missouri is sheltered workshops is not without implications. This term does not encompass the notion of transition but emphasizes the protective and segregated nature of these facilities, and has been taken to mean that a workshop job may be terminal rather than transitional in nature. At the same time, even this sense emphasizes the fundamentally distinctive nature of these enterprises, that they are organized to provide employment to certain types of individuals only and that this is the essential part of their identity. This means that workshops cannot be accurately understood and discussed as industries which happen to have their entire productive workforce made up of persons with disabilities, as if this latter characteristic were secondary and accidental in nature. It is not. It is primary and substantive to what a workshop is. Moreover, the large amounts of public funds which subsidize workshop operations reinforce the point of dissimilarity with industries in general. Workshops exist because they are considered to be a public value, and although they operate within the economic system this is not the source of their legitimation or essential purpose. These points mean that sheltered workshops differ from other industries in this key aspect: the well being of their workers is the primary concern of these organizations, not a secondary issue to profits or production efficiency or any other priority that an ordinary industry may be expected to have. Sheltered workers do not serve the production needs of facilities but the production serves the workers' needs.

While over half of all sheltered workshop revenue in St. Louis County derives from sales, their heavy reliance on public subsidies means they cannot be justified in economic terms. Nor are they meant to be. They exist, and have historically received the public support that has been provided, not because they are viable economic entities but

because they are valued—valued because of the service they provide to a set of residents of St. Louis County who are themselves valued. Any change in the level and nature of public support for sheltered workshops, therefore, must begin with a process of confronting decisions that are primarily value-based rather than economic in nature.

Workshop-Specific Conclusions and Options

The following is a summary of conclusions on six of the seven workshops in St. Louis County with specific options for each of them as individual operations.[1]

Workshop 1. This workshop has a difficult mission but also has a number of key strengths. These strengths include: vigorous, reflective, and able management with an understanding of the value of planning (and proactively engaging in planning for the future rather than maintaining a passive posture); a strong service orientation and commitment to the well-being of employees without neglecting the imperatives of operating an industrial shop; a commitment to finding ways of improving the wages of employees and an understanding the role of automation in this process; and having a direct tie to a community agency which provides a broad set of services including competitive community-based employment.

Because of the special mission of this workshop to individuals with multiple disabilities, particularly those with disabling conditions that are physical as well as intellectual, it cannot be evaluated simply on the basis of business ratios and production *vis a vis* other shops. Workshop 1 leases its facilities and has no capital base itself to draw on for expansion or for new construction. Nor does the workshop have its own truck. Sometimes this shop does not or cannot bid on jobs because of a lack of space, the low number of workers and/or their level of functioning, a lack of sufficient warehouse space, or a lack of equipment needed for the job. Bathroom facilities are not adequate for the large number of employees in wheelchairs. A lack of supervisors or other assisting staff, as well as space and layout limitations, mean that supervisors spend much of their time moving inventory supplies from warehouse to production space.

This workshop has the best supervisor-employee relations we observed during the project at any of the workshops. The management style is worker friendly, and interaction among workers and between staff and workers isone of the best among the shops. Management is committed to transitioning employees who wish to pursue competitive employment in the community. This workshop has one of the larger waiting lists among workshops.

Considered separately, this workshop needs a new facility. Such a move would make the most sense if it involved the expansion of the number of employees overall and an increased integration of higher functioning individuals. The second factor would provide increased flexibility for management in contracting for higher-end, that is to say better paying, jobs. Coupled with an increase in the use of automated processes, all workers could be benefited.

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[1] One workshop was not included in this summary. Less information was available from this facility than the other workshops. Information on employees was sketchy and incomplete. Limits were placed on observations of some work crews during site visits. The manager and board of the workshop decided not to provide any information on contracts and customers, nor to permit the distribution of the questionnaire intended for supervisory staff. These restrictions lessened our confidence in performing an adequate assessment of this workshop or in evaluating its options.

This workshop currently has a waiting list of 28 consumers, 15 of whom are county residents. Combined with its present workforce of 48, they represent a potential workforce of 76. Several options are available: 1) At a minimum, provide support for the workshop to hire another full-time supervisor and move to another building with adequate rest rooms. 2) Buy or lease a larger facility capable of handling a workforce of 70-80 employees. 3) Utilize an existing workshop space, such as ITE, were that workshop to be relocated or merged with another. 4) Merge with another shop and expand the number of employees, and buy or lease a larger facility to accommodate this larger workforce. Despite the fact that in any such merger Workshop 1 would likely be the smaller of the two enterprises, the key strengths of this shop, some of which have been enumerated above, argues for it to be the lead organization.

Workshop 2. The governing board of this workshop organization operates two facilities. They are referred to here as Site 1 and Site 2.

Site 1. This facility operates without a business or marketing plan and without a strategic plan. Nonetheless, it generates more sales for the size of the building and higher hourly wages for employees than any other workshop in the county that does not operate in an industrial building. The physical structure of the workshop is a major impediment to operating at a more productive level; it impacts the size and nature of contracts that can be entered into. At the same time, the limited amount of active marketing engaged in has resulted in periodic slow downs in productive activity and has not allowed the space, limited as it is, to be optimized. Similarly, the workshop has operated with a limited and outmoded computer system which has impacted the entire operation, including planning and the timely assessment of profit centers. . (The workshop manager believes that this situation will be corrected with the implementation of new systems provided by the PLB and partially funded by DESE.) Although the workshop has established strong ties to the community, this has not been a major advantage in obtaining sizable contacts. The workshop is located in _____, a desirable part of the county, and the property, which encompasses nearly an entire city block, is quite valuable. Unfortunately, the property has not be appraised recently and its current market value remains unknown. The staff here is the most experienced, and they have the lowest and most evenly distributed workload. Finally, an important characteristic of this workshop is the worker-friendly atmosphere engendered by staff, the most impressive group we encountered among the seven and a tribute to the workshop manager.

Site 2. This is the most crowded work facility of all the workshops. Partially as a result of this, and because of a strongly task-oriented approach to management, this workshop squeezes more out of its production space than any other. This is the case despite operating (like its sister, Site 1) without a business plan or a very active marketing program and, as one consequence, spending more time than need be on low-end fill-in jobs. Some staff here reported spending nearly all of their time in production rather than in employee supervision, and a number expressed a high level of work-related stress. West's staff has the least experience among the workshops.

Because the two workshop sites are organizationally linked, any consideration of new and different physical facilities, to alleviate the crowding at Site 2 and the structural inefficiencies at Site 1, should include both.

The opportunity has been present for some time for this combined workshop operation to act unilaterally and not wait for the County Board—at least to examine options and assess the feasibility of alternative courses of action. This has been done only in the most generalized way. Combined, the two facilities are worth well over $1 million dollars, and this represents a sufficient base for serious planning and exploration, at the least. These workshops could put themselves in a stronger position by more active strategic planning.

Whatever the future of this workshop, present management should make a commitment to developing a business plan with significantly increased attention paid to marketing. Even in its present location, with all the limitations of the facility, Site 1 and its employees would be significantly benefited by a commitment to more active marketing, to ensure a steadier stream of more profitable contracts. In addition, while the close relationship to the community has not paid dividends in frequent and large work contracts, this shop is in the strongest position of any to develop community-based, mobile work crews. Such units would relieve some of the space stresses of the building and possibly allow some workers to be moved from Site 2, and they would undoubtedly be welcomed by employees.

Merging the two workshop sites into a single, industrial facility would be preferable to operating the two separately as now. Few advantages have been identified by management in operating in different locations. Unification would allow for a more streamlined staff with less duplication of effort than is now the case. The blending of staffs might have other advantages, including increased wages and quality of life of employees—if the emphasis on the bottom line and the focus on efficiency and production at Site 2 could be brought to Site 1 but mellowed by the more worker-friendly attitude of Site 1.

Workshop 3

The manager of this workshop, of all the workshop managers, expressed the strongest view of the value of automation and its impact on employee wages. The purchase of the automatic balloon folding machine was a risk that has paid dividends to the workshop, and workers vie to be on the team that uses it (a matter of status and a reflection that some jobs are perceived by employees as nearer to the types of jobs people have in the competitive labor market).

Fully half of the supervisory staff at Workshop 3 have had previous workshop experience. Most have had prior training working with persons with disabilities, and all have received such training at Workshop 3. As at a number of workshops, supervisory staff reported spending a considerable amount of their time engaged in production work rather than supervision, some up to 90 percent of their time. Some staff report high levels of job stress and, as at all workshops, supervisors view themselves as poorly paid.

Workshop 3 is a crowded work environment, second only to Workshop 2—Site 2 in this regard. It is the only facility of the seven that was built as a workshop and which could be operated more efficiently with fewer employees, closer to what was originally envisaged for it in the middle 1980s. The facility could be also be made more efficient by expanding the number of docks, but this could come only with a considerable investment and is hard to justify. Like most workshops, the marketing focus at Workshop 3 has pri-

marily involved nurturing current customers, with efforts to expand the base limited to slower periods. The manager of the shop is amenable to merger with another shop if this were in the best interest of the two facilities and their employees, and/or to an arrangement in which a different, larger building were shared with another workshop.

Another alternative that may be available for this workshop, and one that should be considered by all, is working in a customer's facility. Long-term contracts are required for doing so, and there are many examples in the literature. Doing the work in a customer's plant has a number of advantages. For the customer, it can decrease costs because the material does not have to be shipped and picked up. A wary customer may also be able to satisfy concerns relating to quality control. For the workshop, it is a way to reduce overcrowding in the facility and improve efficiency by the better use of space. If this model were pursued sufficiently, it could mean replacing the need to find and pay for larger facilities with a situation in which the customer is paying for the overhead. For the worker, it would mean working in a more normal and more integrated work environment, with additional job-related status as well.

Options available for this workshop include: 1) reducing the size of the workforce; 2) relocating jobs in customers' facilities, and adopting a "workshop within industry "model;" 3) converting some warehouse space to production space, adding a dock and using more trailers for warehousing material; and 4) selling the shop and merging with another workshop in a larger facility in the north county area.

Workshop 4

Workshop 4 is the largest of the county workshops and operates in a facility that some view as a model to be envied. This workshop also operates with a strategic plan. Historically this workshop has been among the more willing to see itself as part of a county service and support system for persons with developmental disabilities, and it has been amenable to working out new relationships with community agencies engaged in supported employment. At the same time, management at Workshop 4 has a strong commitment to operating the shop as an effective business and has pursued new ways of expanding its potential. It makes significant use of trailers for the storage of inventory material and leases two off-site warehouses for its contract shipping business. The workshop has recently installed a custom management information system for tracking its procurement, pricing, and production activities. This shop is strong both in the rational approach it takes to the business side of the enterprise and to its openness to new workshop models.

Judged by most of the indices used in this report, Workshop 4 operates one of the more efficient and productive operations in the county. Sales per employee and per square foot of facility are the highest among all shops. Employees here average the highest wage. At the same time, this has come at a price paid by staff, which expressed a high level of stress, along with dissatisfaction with the manner of shop management. The ratio of employee per supervisor is high and made higher by the involvement of supervisors in production. As in all workshops, the level of supervisor pay is low and persons hired in these jobs have had little or no prior experience working with persons with developmental disabilities. Emphasis in the shop is on production; this is stressed to supervisors and it shapes their interactions with employees. In general, employees are not trained for a variety of jobs but tend to stay on the same jobs for extended periods of time.

Moreover, the shop's statistics demonstrate some of the basic characteristics of the current workshop model. For every $1.00 in public support received last year, Workshop 4 workers received $.57 in wages. This was the best ratio in the county, but one that shows that despite the fact that workshops operate as businesses, public investment in them is not leveraged to produce an increase in wages to workers.

Alone among the workshops Workshop 4 has hired laborers (8) to work a second shift to maintain production. Since the overall cost effectiveness of all workshops is curtailed by the short, six-hour work day of employees, Workshop 4 provides a possible example for others in this regard. This further suggests the possibility of adding a second short shift of employees with disabilities (e.g., from 3-6 p.m.) to increase cost effectiveness and enhance production, and to provide at least part-time employment for some waiting-list consumers.

Workshop 4 suffers from a dilemma. The shop itself is crowded at its present level of workers. It could operate more efficiently and probably more safely with 180 workers than 200. At the same time, its current level of production has left staff asserting the need for more workers to keep up. The production process here as everywhere could be made more efficient, but the dilemma would persist.

In interviews with the manager of Workshop 4, three options for the future emerged, the first specific to this workshop, the other two with broader implications. 1) Construct a new warehouse facility on workshop property on the side of the present structure. This would reduce the need to warehouse in the main building (and in off-site facilities) and provide more space in the main building for production. 2) Implement a new workshop model—closer to what is sometimes referred to as an affirmative industry—with an integrated workforce, composed partially of workers with disabilities and workers without disabilities. This change in the workforce coupled with an increase in automation could significantly improve production and produce a situation in which employee wages were positively impacted. 3) Convert the workshop into an integrated and expanded multi-function operation engaged in a broader set of employment activities and services, including supported employment. This workshop, like all workshops, has ties to many business and industries throughout the county, many of them quite different from the types of businesses that tend to serve as sources of supported employment through community agencies. In addition, the location of Workshop 4 in the heart of west county would seem well situated for expanding community employment opportunities for the people served through the PLB.

Workshop 5

The workshop has a contract to clean the ink rags used by newspaper printers. This job, for an important customer, has given all workshops good publicity from a source important for public relations reasons. The social environment at this workshop is qualitatively higher than some other shops. The atmosphere is generally relaxed, as is the management style.

Like a majority of workshops, Workshop 5 has no written mission or goal statements, no business or marketing plan, and no strategic plan. Management of the shop has changed frequently in recent years, and the current manager has limited experience either in running an industry or in managing a workforce. Nor are the staff knowledgeable in how to market the workshop effectively. In this, it could be argued, they are not unlike

most shops. But at Workshop 5 this has led to laying off workers when other shops are suffering from overcrowding.

Employees at Workshop 5 are very poorly paid, even though wages here as a percentage of total expenditures are the second highest among the county workshops. Sales revenue generated per square foot is the lowest among the seven. The quality of work done, in the assessment of other workshop managers, is often poor. This is a reason cited for work not being referred to this shop that cannot be done by another and for Workshop 5 not being used as a subcontractor on larger jobs.

The building, a store front, is not conducive to an industrial operation. (The fork lift, for example, cannot get in and out.)

North St. Louis County does not need four sheltered workshops. The best alternative for this shop is to close it and move the employees to other shops or to competitive work in the community.

General Points

It is clear at the present time that all workshop managers have high expectations of a substantial increase in funding from the PLB and support for new and/or expanded facilities. Given current realities, however—the aging nature of the workshop population and the increase in the age of new hires, the slowing growth rate and fertility rate in the county, the introduction of transition planning in the Special School District with a corresponding increase in community-based and integrated vocational experiences as part of the curriculum, and the offsetting of current waiting lists by workshop employees who would rather be working somewhere else—one is left with the question: Where are all the new workers for the expanded, sheltered facilities going to come from? And would not the expansion of some of the facilities mean the inevitable closing of others? In fact, longer-range system-wide planning may need to take into account a probable thinning stream of potential workshop employees, not an expanding one.

Nor is it at all automatic that simply expanding facilities and replacing storefronts and schools with industrial settings would have a significant impact on employee wages. The current DOL formula links employee wages to an employee's capacity to produce. Expanding the current model might allow for hiring additional workers but not necessarily an increase in wages. Employee wages can be increased in a limited number of ways, increased automation being the most obvious, and this could be introduced in most shops now. Furthermore, the level of automation currently is not correlated with either the size of the workshop or its physical layout. Workers, whose strongpoint is not their physical dexterity but whose income is tied to it, have the most to gain by automating industrial processes, which proportionately will enhance the production of these workers more than any others. But the level of automation is a management and production-based decision and not one that can be expected to follow simply from the size and nature of a facility.

Managers believed that a larger, better configured space would allow them 1) to bid on larger and more profitable contracts and 2) to operate more efficiently and cost effectively. In this way, it was believed, employees would realize an increase in wages. There is, however, no direct or necessary relationship between profitability or operational efficiency and the wages of individual employees. None of the workshops has a profit-sharing mechanism in place, which might be a mechanism of linkage, or a plan for one if facilities were expanded. Moreover, current data suggest that profitability and efficiency

are not straightforwardly related to space. And management and marketing skills are critical intervening factors. Sheltered workers will always have their salaries impacted by the managerial and marketing skills of workshop managers, and a larger or better proportioned facility will not in itself cause these skills to improve. Moreover, a larger workforce and increased overhead will put an added premium on these skills. Managers who now often must rely on low-paid, fill-in work to keep employees busy would find themselves under increased pressure to procure a steady flow of productive contracts. Moreover, available evidence suggests that the percentage of gain from any increased profitability that tricles down to the employee is likely to be relatively small—a small increase on a base that is already very low.

There is a Catch-22 about planning for the future of sheltered workshops from the perspective of employee wages. The more emphasis that is placed on employee wages the more problematic they appear. In 1994, the last year for which we have comparable wage data, the average hourly wage in St. Louis County of sheltered workshop employees was one-third that of individually supported workers with community-based jobs. The current average hourly wage of sheltered workers is still just 37 percent of what community-based workers were making four years ago. In the meantime, data reported in the literature continues to document 1) that level of disability is not a barrier to competitive, community work, 2) that workers can obtain community-based jobs without prior preparation or training, and 3) that the more integrated the worker and typical the employment setting the higher the wages.[2] This suggests that the best way to improve the wages of sheltered workshop employees is to transition them into jobs in the community. This is not to argue against the existence of sheltered workshops but to reiterate that they cannot be justified on the basis of economic return for the worker (and, *a fortiori*, it should not be assumed that their future can or should be hitched to that star.) Short of this, the surest way to ensure that any additional public funds provided to sheltered workshops resulted in an increase in employee wages would be simply to subsidize their wages directly, to ear-mark additional funds for wages only. No other course would yield at least a dollar-for-dollar return for consumers.

The economics of workshops further suggests that were a significant new round of expansion to be funded by the PLB, there would also exist a secondary need for a corresponding increase in ongoing operating subsidies as well. It is problematic whether increased sales would be able to offset increased operating and overhead costs. Only two of the current workshop managers have been thinking in any concrete way about the future. Most workshop planning is ad hoc in nature. The lack of business plans and marketing strategies hints at the effects of relying on a subsidized operation with a repetition of familiar work activities from a set of more or less reliable customers.

In a majority of workshops the state of information and computer systems is quite limited. The difficulty many shops had in providing requested information for this project mirrors the limited assistance current computer systems provide in effective workshop management and marketing. Managers who do not engage in strategic planning do not require the tools of planning; those who do have been updating their computer systems.

Arguably, simple expansion would exacerbate one of the problems with the current workshop system: too much of the same thing. As someone said, “It’s all vanilla.” The workshops currently provide a very limited set of work activities in essentially iden-

[2] See Mank, 1998.

tical work settings. There are many other workshop models to draw from (that include service-based jobs, mobile crews as a permanent component, workshops within industries, and transition-focused shops). Consumer interests, capabilities, and ambitions could be better matched if there were more diversity in the system, not simply more of the same kinds of slots. The justification often given for the current system is in terms of worker and family preferences. However, there has been no person-centered planning for these consumers and no periodic assessment of capabilities and interests to support such claims.

A tension exists in the workshop system between the demands of production, on one end of the continuum, and the well-being of consumers on the other. Although sheltered workshops exist for the benefit of consumers, this was not always easily observable to the shop visitor, except at Workshop 1, given either the strong emphasis placed on production or the scant attention paid to quality supervision and employees' job preferences. The average employee-to-supervisor ratio, high in itself, masks the fact that there are supervisors at all the shops who spend much of their time in production, with a number who are engaged full-time or nearly so in production. This limits their ability to supervise, train, assist, and simply interact with employees—as does the stress placed on them to meet production quotas.

The quality of supervisors' interactions with employees also undoubtedly suffers from the fact that few supervisors come to their workshops with either training or previous experience in working with persons with developmental disabilities; in fact, most had little or no prior experience in supervision or production at all. This is a direct outcome of the low pay offered supervisors. Despite the fact that they are the staff most closely and regularly involved with employees, the pay is inadequate to attract individuals with training (and presumably interest) in developmental disabilities or any social service field, and it appears to be inadequate to keep those hired for very long in the workshop or even in this field of work. This presents another dilemma for the workshop system. Both employees and the staff which supervises them are paid poorly. Where should increased revenues be directed?

Emphasis on production impacts the quality of work life for the consumer. This emphasis shows up not only in quotas and the amount of time supervisors were diverted into production themselves, but in the level of attention paid in the shops to employees' work-related needs. In no shops were employees regularly rotated among jobs. Further, there was a much greater likelihood of workers being moved to different jobs for the sake of production than for the sake of the workers themselves at all of the shops. Indeed, at some shops, employees stayed not only on the same one or few jobs, but with the same supervisor and locality within the shop on a more or less permanent basis. Workers nowhere were more than occasionally asked about their job preferences, and only one shop (Workshop 1) had regular and moderately frequent meetings in which employees could express their preferences or offer feedback about the shop. For the consumers, then, workshops essentially offer a sameness of experience—the same work, dutifully and quietly done, day after day, rather than the variety of work and the experience of learning that comes from being trained in and doing a changing array of jobs.

Options for Workshops as Stand-Alone Operations

A number of factors emerged from examination of the workshops as separate operations that could increase their individual cost-effectiveness and profitability, relieve overcrowding, improve the quality of work life for employees with development, and, in some cases, have a positive impact on worker wages. (In a number of areas, technical assistance (ta) would be required, at least for most workshops.)

1. Improve cost-effectiveness, efficiency and profitability
   - develop and utilize business plans, (ta)
   - place greater emphasis on marketing, including analysis and planning, (ta)
   - upgrade computer systems utilize computer software for pricing, procurement and tracking production and contracts, (ta)
   - increase automation, (ta)
   - reassess work flow and process design of larger contracts, (ta)
   - extend the work-day,
   - adopt a work-in-industry model and engaging in more off-site production,
   - integrate the workshops (including workers without disabilities),
   - utilize more participatory management techniques to obtain feedback from staff.
2. Relieve overcrowding
   - make greater use of mobile crews,
   - pursue work-in-industry opportunities and other off-site jobs, (ta)
   - place more emphasis on marketing to expand opportunities to contract with companies that place fewer demands on warehouse space, (ta)
   - reduce the workforce by transitioning those who would prefer to work elsewhere,
   - establish working relationships with community agencies engaged in employment services and adopt a more transition-based workshop model,
   - engage in community-based placement for individual employees,
   - institute a blended workshop model and engage in supported, community-based employment. (ta)
3. Improve the quality of work life for employees
   - broaden the types of workshop jobs available to consumers, (ta)
   - move some jobs out of the workshop altogether (through mobile crews and enclaves in industries),
   - adopt more employee-friendly management practices, (ta)
   - encourage more interaction among employees and between staff and employees in the work setting, on breaks and before and after the work day,
   - develop recreational activities at the work-site for breaks and before and after work,
   - play music in the workshop (give workers a say in type of music played),

- institute a profit-sharing plan to ensure workers benefit from any improvements in efficiency and profitability,
- increase automation to improve worker productivity and wages, [ta]
- hire more supervisors and reduce their involvement in production, so that they can offer more attention and provide more training to their employees—while relieving the high levels of stress and overwork that many supervisors report.
- offer supervisors pay commensurate with the importance of their work, in order to attract individuals with the background and interest necessary to offer quality assistance to those they supervise.
- provide continuing training (on the job or at other institutions) to supervisors, to allow them to broaden their knowledge base and sharpen their skills.
- obtain feedback from workers on a regular basis, as a group and individually, on ways to improve the quality of life at the workshop,
- eliminate the current practice of segregating some sheltered workers (those with multiple disabilities, such mental illness and physically disabilities in addition to intellectual disabilities, who now primarily must work at one of two workshops),
- emphasize the centrality of the employees to the mission of the shop, by developing and updating consumer-specific work plans and by eliciting and respecting the feedback of consumers in regular employee-management meetings.

These options are available to individual workshops. Other options are available that involve coordination among workshops and consolidation of the workshop system into fewer facilities.

Issues related to major capital investment, involving the building or leasing of new or larger facilities, or the substantial modification or expansion of existing facilities, should not be considered within the context of the workshops as an employment system, but preferably as a subsystem within the broader service system for persons with developmental disabilities in the county.

Collaboration

All the workshop managers describe the relationship among workshops as friendly and cooperative, a "close-knit group" as one described it. Information on contracts is passed along from time to time, and occasionally subcontracting arrangements are entered into. Nonetheless, it is clear that, for the most part, the workshops are playing a zero-sum game with each other; a game in which there are winners and losers. They are unlikely to pass along customer information if they fear the other shop may "steal" the customer away from them or bid against them for work with this customer in the future. (Most would not share customer information with us for this study for fear it would leak out.) They are competitors, and this shapes the nature and extent of their relationship in the end.

Consortia. There are models of workshop consortia across the country and in other countries that have potential to improve the efficiency and cost-effectiveness of a set of workshops, and the potential is generally recognized by the county workshop man-

agers. There have been a number of areas suggested by individual managers in which they could form consortium arrangements for the economic benefit to all.

- The type mentioned most often involved a buying consortium in which shops could pool their needs for production-related material (shrink wrap comes to mind), pallets, office supplies, health insurance, and maintenance services.
- The sharing of warehouse space would have a direct effect on a problem plaguing them all and relieve the pressure on overcrowded production space.
- One workshop recently invested in customized contract and product tracking computer software. This is something that could benefit all shops and, given the similarities in procurement and production, could have been a joint venture.
- Use of common software would also allow for an Internet-based information system for sharing information on contracts and subcontracting possibilities (along the lines of the European workshops described in Robinson, 1997; see previous section).
- Increased collaboration could also include the sharing of business operations (including accounting and personnel), staff training, marketing and market research, as well as production expertise, and the development of increased shop specialization to reduce inter-shop competition.

The Stout Vocational Rehabilitation Institute at the University of Wisconsin has focused a considerable amount of attention on sheltered workshops over the years. It has assessed three types of workshop consortia. They are:

1. The referral consortium model (in which there is a cooperative agreement to refer jobs beyond the production capabilities of one's own organization);
2. The general contractor consortium model (in which there is centralized control that allows joint bidding and contracting for larger jobs); and
3. The facility contractor consortium model (in which the initiating organization retains control of the contracting opportunity and supervises the quality of the product or service provided).

Of the three, only the last was seen by Stout as having a great deal of potential, because facilities, despite attempts to act cooperatively, remained essentially competing entities. (See Smith & Russo, 1989.)

One interesting local model of collaboration is the Cooperating School District of St. Louis. The various independent school districts realized long ago that many economies and improved service could be obtained if they pooled certain educational research, training, and miscellaneous information services. Teachers and administrators, employed by their own school districts, serve as consultants to the CSD and provide contractual services to other school districts, employee groups, and other organizations. The CSD has become a think tank for St. Louis area educators, conducting seminars and other programs of interest throughout the year. Instead of each school district competing with each other, they collaborated and generated a win-win outcome for all.

Consolidation. The only way to ultimately deal with the problem of competition and yet gain the advantages of cooperation is consolidation, which could involve a subset of county workshops or all of them. From the point of view of the service system and the consumer, there is only one workshop now, one model with a narrow range of pro-

duction activities. But it has none of the efficiencies of a single operation, in staffing, or shared resources. In fact, through the bidding process the work of employees is devalued and adequate pricing becomes problematic in the need to maintain steady procurement. To take a practical example: Many of the shops do work for a particular company, and many express various problems with these contracts. Separately, they have limited leverage in dealing with this company. In fact, by bidding separately they tend to keep the price lower than it might otherwise be. Combined, whether as a single consolidated company or as a single buying and/or bidding consortium, they might be able to improve this situation and this contract.

In a consolidated system, an organizational structure with three facilities, rather than the current seven, makes more economic sense; for example a north county site, a south county site and a west county site. The Workshop 4 facility is acceptable for industrial purposes and the option of adding warehouse space here could be feasible were this shop part of a consolidated workshop system with fewer plants. Consideration could be also be given to using this location (west) to attempt an integrated workforce model and/or a integrated services model, combining administration of sheltered and community-based employment at a single organizational entity. As for the other two, selling existing buildings and grounds to provide a capital base to acquire new facilities is most feasible as a long-term plan for sheltered employment. Consideration should also be given to expanding the model implemented in these locations, incorporating aspects of an integrated services model (blending community and sheltered work).

Transportation. A key consideration in any change in the location and number of workshops is the impact on the cost of transportation. Overall it may be assumed that reducing the number of facilities (for example, to three from the present seven), has to drive the cost of transportation higher, since the average distance to work would be expected to increase. However:

1. As has been seen (Map 2), it is not now the case that consumers work at the facility nearest to them, which inflates current transportation costs.
2. If attention were paid to locating the new facilities in sites more easily accessible to a greater number of consumers via major highways (such as Workshop 3), actual drive time could be reduced.
3. In addition, were emphasis placed on adopting off-site, workshops within industries, more employees could work closer to where they live than they do now (particularly if workshops avoided double transportation—first to the workshop, then to the work site—which has occurred in the past when workshops periodically attempted off-site enclaves).
4. Finally, more emphasis could be placed on transitioning workers to community-based jobs, further reducing the total number of consumers in workshops and in need of long-distance transportation.

In addition to reducing the cost of transportation, the third and fourth points above would reduce the size of facilities needed for workshops, thus also lowering capital outlays.

Planning

The bottom line is that a more rational system needs to be introduced. By more rational, we mean developing an organizational structure that:
centralizes and/or consolidates all workshop operations or, at a minimum, key support services,

- *devotes more attention to marketing and new production design possibilities,*
- *provides more diversified employment experiences to consumers,and*
- *commits more resources to transition existing workers from sheltered workshops to more integrated jobs in the community.*

The first step involves developing a plan to reorganize the independent workshops into a coherent operating system. In all sectors of the economy, from private companies to school districts to the local parish, marketing, research, information systems, and human resources are functional areas that usually are successfully centralized. Of course, successfully is the key adverb here, and that must translate into economies of scale (cost savings).

The PLB can best facilitate these changes, even in the face of anticipated resistance, by involving sheltered workers, their families, and workshop board members, in addition to workshop staff, in the planning and reorganization process. When it is clear to current stakeholders that the changes considered all address important objectives, when managers and supervisors understand that they have more to gain working to make the changes than by opposing them, the transition to a more rational system of sheltered workshops will have a greater chance to be smooth and successful.

The general lack of business and strategic plans can become the first change agent—the vehicle by which the PLB and the workshops begin to hammer out a new organizational structure. It is imperative that there be a systematic review of mission, goals and objectives, plan of operation, and evaluation.

The PLB and the workshops can obtain planning and technical assistance from a well-established network of business internships through local colleges and universities, either through each college's academic departments or the job placement offices. From the community college system to Washington University, dozens of student interns or apprentices work for free or for a nominal wage and provide much needed help to businesses and government agencies. Similarly, a cross-workshop business advisory group could be assembled, with specialists in marketing, market analysis, procurement, information system design, production design, etc. to assist.

It is also imperative that the system of the future not be a victim of its past, but seek out new operating modalities. Performing contract services on site at the customer's place of business is one example that accomplishes multiple objectives: it expands the set of occupational activities, including service as well as production activities; it offers the cost effective use of another company's facilities; it reduces the level of capital and operational subsidies required, freeing them to fill other needs; it introduces the potential to draw on natural supports in the workplace; it provides a more normalized, less artificial, and more integrated work environment; it increases the likelihood that the consumer will

perceive himself or herself engaged in work valued by the community;[3] and it introduces greater prospects for transition into individual, competitive jobs.

The second step (that is, second conceptually although not necessarily temporally) involves planning for the full integration of workshops as a subsystem into the broader service system in the county. The current distinction between and compartmentalization of workshops and community-based supported work is artificial and counter-productive. For the service system to operate efficiently and effectively, and for consumers to be well served, the Berlin wall that separates these service sectors, and feeds competition and creates distrust, should be torn down. Were this the case, workshops could become, and be more generally recognized as, more relevant components of the service system—where consumers could work while waiting for community-based jobs to become available or as a temporary safety-net when particular community jobs or plans unravel; where consumers can experiment with different kinds of occupational experiences; where consumers can work part time while going to school, while engaged in community volunteer work, or while holding down a part-time community job; where consumers and family can test community integration cautiously through work crews or enclaves; where consumers can work side by side both their peers and workers without disabilities and, through profit-sharing, be properly compensated; and where consumers who have worked for years in a sheltered environment can choose to remain in a humane, friendly work setting.

One employment model that becomes possible, when old categories are eliminated, is one that places all the emphasis on the consumer, rather than on the intervening structure or system of employment, and expands the concept of work to develop better fits between the job and the individual's interests and capabilities. This could involve directly subsidizing the wages of the consumer particularly in situations in which the employer cannot pay his/her salary or where a job in the traditional sense does not exist: such as working as an assistant in a day care center or as a greeter at the Science Center. Many possibilities that would not be feasible given the current structure of the employment system would become opportunities available to a consolidated system, particularly were the system integrated into the broader service system in the county.

Planning at the system level will require the involvement of a number of key participants. This includes:

1. Consumers themselves and their families. (This assumes the introduction of person-centered planning for all consumers, including those in sheltered workshops.)
2. Workshop management and boards. (This would require an executive, advisory committee with representatives from each workshop board.)
3. Representatives of DESE. (Their involvement is necessary to address issues of state agency policy and the possible waiver of some current state regulations that may inhibit system flexibility and consumer choice.)
4. State and local representatives of the Division of Vocational Rehabilitation. (This agency likewise is in a position to facilitate or restrict systems change and consumer choice);

[3] Research indicates that a consumer's level of self-esteem is most affected by the degree of importance they feel the general public ascribes to their job. (See Dick & Shepherd, 1998).

5. Representatives of community agencies which provide both supported employment and residential and support services. (Essential for integration.)
6. PLB staff and board, including members of current Employment Services Steering Committee. (Plans for a comprehensive, integrated employment system which have been underway for some time at the PLB should include consideration of the role of the sheltered workshops in the future service system in the county.)

Planning for the future of the sheltered workshops in St. Louis County should be done incrementally through a series of phases. It should include the two steps discussed above—consolidating the workshops and integrating them into the broader service system in the county—and involve representatives of the groups listed above. And it should be carried out in conjunction with other ongoing system-level planning at the PLB (for example, the work of the Employment Services Steering Committee). The first phase of the planning should itself be utilized to articulate and define the planning process, including its goals and subsequent course.

We would recommend that among other considerations listed in this report, and considerations that will be brought to the planning table by participants, that planning participants consider the following activities during the initial planning phase.

1. Contract with an independent assessor to conduct a private interview with each workshop employee, and as appropriate, his or her family, to develop at least a rudimentary person-center plan relating to employment preferences and to obtain a firm number of workshop employees with an unambiguous preference for remaining in their shop.
2. Establish a search committee of prominent county residents to determine whether a suitable facility or its use could be obtained *gratis* or at a sub-market value price.[4]
3. Establish an arrangement with the Special School District to obtain on an ongoing basis information on the number of students leaving the system each year and their employment preferences as reflected in their transition plans. Integrate this information into a full consumer service data base accessible via the Internet to facilitate the coordination of services and on-going system-wide planning.
4. Consider, at least as a short-term step, establishing a process for providing financial incentives for workshops to transition workers to competitive community employment if consumers express a preference for this, even on an experimental basis.
5. Consider rectifying current inequities in wages paid to workshop employees by using a portion of any additional county funds allocated workshops to directly subsidize consumer salaries.

[4] An area to include in such a search would be the McDonnell industrial site taken over by Boeing.

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