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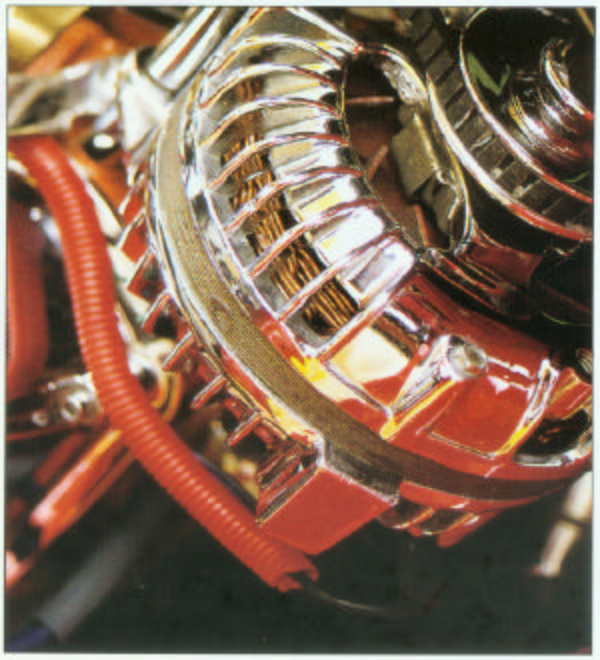
Defining Labor for the Auto Industry

The number one criterion — in fact, the overriding criterion — that a location must meet to qualify for an automotive assembly plant is labor. Labor is the driving factor when it comes to qualifying or eliminating geographical regions during a site location study for any type of a major project that will hire large numbers of employees. For an automotive assembly plant, the second-most important criterion during a site location study is air quality attainment status, and the third-most important criterion is competitor avoidance; i.e., not located within a defined distance of an existing competitor's automotive or truck assembly plant. But the overriding factor is labor — if a location doesn't have a sufficient labor pool to staff a plant, then it doesn't really matter what else it has.

But just what does "sufficient labor pool" mean? When a company or a site location consultant is evaluating labor within a geographic region, there are many subfactors that are identified and considered, typically in a very logical sequence, that will either qualify or eliminate geographic regions within the search area. The following provides an insight into some of the major subfactors and how they are evaluated as a part of a site location study.

Work Force Density

The first subfactor that is most common relates to population and work force density. As a general rule of thumb, the work force density should be at least 100 times greater than the number of employees projected for the new automotive assembly plant; and in some regions, it may even be defined by a higher ratio of up to 150 times greater than the number of employees. The projected number of employees is established based on a full buildout at the new location, not just the number of employees normally announced for the initial phase of production. All automotive assembly plants are designed and are planned for future expansions,



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and all project criteria are based on full buildout for future years. By way of example, if a plant is going to hire 2,000 employees for the initial phase and will add an additional 2,000 employees as part of a future expansion for a total of 4,000 employees, then the work force density within a commuting distance of the plant should be at least 400,000. In the latter case, the work force density would need to be at least 600,000. Note that this is work force density, not population density.

One of the variables in determining whether a region is qualified based on work force density relates to the definition of "commuting distance." The most commonly used criterion for defining commuting distance for large manufacturing facilities is to use a "90-minute drive-time" radius, although it is not uncommon for some mega-projects to use larger radii. Using "drive time" is preferred over "distance" due the potential impact of highway quality, traffic congestion, traffic patterns, and traffic corridors. Most companies will prefer locations where future employees (and suppliers) will have more than one highway route to get to the plant. This strategy minimizes the risk and the impact of a natural or man-made disaster that may block the primary highway route. Most companies will also take into consideration the impact that weather patterns in the region — in the form of ice, snow, heavy rains, high winds, and violent storms — may have on traffic movement. Any or all of these could have significant impact on driving time in many geographical regions.

However, point of fact is that many individuals will drive significant distances, or will make arrangements for short-term living accommodations, for the opportunity to work in an automotive assembly plant. It has been previously reported by Toyota in Georgetown, Kentucky, that its employees had a home of record in all but two counties within the state, and a similar condition has been reported by Nissan in Canton, Mississippi, where they have employees representing all but two counties within that state. This condition supports evaluating work force density over a broader area than normal for these types of operations.

Literacy and Graduation Rates

After a region has qualified in terms of work force density, the labor analysis is expanded to take into consideration multiple, additional subfactors for screening and evaluation purposes. Two of the more important subfactors include community literacy rates and percentage of high-school and college graduates within the work force draw area. Literacy rates are highly important relative to potential employees being able to read, write, and interpret written directions, procedures, and other actions required as a part of the job. Percentage of high-school and college graduates is impor-

tant in terms of the potential availability and trainability of an existing and educated work force. The higher the percentage of graduates at either level, the more likely the company will be able to recruit a trainable work force. Most companies will prefer regions that equal or exceed national averages for literacy and graduation rates.

Concurrently with the above, standardized test scores for high-school students are also reviewed. Some states and regions use the Scholastic Assessment Test (SAT) as their standardized test while others may use the American College Test (ACT) as a measure. Both are good indicators of the preparedness of high-school students to enter post-secondary education, and both are also good indicators of the probability of success of students after entering post-secondary education. From a prospective employer's view, both tests are also good indicators of the quality of education at the secondary-school level. However, one should be very careful in interpreting average scores posted by states and regions.

It is important to note and understand the administrative policy and implementation strategy that a specific region uses in compiling and posting test score results. Some states and school districts require all students enrolled in public schools at a particular grade level to take the test, whereas other states and school districts require only college-bound students to take the test. College-bound students typically represent the top 10 to 20 percent of students in a graduating class; hence, those states or districts that test all students and post a composite score of their results may appear to have lower performance scores than districts that test only college-bound students. It is always best for consultants and companies to request average standardized test scores for the top 10 to 20 percent of students in each area being evaluated to ensure a fair comparison between alternative locations. And it is a good idea for states and communities to have these comparatives available in advance of any request.

Trainability vs. Skill Requirements

One of the most misunderstood requirements related to labor and labor qualifications for an automotive assembly plant relates to the skill requirements needed for the work force. The work force profile for a typical assembly plant will be broken down among assembly workers, maintenance and technician workers, and management and supervision. Generally, about 70 percent of the work force will be assembly workers; about 20 percent will be engineers, technicians and maintenance workers; and about 10 percent will be management, supervision, and administration. For a 2,000-person work force, this would break down into 1,400 assembly workers; 400 technical and maintenance workers; and 200 management, supervision, and administrative employees.

In recruiting assembly workers, most automotive companies would prefer to recruit individuals with no previous automotive experience. While this may seem unusual, it makes perfect sense in establishing a new and positive work climate within the plant in terms of motivation, dedication, coordination, communications, and productivity. The types of skills and knowledge base that companies are seeking relate more to written and verbal communication skills, interpersonal skills, rationalization, flexibility, dexterity, and attitude versus any specific set of manual skills. Companies are looking for individuals who can be easily trained in motor skills, but more importantly, those who can work in an environment using positive attitudes, creative thinking, good judgment, and teamwork. Previous work experience is required, but typically from the perspective of attendance, reliability, safety, performance, and references.

The recruitment of engineers, technicians, and maintenance mechanics takes on a totally different approach. These positions typically require extensive formal classroom and laboratory training for basic knowledge and technical skills in selected fields, and then require intensive training for specific types of equipment and manufacturing processes. Much of the equipment and process-specific training is done through vendor, one-on-one, or on-the-job training. Companies will recruit individuals for these positions based on the knowledge, experience, and skill sets they bring to the job, but they do not typically require experience in automotive assembly plants. Most companies are seeking a combination of technical knowledge, technical experience, and interpersonal skills. It is assumed these candidates can be trained in equipment and manufacturing processes specific to the plant.

The strategy for recruiting management, supervisory, and administrative personnel varies among different companies. Most companies, however, will want many of these individuals to have previous automotive experience and, more specifically, automotive experience working for the same company in one of their other locations. Senior management and human resources personnel are most critical in the hiring and training of a new work force, and are normally transferred to the new location from an existing operation. These individuals become the catalyst in creating a positive work environment and in establishing the work ethic

and attitude of the plant. Management and supervision selected from outside the company are screened and evaluated very carefully for communication skills, interpersonal skills, work ethic, and previous work history.

These expectations, hiring strategies, and skill development requirements are taken into consideration when evaluating the labor pool for a region. It is easier to understand why "automotive experience" or "assembly worker experience" is not typically a criterion in evaluating labor qualifications within a region when one understands the above-discussed recruitment and training strategies. Trainability is much more critical.

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Job Growth and Job Losses

An important consideration in any labor analysis is the amount of job growth or job losses within a region by type of employment for both the public and private sector. It is also important to understand the underlying root causes of job growth or job losses. The dynamics of employment and unemployment within a region may have a significant impact on the ability of a company to recruit and hire a qualified work force. If the job growth rate, for instance, is greater than 2 to 2.5 percent per year within the defined draw area for potential employees, a new company could find itself in severe competition with other employers for new employees, especially those in key skill, management, or knowledge positions. A second consideration is whether a high job growth rate within a region may be contributing to employee turnover as existing local employees seek new or higher paying opportunities.

Similarly, a region that has experienced significant job losses over the previous short term may not necessarily offer a greater opportunity for hiring. Depending on the types of jobs previously held, the predominant wages paid, and the reason for the job losses, there may or may not be an opportunity for a new company evaluating the area. These factors must be evaluated carefully in order to understand the dynamics of the labor market and to determine their impact on recruitment and training.

Existing Business and Industry Interviews

The most valuable information collected during a labor study for a region is typically collected during existing business and industry interviews. Consultants or businesses conducting their own site location studies should interview multiple existing employers in different types of business and industry. The number of interviews conducted will vary based on the number of projected employees for the new project, the size of the work force in the region, the number of private employers in similar types of business, and the willingness of existing employers to meet with representatives of a prospective company.

Interviews should be well planned, but should be more interactive than directive. There are specific categories of information that should be obtained, but the manner in which the interview is conducted and the manner in which inquiries are made can make a major difference in the accuracy and usefulness of the feedback. Additionally, the evaluator should make it a point to interview employers who have been in the region for a fairly long period of time, as well as employers who may have recently located into the area.

The initial part of the interview should focus on the ability to recruit, hire, and train a work force; or, in the case of a longer-term employer, the ability to recruit and train replacement workers for turnover that may occur. The key points during this part of the discussion center on the availability of qualified candidates, the ability to successfully recruit candidates, the types of wages and benefits common to the region, and the trainability of the candidates after employment.

The follow-up questions should focus on the critical issues of turnover, absenteeism, and drugs in the work place. Drug issues should address pre-employment drug screening, random testing results, and whether drug paraphernalia is found on the company's property. These issues are critical in determining the reliability and retention of the work force.

Particular attention should be focused on productivity within the work force. Productivity indicators typically include turnover and absenteeism, but also include throughput, rework, quality, and out-put. It is always important to ask how productivity and quality at this location compare to operations in other parts of the country or other parts of the world.

Labor Relations

Labor relations is a highly important part of any labor market analysis for an automotive assembly plant, or for any business operation with a large work force. On the one hand, companies that have national labor agreements in place, and who know that they will have a union work force at any new location, should take the time to ensure that any state or community under consideration will be receptive to a unionized work force. On the other hand, any automotive company

that does not have national labor agreements in place, and that desires to operate in a non-union environment, must take the time necessary to ensure that the states and communities under consideration understand the importance of that labor position, and that they are supportive.

It is a fair question under either scenario for the consultant or company to ask whether the state and community will be receptive to its preferred labor posture if the company locates into the area. There are a number of states that will not be supportive of a large, union work force, and there are a large number of states that would be supportive.

Any labor analysis of a region should include the identification of existing business operations, private and public, that are represented by unions, the names of the unions, the number of years present, the number of elections held over the past 10 years (certification and de-certification), and the outcomes of the elections. A more detailed analysis may be in order depending on the outcome of the initial inquiry.

Understanding the labor market within a geographic region is a critical part of any site location study; however, it is paramount in an automotive assembly plant site location study. The above methods and processes provide an insight into how many of the labor market factors and subfactors are identified and evaluated, and why they are important in performing a site location study for any large project. Geographic regions could be eliminated based on the evaluative results of any one or any combination of the above factors. But it is only those communities and regions that score well on all of these factors that are allowed to move to the next level of evaluation.