

### Occupation Interest

Assemblers and fabricators are practical, interested in work activities that deal in hands-on problems and solutions. They can be intrigued by how things work, possessing an artist's vision and a technician's dexterity and know-how.

### A Day in the Life—Duties and Responsibilities

Assemblers and fabricators need a range of knowledge and skills. For example, assemblers putting together complex machines must be able to read detailed schematics. After determining how parts should connect, they use handtools or power tools to trim, cut, and make other adjustments to fit components together. When the parts are properly aligned, they connect them with bolts and screws, or they weld or solder pieces together.

Assemblers look for faulty components and mistakes throughout the assembly process. Such assessments help to ensure quality by allowing assemblers to fix problems before defective products are made.

Modern manufacturing systems use robots, computers, and other technologies. These systems use teams of workers to produce entire products or components.

Assemblers and fabricators may also be involved in product development. Designers and engineers may consult manufacturing workers during the design

### Duties and Responsibilities

- Reading and understanding schematics and blueprints
- Positioning or aligning components and parts either manually or with hoists
- Using handtools or machines to assemble parts
- Conducting quality control checks
- Cleaning and maintaining work area and equipment, including tools

### Profile

**Working Conditions:** Inside

**Physical Strength:** Medium to Heavy Work; Varies

**Education Needs:** High School; On-the-Job Training

**Licensure/Certification:** Usually Not Required

**Opportunities for Experience:** Internship; Apprenticeship; Part-Time Work

**Interest Score:** RCI

stage to improve product reliability and manufacturing efficiency. Some experienced assemblers work with designers and engineers to build prototypes or test products.

Although most assemblers and fabricators are classified as team assemblers, others specialize in producing one type of product or in doing the same or similar tasks throughout the manufacturing process.

**MORE INFORMATION****Accrediting Commission of Career Schools and Colleges (ACCSC)**

2101 Wilson Boulevard, Suite 302  
Arlington, VA 22201  
703.247.4212  
[www.accsc.org](http://www.accsc.org)

**Advance CTE: State Leaders Connecting Learning to Work**

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[careertech.org](http://careertech.org)

**American Technical Education Association (ATEA)**

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[www.ateaonline.org](http://www.ateaonline.org)

**Association for Career and Technical Education (ACTE)**

P.O. Box 718621  
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**Council on Occupational Education (COE)**

7840 Roswell Road  
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**National Career Development Association (NCDA)**

305 N. Beech Circle  
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Diesel technicians also use a variety of power and machine tools, such as pneumatic wrenches, lathes, grinding machines, and welding equipment. Hand tools, including pliers, sockets and ratchets, and screwdrivers, are commonly used.

Employers typically provide expensive power tools and computerized equipment, but workers generally acquire their own hand tools over time.

## **WORK ENVIRONMENT**

### **Immediate Physical Environment**

Diesel service technicians and mechanics work largely in garages and repair shops, which are typically well-ventilated and well-lit for maximum productivity. It is a physically demanding job as it can be greasy work that requires a lot of standing all day long, and workers must also frequently contort themselves into uncomfortable positions as they work on vehicles.

Diesel service technicians and mechanics frequently work with heavy parts and tools. As a result, workplace injuries, such as small cuts, sprains, and bruises, are common. Work hours for diesel service technicians and mechanics are often full-time, and the shops they work in can frequently be open 24 hours, meaning a variable or unusual work schedule is possible.

### **Human Environment**

Diesel service technicians and mechanics often share the space with others doing the same kind of work, sometimes working in teams to better deal with the heavy parts involved and get the job done faster. A shorthand language is possible in such situations; however strong communication skills (oral, written, listening) remain very beneficial when it comes to dealing with customers and expressing sometimes complex ideas about the machinery to these laypersons.

### **Technological Environment**

Technological requirements include an awareness of the largest to the smallest of details of how the various mechanical and electronic components of diesel-operated vehicles work. One major requirement of the job is the ability to use various handtools with dexterity and precision. Diagnostic tools are routinely employed in order to assess problems. Computer skills are also highly useful: among these are software skills including analytical and data base software.

- Have specialized training in food safety
- Pass a multiple-choice exam

The certification attests to professional competence, particularly for managers who learned their skills on the job.

### **Additional Requirements**

Managers who work for restaurant chains and food service management companies may be required to complete programs that combine classroom instruction and on-the-job training. Topics may include food preparation, sanitation, security, company policies, personnel management, and recordkeeping.

## **EARNINGS AND ADVANCEMENT**

Earnings depend on the size and caliber of the restaurant, whether the manager oversees more than one location, and whether the manager also owns all or part of the business. Median annual earnings of food service managers were \$59,440 in 2021. The lowest 10 percent earned less than \$36,630, and the highest 10 percent earned more than \$98,070.

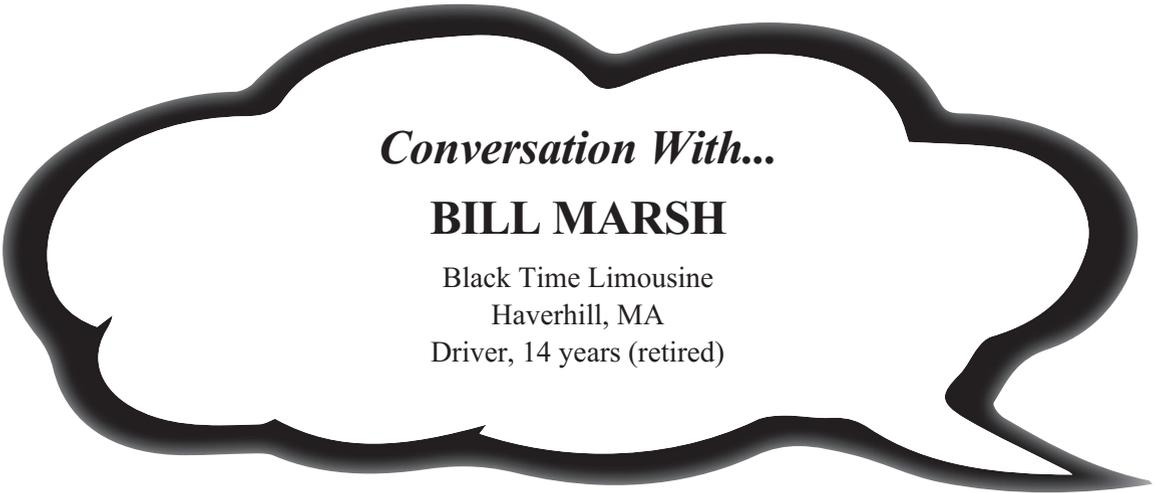
Food service managers may receive paid vacations, holidays, and sick days; life and health insurance; and retirement benefits. These are usually paid by the employer if the business is not self-owned.

## **EMPLOYMENT AND OUTLOOK**

Food service managers held 309,800 jobs in 2020. Thirty-five percent were self-employed. Employment is projected to grow 15 percent from 2020 to 2030, faster than the average for all occupations.

Much of the projected employment growth in this occupation is due to recovery from the COVID-19 recession that began in 2020.

Food service managers will be needed to oversee food preparation and service as people continue to dine out, purchase takeout meals, and have food delivered to their homes or workplaces. However, more dining establishments are expected to rely on chefs and head cooks instead of hiring additional food service managers, which should limit employment growth in this occupation.



## *Conversation With...*

### **BILL MARSH**

Black Time Limousine  
Haverhill, MA  
Driver, 14 years (retired)

#### **What was your individual career path in terms of education/training, entry-level job, or other significant opportunity?**

Most of my career I worked for a Japanese trading company in the logistics division, handling cargo shipped by ocean and air. I lost the job during an economic downturn in the Japanese economy. During my last several years with the company I was on the board of directors and set up meetings all over the country. As a result, I had a lot of contacts among limousine companies that I hired to drive executives, so I reached out to several of them in the Boston area where I was living at the time.

I drove for six different limousine companies over the course of fourteen years and ended my career driving for Black Tie Limousine. I consider Black Tie the premiere limousine service and was very happy there. My wife had gone back to her job teaching and my new job worked for our family.

#### **What are the most important skills and/or qualities for someone in your profession?**

You have to be a good driver, a safe driver. You have to be able to communicate well with people. You have customers that request you, so you develop relationships.

You also have to be dependable and get used to working off hours. It's not a 9-to-5 job. I drove a lot of executives to and from the airport and often had to be up by 3 or 5 a.m. Other drivers do a lot of evening events and are out late. Our limo drivers had to be at least 21 years old.

#### **What do you wish you had known going into this profession?**

Some companies fall short on safety compliance. You read some horror stories in the news, like the limo that caught fire on prom night. Luckily all the teens got out safely.

The best way to find a good company to work for is to ask the doormen at major hotels which ones they think are best. They get to know the limousine companies and drivers who come and go all the time. Ask a lot of questions.

**What are the most important skills and/or qualities for someone in your profession, particularly someone who decides to work overseas?**

Cultural sensitivity. Being able to know what you have to accept and where you have to stay strong. You need to know where your limits are, and how people operate. For instance, if you have a customer in Russia and he and his boss are in the same room, he won't tell you anything. He will defer to his boss. You need to be able to gain someone's trust.

For a lot of international jobs, U.S. companies want people who can bridge both cultures. Being a native English speaker certainly was a plus for me.

**What do you wish you had known before deciding to work abroad?**

If you are working for a U.S. company and they send you overseas, you need to know: is there a relocation package and, if so, what does it look like? How do I get back? Is it a one-way ticket or not?

Every year that you spend overseas, you are investing in that country's health care and retirement systems. If you want to go back to the U.S., it's important to understand how you can get credit for whatever investments you've made into those systems. You also need to know the tax implications before you go. I'm lucky because there's a double-taxation treaty between the U.S. and Germany. So, if I owe \$40,000 in taxes to the U.S. and \$50,000 to Germany, I can deduct my German taxes from the US taxes owed. On the other hand, Dubai, which has many ex-patriates because there is no income tax, isn't attractive for Americans because you still have to pay U.S. taxes on your worldwide income.

**Are there many job opportunities overseas in your profession? In what specific geographic areas?**

The tech sector offers a lot of opportunities. In the UK there's the M4, which is southwest of London. Paris and Munich are also booming. Berlin has a very, very vibrant startup scene. As with the U.S. startup scene, you need to be self-motivated, confident, flexible, and willing to take risks.

**Will the need for professionals in your career to travel and live overseas change in the next five years? What role will technology play in those changes, and what skills will be required?**

We are seeing a shift to a more multi-cultural career. You can be sitting in Detroit, your colleague is in Singapore or Beijing, and you work together remotely. Technology like Skype is really big. I have not had a work telephone for nine years. Collaboration tools are being widely used, like Microsoft Office. On a daily basis, I might be working on one chapter of a contract in Word and can see my colleague in Dubai concurrently working on another.

**What do you enjoy most about your job? What do you enjoy least about your job?**

I enjoy my diverse set of customers and projects. For instance, I have a couple of projects with football teams, who are now looking for technology to help them engage with their fans through the internet. We go to the stadium for meetings. Or I might work with a startup in Sweden, the government of South Africa, or a bank in Moscow.

I least enjoy that I am mostly supporting teams who are on the ground working directly with the customer on a daily basis; I'm typically called in to fix a problem.