

Toyota Motor Corp. and Toyota Group Companies outline efforts towards COVID-19

First of all, Toyota Motor Corporation and Toyota Group (Toyota) companies send their deepest condolences to people grieving the loss of family and friends due to the pneumonia and respiratory issues caused by COVID-19 around the world, and to those who are currently continuing to fight this illness. Also, Toyota expresses its heartfelt thanks and deep respect towards those making efforts night and day to help prevent the spread of the disease, including national and local governments, as well as the healthcare professionals that are working without rest to diagnose and treat infected patients.

Based on Toyota President Akio Toyoda's policy to be "mindful of the feelings of those in the midst of this pandemic, reach conclusions more swiftly, make prompt decisions, and take immediate action faster than ever focusing on safety and security as the highest priorities," Toyota will do what it can to help efforts on the front lines of treatment and in limiting the further spread of COVID-19, which has become society's biggest priority. Some ways that Toyota will help is by considering support measures from various angles by utilizing its global supply chain and utilizing its know-how of manufacturing and logistics in the fight against the virus. As such, the company and group companies will implement the following primary measures while being challenged with a different style of working due to measures being taken to prevent the spread of COVID-19.

On the one hand, through the spread of the virus, there is a concern regarding the impact over the mid- to long-term on the economy. While engaging in efforts to help suppress the spread of the virus and support the medical professionals on the front lines, the most urgent issues, Toyota also sees a need to be prepared for the recovery of economic activity following a return to normalcy. By working towards and improving its own organization while maintaining employment, the company will firmly advance its preparations with an eye on the future, pushing to contribute to the economic recovery and expansion by helping to recover the automotive industry, a key industry in both Japan and the rest of the world, as quickly as possible.

Below are some of the primary initiatives and efforts that Toyota will be making.

1. Support measures against COVID-19

The following measures include both items in the planning stage as well as some that have already been started. Toyota hopes for a recovery to normalcy as quickly as possible, and, in order to help that happen, is listening to the voices of its many stakeholders to determine how it can contribute, with the aim to do what it can during this crisis.

(1) Production of medical face shields (protective mask)

To help with the current shortage of medical face shields, Toyota will produce injection mold

and 3D-printed medical face shields. Specifically, Toyota's Teiho Plant (Japan) is preparing to produce injection mold medical face shields with an anticipated starting production volume of 500 to 600 per week. The company is also starting to evaluate the possibility of other group companies also joining in on the production.

(2) Work to help improve productivity of medical equipment manufacturers, utilizing Toyota Production System (TPS)

In response to a request from the Japanese government made to Japanese automakers through the Japan Automobile Manufacturers Association (JAMA) calling for an increase in production of medical equipment including ventilators, Toyota is working with medical equipment manufacturers to determine if its know-how of the Toyota Production System (TPS) can be utilized to help improve productivity. To do so, the company is creating a TPS support team, centering around Toyota Motor Corporation, and will immediately dispatch them to companies struggling to rapidly increase production of medical equipment. Currently, the company is coordinating with relevant parties including manufacturers on specific measures.

(3) Considering transportation support for mildly infected patients

For regions seeing an increase in people testing positive for COVID-19, centering mainly in Tokyo, Toyota is considering additional ways to help prevent the further spread of the virus within vehicles. Vehicles are used to help transport people from their homes to medical facilities or quarantine areas, and the company has started to consider ways to suppress the transmission of the virus from infected people in mild condition when using public transport such as its JPN Taxi.

(4) Leveraging Toyota's supply chain to assist in the procurement of hygiene products such as face masks

Based on the government's request to JAMA to help cooperate in procuring essential items, Toyota is making efforts to procure hygienic products that include face masks, personal protective equipment, and thermometers, among other items, leveraging its supply chain.

(5) Supply equipment that can be used by medical institutions

Aisin Seiki Co., Ltd. has begun examining the possibility of cooperation in the production of other equipment that may be medically necessary, such as makeshift beds for hospitals, disinfectant containers, and simple partition walls for use at medical facilities.

(6) Participate in research activities to support drug development and infection control

DENSO Corporation is already participating in a project run by Canadian company D-wave, where access to a quantum computer is provided for free, to support research being done

by various countries for drug development and infection control. The company will provide technical support with the aim of promoting use of the project.

As for its overseas operations, Toyota is considering how it may best provide support by collaborating with local governments and related members of local communities, centering on the governments involved in each region. Some of the proposed activities include the production and donation of medical face shield (protection mask), provision of hygiene products including face masks for local medical facilities, , and the utilization of Toyota's TPS to help improve the productivity and logistics of medical companies.

<For reference : Examples of support activities by overseas affiliates>

(As of April 7, 2020)

China

- Monetary donations to the Red Cross Society of China for the purpose of purchasing medical supplies
- Donation of medical supplies (including face masks for medical workers, protective gear, medical caps, and disinfectant)

North America

- Preparing to produce (Toyota and DENSO) 3D-printed medical face shields (protective masks) as well as face masks to help fight COVID-19
- Offering support to ventilator equipment manufacturers utilizing TPS to increase productivity (in the company selection process stage.)
- Providing know-how related to production/technology development to help increase productivity in essential goods and medical use equipment
- Donation of face masks and hygienic products (including shoe covers, gloves, cotton wool) to local medical facilities and emergency response services

Europe

- Production of medical face shields (protection masks) and hands-free door openers utilizing 3D printers
- Providing manufacturing visual control techniques for hospital manpower management, and maintenance expertise for medical equipment (e.g., Support to a hospital to modify ventilator to be used on two patients instead of one)
- Providing vehicles, car-rental to health or related public support staff
- Making financial and in-kind donations to national and local emergency response and health organizations, hospitals (TBD)

Asia

- Providing shuttles for medical workers upon request (Toyota Mobility Foundation <insert URL>)
- Supplying vehicles for use by healthcare workers and others involved in infectious

disease prevention

- Providing medical face shields (protective masks), and protective gear

*Toyota has also provided various support of medical supplies to health organizations, support through donations of medical supplies and food to local communities in other countries and regions.

<For Reference: Other efforts>

Produce face masks for internal use (aim to ease overall demand)

In response to the lack of supply of face masks, Toyota is considering production of face masks at its facilities to meet its own needs for face masks that it requires for its employees involved in production. The aim of this is to help ease the pressure in its own small way on the overall market for face masks as it reduces the amount the company needs to procure from outside manufacturers, leaving more available for purchase for others.

- DENSO Corporation will self-produce face masks it requires for employees mainly at its production sites. With production of the face masks scheduled to commence within April, they have been working on a prototype. It is anticipated that if things proceed as scheduled, 100,000 face masks will be produced daily.
- Toyota Boshoku Corporation, Kariya Plant is scheduled to commence production of face masks starting from early April, at a level of approximately 1,500 face masks per day. Along with measures to increase production, it is anticipated that production will gradually be transferred to Sanage Plant from May, where there are currently plans to increase production to eventually reach up to 12,000 face masks per day.
- In addition, Aisin Seiki Co., Ltd., Daihatsu Motor Co., Ltd., and Hino Motors, Ltd. are also considering their own production of face masks.

Support smooth business operations of related parties

Domestically, Toyota is considering providing funding and modifying transaction conditions for Toyota and Toyota Group companies' stakeholders, such as those currently offered to its dealers and suppliers. In cooperation with local business units and Toyota Financial Services, Toyota will consider each situation individually and look to respond based on each situation with flexibility and attention to detail.

2. Initiatives to improve company structure to drive future recovery

While telecommuting is encouraged as a measure to prevent the spread of COVID-19, Toyota aims to change how office workers in the manufacturing industry work from home

as well as how to improve productivity. Also, at its factories, Toyota is proactively working to improve productivity, reduce costs and further train workers using extra time that has come from reduced or suspended production at its production sites due to decreased demand to improve its corporate structure and improve competitiveness across the group for the future.

In addition, Toyota will go back to its founding principles to eliminate "extra fat" and shift to a leaner corporate structure by using the knowledge it gains this time to thoroughly review its capital investment, R&D expenses, and required personnel, etc. By improving the productivity in the existing regions, Toyota will see how it may be able to secure the right resources (people, things, and money), and shift to a new focus areas to improve its ability to manage the growing area of CASE, while also working to improve customer satisfaction.

<Basic concepts>

- Boldly remove unnecessary tasks
- Change the way we work to further improve efficiency
- Always do what needs to be done, no matter what the circumstances

In light of events that were canceled as part of the measures to prevent the spread of the COVID-19, and taking into account changes being made in the style of work, such as working from home, Toyota is taking the opportunity to review both the necessity of certain business activities as they have been done in the past as well as determining if there is a better way of doing the work from scratch.

<Main initiatives in administrative and technical work locations>

(1) Providing tools and enhancing network infrastructure to manage the expanding needs for working from home

To better manage the sudden, increased demand for remote access, the company is making progress in providing a variety of system environments needed for telecommuting for each workplace, including the expansion of capacity for remote access from lines outside the network, etc. With the large flux of companies progressing all at once to working from home, limitations of what can be put into place in the short terms for networks have been made clear, so Toyota will prioritize the issues it needs to handle the adjustment to work style. In addition, Toyota is promoting further efficiency as it revitalizes its operations by proactively utilizing new communication tools such as Skype and Teams.

(2) Establish work style reforms and work from home rules that help improve productivity

To further promote work styles that are not restricted to a single location such as working from home, there will be a review of regulations and rules as they pertain to

labor and work. In addition, as the tasks and work items for each person's work are clarified daily, the progress workers make and their individual work volume can be seen on a daily basis, which can then be reflected in individual evaluations. Those can then be linked to reorganizing tasks and improved efficiency within the company as a whole.

(3) Acceleration of human resource development

In each workplace, specialized skills that are deemed "necessary to acquire" will be recorded in a "skills map". By considering each person's skills improvement plan, human resource development will be further accelerated.

< Main initiatives at production sites >

(1) Improvement activities and human resource development utilizing extra time from reduced or suspended production

During normal production line operation, it is difficult for Toyota to engage in improvement activities and human resource development. However, utilizing the extra time from reduced or suspended production, the company can proactively proceed with improvement activities such as refreshing aging equipment, inspecting production equipment, as well as improvements to the work environment, productivity and significant cost reduction, etc., which activities may contribute to increased competitiveness in the future for each company.

(2) Production network maintenance and improvement activities integrated with suppliers

To maintain its supply chain, Toyota is working together with each supplier, striving to grasp their issues, as well as sharing issues with them to help improve productivity and promote integrated improvement activities. Additionally, for each country and region where parts, etc., may be unavailable due to lines being stopped, Toyota will work together with suppliers and group companies on alternative production, and proactively promoting human resource development through supporting each other.