Executive Summary

On July 22, 2020, a Class A operating tour bus (hereafter "the occurrence bus"), plate number 279-VV, of Jialeda Transportation Co. Ltd. was used for a 1-day bus tour in Taiping Mountain, Yilan, provided by Youshanwanshui Travel Agency. At 0825:36, the occurrence bus crashed into the rear of a bus from Capital Bus driving in front of it in the same lane at the 12.2 km marker on Southbound National Freeway No. 3, causing the Capital Bus to crash into the rear of the private passenger car in front of it then push forward and hit a private light truck. This event caused the death of one tour escort on the occurrence bus; injured 19 passengers; and damaged 2 operating tour buses, 1 private passenger car, and 1 private light truck. The investigation report was reviewed and approved at the 32nd TTSB Board meeting on November 5, 2021.

Findings Related to Probable Causes:

1. The driver of the occurrence bus (hereafter "the occurrence driver") may have been using his mobile phone without paying attention to the situation in front of the occurrence bus just before the accident. The occurrence driver suddenly veered to the left and hit the bus ahead because it's too late to brake.

Findings related to the risks:

- 1. The tour escort on the occurrence bus might have not been seated or fastened a seat belt because she was assisting the tour members' affairs. This may have resulted in the tour escort falling onto the platform under the front stairs inside the occurrence bus when the occurrence bus crashed into the bus in front of it, causing multiple trauma that led to death.
- 2. The occurrence bus passenger in Seat No. 4 of Row 12 didn't fasten a seat belt during the event and caused serious injuries such as the forehead scalp laceration, and chest contusion
- 3. The Ministry of Transportation and Communications has drafted regulations and penalties prescribing that the bus passengers in the back seats must fasten seat belts. However, these regulations and penalties have not yet been completely legislated.
- 4. The Youshanwanshui's job requirements and the safety instructions for tour guides emphasize that their staff members must ensure the safety of tour members; they do not specify how staff members can ensure their safety on tours. The travel agency lacks specific operating procedures based on driving safety.

- 5. The Tourism Bureau of the Ministry of Transportation and Communications has provided a document promoting tour bus passenger safety for domestic tour groups. The document outlines several requirements, including that tour members must sign a travel contract and be appropriately insured before the start of the tour and that the tour guide or escort must not stand or walk when the vehicle is moving. However, in the occurrence, the tour escort may have been dealing with the passengers' insurance when the occurrence bus was moving. The tour escorts leaving their seats on a moving vehicle to handle work tasks or serve passengers were not uncommon for domestic tour groups, which highlights the limited effectiveness of current safety advocacy.
- 6. Taiwan's Regulations Governing Travel Agencies specify that tour escorts appointed by travel agencies are liable for the safety of tour members. However, the Tourism Bureau of the Ministry of Transportation and Communications does not have specific requirements regarding tour escort qualifications and road safety training. Accordingly, tour escorts may not be sufficiently aware of road safety or sufficiently capable of initiating an emergency response after the occurrence.

Other investigation findings:

- 1. The occurrence bus had been issued a valid vehicle license by a motor vehicle office at the time of the event. No abnormality was observed in the tires, brakes, or steering system of the occurrence bus according to images collected from its driving vision assistant system, the results of inspection after the event, and its repair and maintenance records before the event.
- 2. No abnormal conditions of road engineering and traffic engineering in the accident section. It was sunny with great driving visibility at the time of the event.
- 3. The occurrence driver had a valid driver's license and a Driver's Registration Certificate for Tourist Bus Transportation Enterprise issued by the Directorate General of Highways.
- 4. No evidence suggested that the occurrence driver's driving performance during this event was impaired by fatigue, medication, or alcohol.
- 5. The tachograph on the occurrence bus passed the examination, although the tachograph chart used on the occurrence bus was not produced by the same manufacturer as that of the tachograph.
- 6. Immediately after the event, the occurrence driver assisted the passenger in Seat No. 2 of Row 2 in exiting the occurrence bus but did not sufficiently grasp the

- status of other passengers or provide them with clear instructions and guidance on evacuation.
- 7. The road traffic accident handling procedures of Jialeda Transportation Co. Ltd. does not require drivers to, in the event of an accident, ensure passenger safety by checking on them or providing them with instructions or assistance in evacuating to a safe place before further assistance arrives.
- 8. Although the passengers sitting in Seat No. 2 of Row 1 and Seat No. 2 of Row 2 were fastening seat belts at the time of the event, they sustained severe injuries after respectively hitting one's head against a protection board in front of him and having one's right leg pierced by a displaced seat.
- 9. The occurrence bus, an operation tour bus with a capacity of 45 passengers, was at full capacity at the time of the event, with 44 passengers and one driver. The tour escort's seat was next to the occurrence driver; this did not comply with the Tourism Bureau's recommendation that the first-row seat on the right is reserved as a dedicated seat for the tour guide.

Safety Recommendations

To Jialeda Transportation Co. Ltd.:

- 1. Enhance road safety promotion and training regarding prohibited use of mobile phones or other similar devices while driving.
- 2. Review and improve road traffic accident handling procedures, such as including a requirement for drivers to check on passengers and instruct passengers to evacuate to a safe place until help arrives. Establish appropriate handling procedures and instructions specific to common locations of transportation occurrences, such as long tunnels, mountain roads, highways, or expressways. Incorporate the aforementioned information into road safety training for drivers to equip them with the ability to respond to accidents in various contexts.

To Youshanwanshui Travel Agency:

1. Review and improve the job description and safety instructions for tour guides and escorts to emphasize the importance of ensuring their safety on tours. Establish specific operating procedures in consideration of road safety.

To Ministry of Transportation and Communications:

1. Revisit the driving safety promotion videos and other audiovisual or signs for fastening seat belts on buses. To reduce the level of casualties of tour guides or

tour escorts in the occurrences, improve the promotion of the following practices:

- All people on a bus (including the driver, tour guide or escort, and passengers) should have the awareness that they should fasten their seat belts at all times throughout the tour.
- Passengers should value the safety of the tour guide or escort and not ask them to leave their seats to perform service while the tour bus is moving.
- 2. Continue the legislative process for regulations that mandate passengers in the back seats of the buses should fasten seat belts.

To Directorate General of Highways:

- 1. Assist and supervise the tour bus operators in establishing road traffic handling procedures, including requiring drivers to check on passengers and to instruct passengers to evacuate to a safe place until help arrives; in establishing appropriate handling procedures and instructions specific to common places of transportation occurrences, such as long tunnels, mountain roads, highways, or expressways; and in incorporating the aforementioned information into road safety training for drivers to equip them with the ability to respond to accidents in various contexts.
- 2. Increase seat belt checks for front-row passengers on buses driving on roads, highways, or expressways and, when the legislative procedure for the regulations expanding seat belt enforcement to all bus passengers has been completed, promote the new seat belt regulations and conduct seat belt checks accordingly.

To Tourism Bureau of the Ministry of Transportation and Communications:

- Assist and supervise travel agencies in developing job descriptions and safety instructions for tour guides and escorts that emphasize the importance of ensuring their safety on tours and in establishing operating procedures with consideration for road safety.
- 2. Evaluate the feasibility of incorporating tour escorts into the scope of legal management. Research and provide preservice and in-service safety training according to the safety responsibilities of tour escorts.
- 3. Review the situation and effectiveness of the travel agency's adoption of exclusive seats for tour guides, as a reference for the rolling review of the relevant promotions.
- 4. Review and strengthen the advocacy, implementation, and difficulties for travel

agency tour guides and tour escorts not leaving the seats, as a reference for the rolling review of the relevant promotions.