

**Staff Accident Report Summary to
The Colorado Public Utilities Commission
On Regional Transportation District
Rail Fixed Guideway Accidents
From January 1, 2024, through March 31, 2024**

SUMMARY OF ACCIDENTS

The Regional Transportation District (RTD) filed accident investigation reports for eleven accidents occurring from January 1, 2024 through March 31, 2024. The staff has reviewed the reports and found the accident reports to be complete and in accordance with Rule 7349. All accident investigations were performed in compliance with RTD's investigation procedures, which were formally adopted by the Commission by Decision No. C09-0674 on June 24, 2009.

One accident occurred near the Auraria Campus along the Central Corridor during the January to March 2024 timeframe. This accident occurred at the 7th Street and Colfax Avenue intersection, involving an automobile that made a prohibited left turn.

Three accidents occurred in Central Downtown, also part of the Central Corridor, during the January to March 2024 timeframe. These accidents occurred at the intersection of California Street and 15th Street, 16th Street, and 17th Street intersections. Two of the accidents involved a pedestrian that made contact with the train and the police did not respond. The third accident involved an automobile that failed to obey a traffic signal and struck the train. The police responded. There were no injuries associated with these accidents.

The other area where accidents typically occur on the RTD system is along Welton Street which is also part of the Central Corridor. Two accidents occurred along this corridor during the January to March 2024 timeframe. The first accident occurred at 28th and Welton where an automobile was cited for failing to yield the right-of-way at the intersection. The second accident was at 29th Street and Welton where the LRV was struck by an automobile that failed to obey traffic signs. There were no injuries or tows associated with both accidents.

Two accidents occurred on the Southwest Corridor during the January to March 2024 timeframe. Both accidents occurred at the Elati Yard. The first accident involved a derailment when the LRV went through a misaligned switch. The other accident involved an LRV going through the wash bay while the washer arm was still extended. There were no injuries associated with these accidents.

Two accidents occurred in the West Corridor during the January to March 2024 timeframe. The first accident was a derailment through the Consolidated Main Line

(CML) fly-over caused by the RTD’s contractor’s rail grinder machine. The other occurred in Knox Station, involving a patron touching the moving train. The patron was transported for injuries.

One derailment occurred north of Southmoor Station, in the Southeast Corridor. The derailment was due to the LRV shedding its wheel/tire components and eventually experiencing a catastrophic failure of the wheel/tire assembly causing it to derail.

Summaries of the eleven accidents are as follows:

Accident Tracking Number	Date/Time	Location	Nature of Event	Fatalities/ Injuries	Citation Issued, or Other Comments
A1-01112024	01/11/2024 8:25 PM	15 th Street & California Street	NB LRV was hit by an automobile traveling WB that failed to obey a traffic signal	No	Yes, Denver Police responded. A police report is not available.
A1-01222024	01/22/2024 5:09 PM	16 th Street & California Street	LRV contacted a pedestrian who turned into the path of the train.	No	Police did not respond
A1-01232024	1/23/2024 9:20 PM	Elati Yard	LRV derailed while an operator was moving a four-car consist over a misaligned switch	No	LRVs had to be towed.
A1-01242024	01/24/2024 12:25 PM	North of Southmoor Station	LRV began shedding wheel/tire components and eventually experienced a catastrophic failure of one wheel/tire assembly and derailed	No	LRVs had to be towed.
A1-02022024	02/02/2024 10:35 AM	17 th Street & California Street	LRV was hit by a pedestrian on an electric scooter	No	No

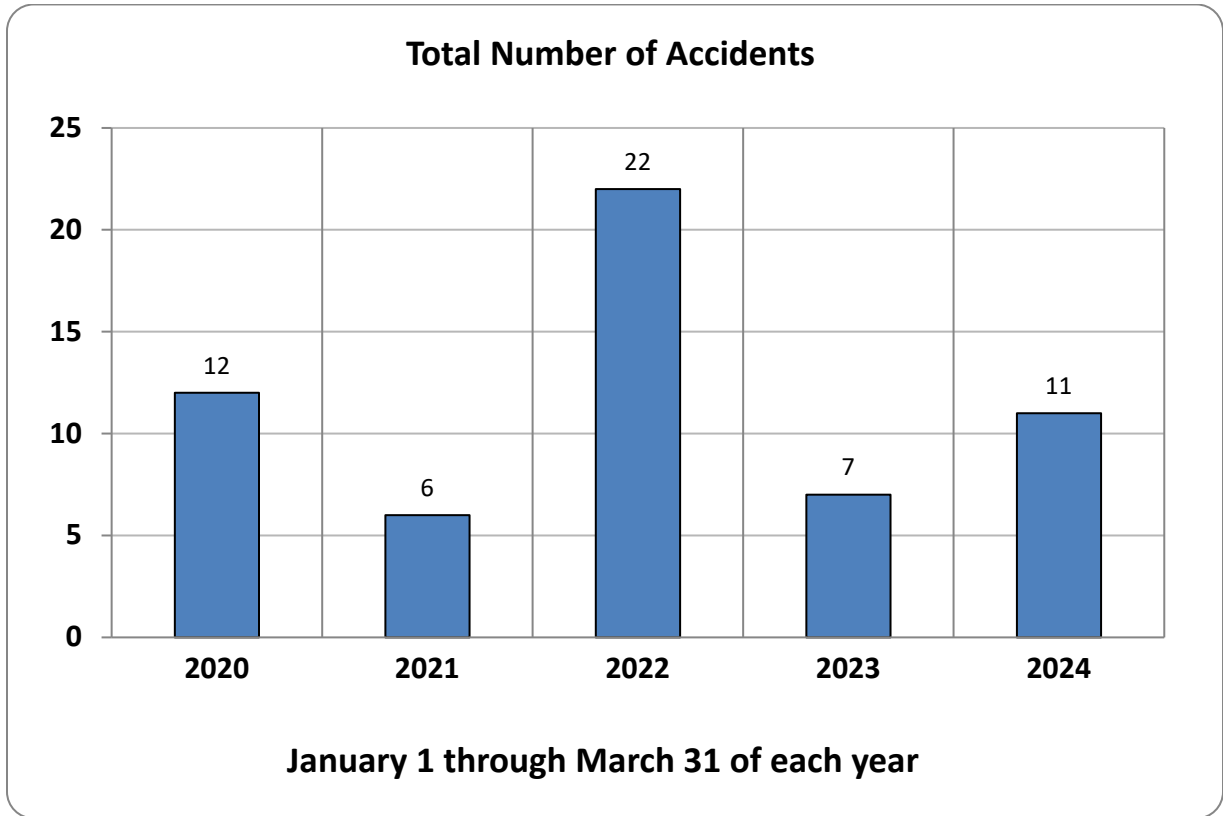
Accident Tracking Number	Date/Time	Location	Nature of Event	Fatalities/ Injuries	Citation Issued, or Other Comments
A1-02042024	02/04/2024 11:27 AM	28 th Street & Welton Street	LRV was struck by an automobile that slid into the side of the train	No	Police, fire, and paramedics responded to the scene. The vehicle driver was cited for failing to yield ROW to the train. The vehicle was not towed.
A1-02132024	02/13/2024 2:02 AM	Consolidated Main Line (CML) Flyover	RTD's contractor's Rail Grinder derailed while performing rail grinding operations	No	No tow was required.
A1-02142024	02/14/2024 1:08 PM	29 th Street & Welton Street	LRV was hit by an automobile that failed to obey the traffic sign.	No	Driver admitted fault. Police did not respond.
A2-02142024	02/14/2024 7:27 PM	Knox Station	A patron was injured after his hand made contact with a moving train.	Injury	RTD police were on the scene. Paramedics transported the patron.
A1-02292024	02/29/2024 2:01 PM	Elati Yard	LRV was operated through a wash bay with the washer arm still extended causing damage to LRV	No	No
A1-03222024	03/22/2024 6:10 PM	7 th Street & Colfax Avenue	LRV made contact with an automobile that made a prohibited left turn.	No	Driver admitted fault. Police did not respond.

STAFF ANALYSIS

Staff reviewed the accident types and totals that occurred during the January 1 to March 31 timeframe in 2020, 2021, 2022, 2023, and compared them to the 2024 accidents. Those analyses begin on the next page.

Below is Graph 1 which shows the total number of accidents by year:

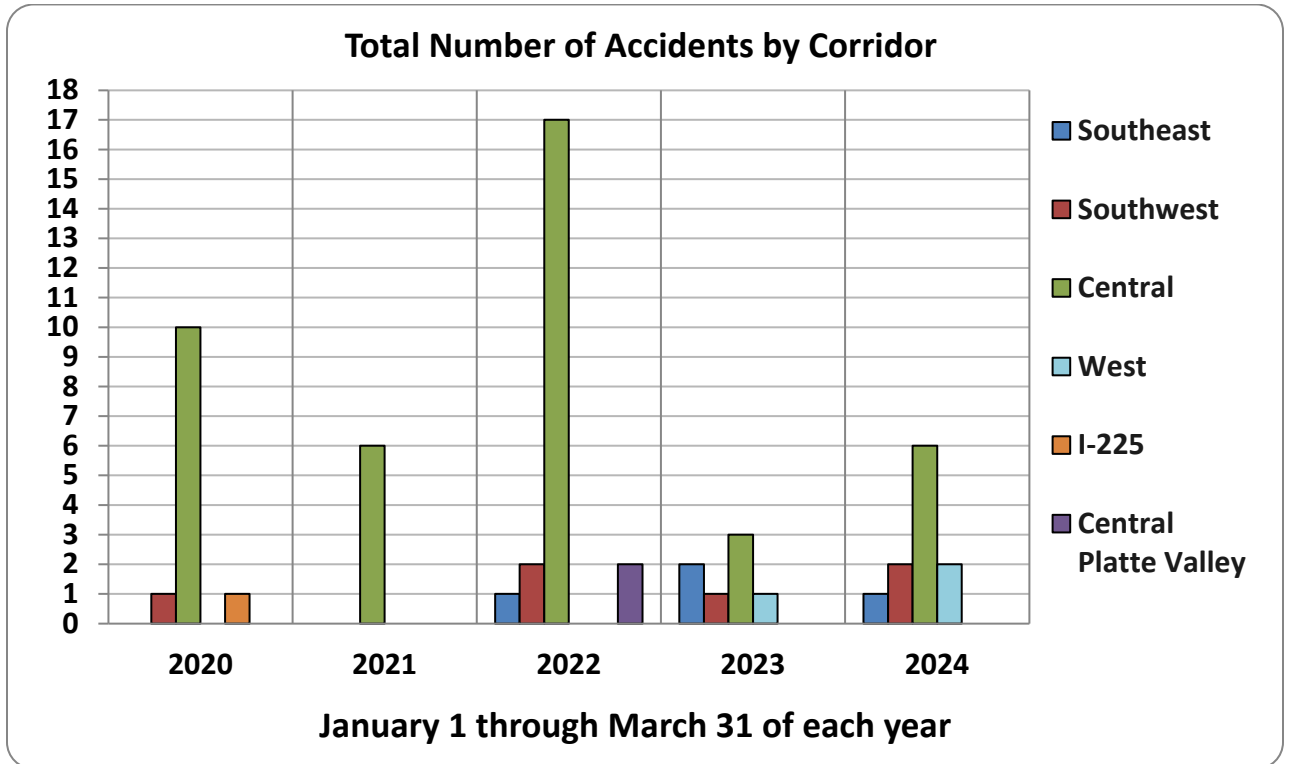
Graph 1



The number of accidents that occurred during January to March was within the range of accidents that occurred during this timeframe since 2020. Two pedestrians made contact with the trains but did not get injured. There was one injury involving a person who touched a moving trail and was transported for injuries. Four accidents occurred with automobiles that failed to obey traffic signs or rules. There were three derailment accidents-- one involved a contractor's rail grinding machine, the second involved an LRV going through a misaligned switch in the yard, and the third derailment was due to the LRV's wheel/tire failure. Staff will monitor this timeframe to see where the accident trends continue.

Below is Graph 2 which compares the total number of accidents by corridor:

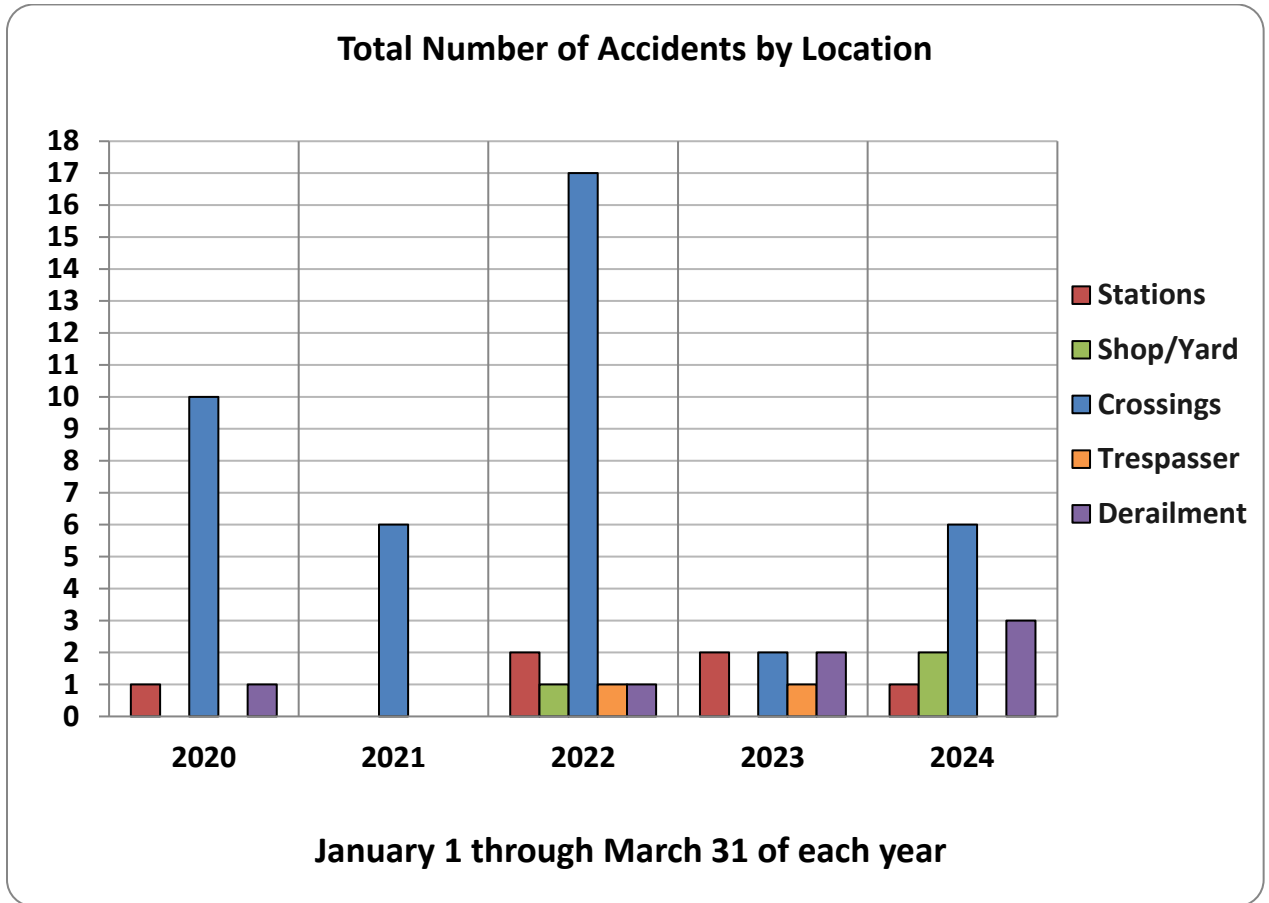
Graph 2



The Central Corridor, which includes Welton Street, the Auraria Campus, and Downtown areas, continues to have the highest concentration of accidents. The total number of accidents in the Central Corridor is within the range of accidents during this timeframe since 2020.

Below is Graph 3 which shows the total number of accidents by location:

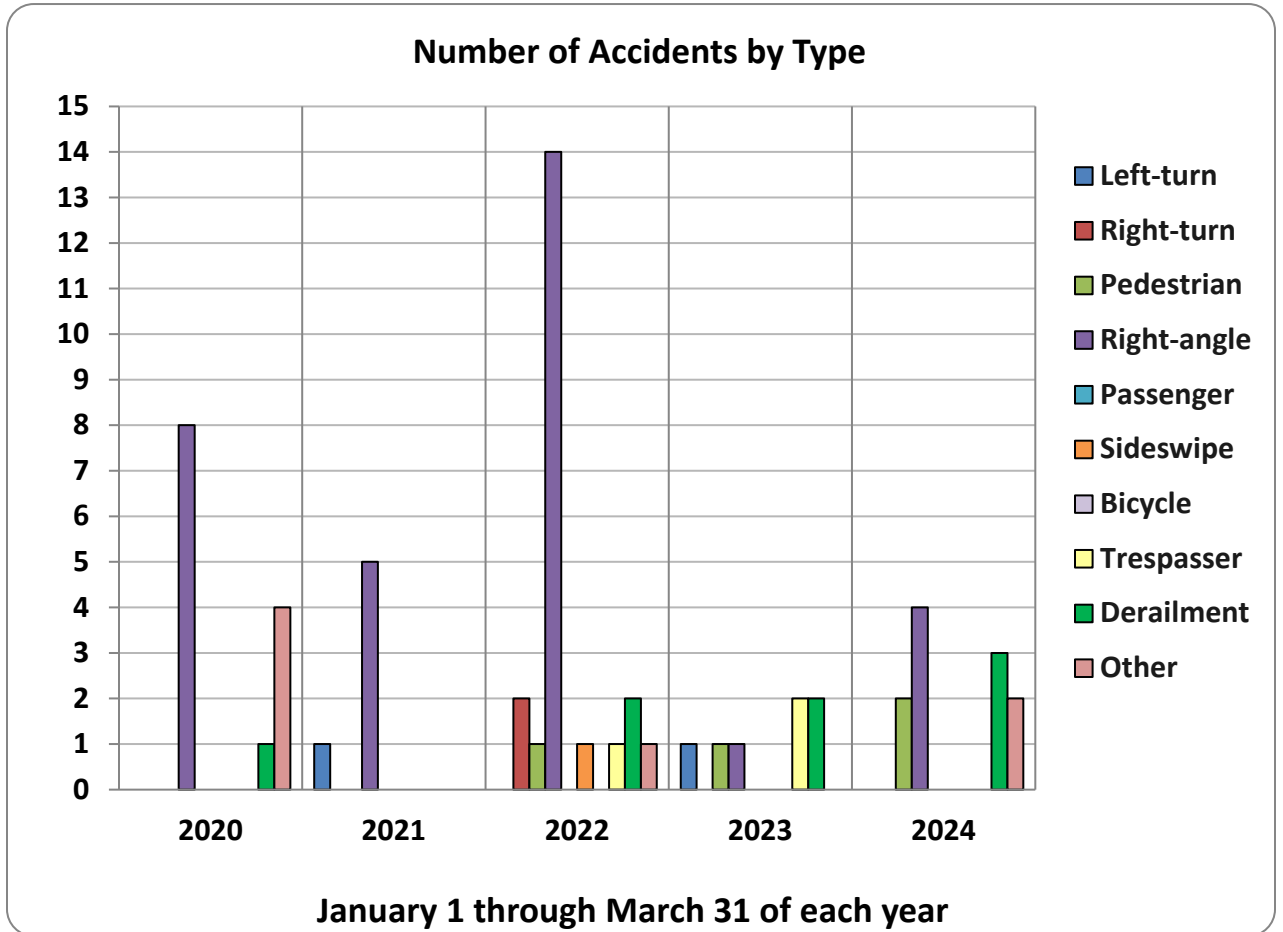
Graph 3



The number of accidents that occurred at crossings from January to March is within the range of accidents during this timeframe since 2020. There was one station accident during this timeframe, two shop/yard accidents, and three derailment accidents. Staff and RTD Safety Staff will continue monitoring the trends to determine if additional mitigation measures may be necessary in the future.

Below is Graph 4 which compares the number of accidents by type:

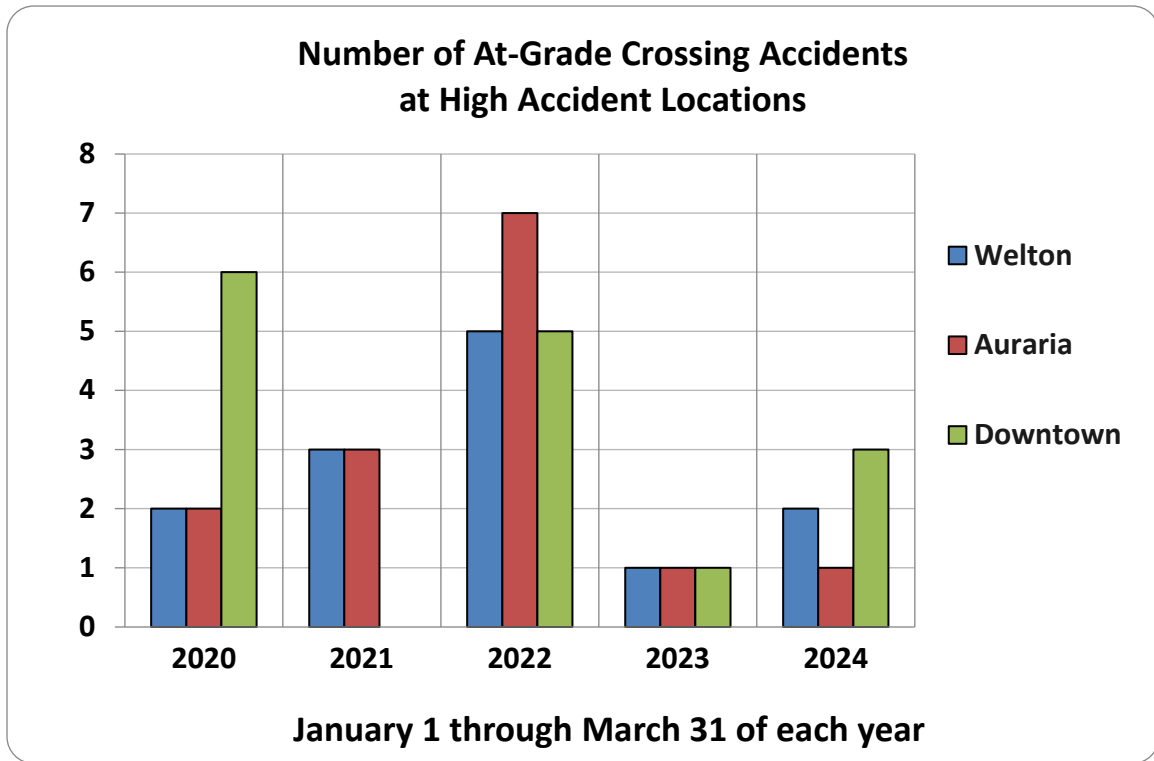
Graph 4



Right-angle (a.k.a., broadside) accidents are the most common types of accidents. This is consistent with most accidents occurring at at-grade crossings as light-rail traffic travels perpendicular to vehicular traffic. Four right-angle accidents occurred during the January to March timeframe in 2024. There was an increase in pedestrian and derailment accidents in 2024.

Below is Graph 5 which compares the number of accidents that occurred at at-grade crossings along Welton Street, near the Auraria Campus, and Downtown. These are the higher accident locations that Staff and RTD have been closely monitoring:

Graph 5



Two accidents occurred on the Welton corridor, three accidents occurred in the downtown area, and one accident occurred in the Auraria Campus Area. During 2020, accidents in these three areas generally decreased from previous years. This is likely due to COVID-19, which led to fewer vehicles on the roadway and fewer LRVs running on the system. There are still fewer LRVs running on the system in 2024. In 2024, the accident numbers in this area are slightly higher than last year. RTD has developed internal measures for addressing some of the issues in their control, such as defensive driving for rail operators. Staff will continue to monitor the progress of the training in the quarters to come. Additionally, the Commission has approved an application to install blank-out signs along the Welton corridor that should reduce the number of incidents on this corridor. A recent update from RTD is the Welton project has been advertised and awarded. Construction will start shortly after contractor selection.

Based on Staff's analysis of the RTD system accidents, Staff does not recommend further Commission action at this time. Staff will continue to work with RTD Safety Staff to analyze the accident trends along Welton Street and the central downtown area and work toward the design of mitigation features for this corridor. Staff will also continue to monitor safety improvements at the Auraria Campus crossings to determine their

effectiveness by analyzing the accident trends at those crossings. RTD and the City and County of Denver amended an application to mitigate several accidents occurring at the one-way alley crossing. Finally, Staff will continue to monitor the efforts of the enhanced RTD training program for rail operators.

CONCLUSION

The eleven accident investigation reports have been reviewed by Staff and have been completed in accordance with Rule 7349. Staff recommends formal adoption of these investigation reports by the Commission.