CLAIMS

1. A gap blocking system, comprising:

a loading platform having a gap separating a first portion of the loading platform from a second portion of the loading platform;

and

a guardrail assembly comprising a plurality of guardrail units coupled to the first portion of the loading platform and configured to transition between a first position and a second position,

wherein the plurality of guardrail units are configured to block access to the gap when in the first position,

wherein an individual guardrail unit of the plurality of guardrail units is configured to interface with an engagement feature of a ride vehicle that is coupled to a transport that extends through the gap, the transport being configured to propel the ride vehicle along a loading path adjacent to the loading platform, to selectively transition the individual guardrail unit from the first position to the second position, wherein the individual guardrail unit is configured to permit the ride vehicle to occupy a guest-accessible position adjacent to or on the loading platform in the second position.

2. The gap blocking system of claim 1, wherein the plurality of guardrail units are configured to extend generally vertically along an edge of the first portion of the loading platform in the first position, such that the plurality of guardrail units in the first position protrude above a surface of the first portion of the loading platform to block access to the gap.

3. The gap blocking system of claim 2, wherein the plurality of guardrail units are configured to subduct beneath the surface of the first portion of the loading platform to transition to the second position.

4. The gap blocking system of claim 1, comprising a plurality of track assemblies coupled to an underside of the first portion of the loading platform, wherein the individual guardrail unit of the plurality of guardrail units comprises a roller assembly configured to

interface with a respective track assembly of the plurality of track assemblies to permit the individual guardrail unit to translate along the respective track assembly between the first position and the second position.

5. The gap blocking system of claim 4, wherein the plurality of track assemblies comprise respective springs configured to translate the plurality of guardrail units from the second position to the first position and respective dampers configured to limit a translation rate of the plurality of guardrail units from the second position to the first position.

6. The gap blocking system of claim 1, wherein the individual guardrail unit of the plurality of guardrail units comprises a plurality of rail segments pivotably coupled at hinge points, wherein the plurality of rail segments are configured to articulate relative to one another at the hinge points to facilitate transitioning of the individual guardrail unit from the first position to the second position, or vice versa.

7. The gap blocking system of claim 1, wherein the first portion of the loading platform is a turntable configured to rotate about an axis and the second portion is an outer platform disposed about the turntable.

8. The gap blocking system of claim 1, wherein the engagement feature is configured to sequentially engage with respective push plates of at least two guardrail units of the plurality of guardrail units to gradually transition the at least two guardrail units from the first position to the second position in a staggered manner.

9. A gap blocking system, comprising:

a loading platform having a gap separating a first portion of the loading platform from a second portion of the loading platform;

a ride vehicle coupled to a transport extending through the gap, wherein the transport is configured to propel the ride vehicle along a loading path of the loading platform; and

a panel assembly coupled to the loading platform and comprising a plurality of panels, wherein each panel of the plurality of panels is coupled to a respective actuator configured to selectively transition the panels between first positions and second positions,

wherein the plurality of panels are configured to block access to the gap in the first position,

wherein a panel of the plurality of panels is configured to interface with an engagement feature of a ride vehicle that is coupled to a transport that extends through the gap, the transport being configured to propel the ride vehicle along a loading path adjacent to the loading platform, to selectively transition the panel from the first position to the second position, wherein the individual panel is configured to permit the ride vehicle to occupy a guest-accessible position on or adjacent to the loading platform.

10. The gap blocking system of claim 9, comprising a controller operatively coupled to the actuators, wherein the controller is configured to instruct one or more of the respective actuators to transition one or more panels of the plurality of panels from the first position to the second position upon receiving feedback indicating that the ride vehicle approaches the gap.

11. The gap blocking system of claim 10, wherein the feedback is indicative of positional data of the ride vehicle provided via a tracking sensor coupled to the ride vehicle.

12. The gap blocking system of claim 10, comprising a sensor coupled to each panel of the plurality of panels, wherein the sensor is configured to detect a component of the ride vehicle and to provide the controller with the feedback upon detecting that the component is within a threshold distance of a corresponding one of the one or more panels.

13. The gap blocking system of claim 9, wherein the actuators comprise linear actuators, hydraulic actuators, pneumatic actuators, or a combination thereof.

14. The gap blocking system of claim 9, wherein the first portion is a turntable configured to rotate about an axis and the second portion is an outer platform disposed about the turntable, wherein each panel of the plurality of panels is coupled to the turntable and configured to translate radially or circumferentially relative to the turntable to transition between the first positions and the second positions.

15. The gap blocking system of claim 14, comprising a controller operatively coupled

to the actuators, wherein the controller is configured to instruct the respective actuators to transition one or more panels of the plurality of panels to the second positions to expose the portion of the gap upon receiving sensor feedback indicating that the ride vehicle is within a threshold distance of the one or more panels of the plurality of panels.

16. The gap blocking system of claim 15, wherein the controller is configured to receive instructions to execute a braking sequence to stop movement of the ride vehicle along the loading path and to stop rotation of the turntable about the axis, wherein the controller is configured to determine whether a position of the ride vehicle, relative to the turntable, deviates by a threshold distance during execution of the braking sequence.

17. The gap blocking system of claim 16, wherein the one or more panels include two or more panels of the plurality of panels, wherein, in response to determining that the position of the ride vehicle deviates by the threshold distance, the controller is configured to transition a forward-most panel, with respect to a direction of movement of the ride vehicle along the gap, of the two or more panels from the second position to the first position.

18. A method of operating a gap blocking system for an amusement park attraction, comprising:

transitioning, via a plurality of actuators, a plurality of panels of a loading platform to extended positions to cover a gap of the loading platform to block access to the gap;

detecting that a ride vehicle approaching the loading platform from a ride track is within a threshold distance of the gap; and

transitioning, via at least one of the actuators, a corresponding panel of the plurality of panels from the first position to the second position, wherein the individual panel is configured to permit the ride vehicle to occupy a guest-accessible position on or adjacent to the loading platform.

19. The method of claim 18, further comprising:

rotating, via a turntable coupled to the panels, the plurality of panels about an axis;

and

directing, via a transport, the ride vehicle about the axis to travel with the turntable,

wherein a support structure of the transport is configured to extend through the portion of the gap to couple the ride vehicle to the transport.

20. The method of claim 19, further comprising:

directing, via the transport, the ride vehicle toward the ride track to discharge the ride vehicle from the gap; and

transitioning, via the at least one actuator, the corresponding panel of the plurality of panels to a respective extended position to re-cover the portion of the gap.