CLAIMS

What is claimed is:

1. A carriage for pushing a child carrier, the carriage comprising:

a plurality of wheels; and

a frame comprising:

a front end and a rear end, offset from one another along a longitudinal direction;

a lower frame end having the plurality of wheels attached thereto; and

an upper frame end configured to support the child carrier, the upper frame end having a plurality of seat couplers that are configured to releasably couple to the child carrier so as to prevent upwards removal of the child carrier from the carriage, the plurality of seat couplers including:

a pair of seat couplers configured to removably couple to opposing sides of the child carrier; and

at least one other seat coupler, offset from the pair of seat couplers with respect to the longitudinal direction, the at least one other seat coupler configured to removably couple to the child carrier,

wherein the carriage is devoid of any push handle that extends above the child carrier, and the carriage is configured to be pushed by a push handle of the child carrier when the child carrier is coupled to the carriage.

___2.——The carriage of claim 1, wherein the at least one other seat coupler couples the child carrier to the carriage so as to limit torque applied to the pair of seat couplers when a force is applied to the push handle of the child carrier.

___3.——The carriage of ~~any one of claims~~claim 1~~ and 2~~, wherein the pair of couplers comprises a pair of bayonets that are configured to removably couple to opposing sides of the child carrier.

___4.——The carriage of claim 3, wherein the at least one other seat coupler is disposed in front of or behind the pair of bayonets.

___5.——The carriage of ~~any one of claims~~claim 3~~ and 4~~, wherein each bayonet defines a recess on an inner side thereof that is configured to receive a movable latch of the child carrier to

affix the child carrier to the carriage.

6. The carriage of ~~any one of claims~~claim 1~~ to 5~~, wherein the frame comprises a first leg assembly and a second leg assembly, each comprising a front leg and a rear leg that are pivotably coupled to one another about a first pivot axis.

7. The carriage of claim 6, wherein the first and second leg assemblies comprise first and second linkages, respectively, that are configured to guide movement of the front and rear legs of the first and second leg assemblies as the frame is transitioned from an expanded configuration to a folded configuration.

8. The carriage of claim 7, wherein each of the at least one other seat coupler is defined by one of the first and second linkages.

9. A travel system, comprising:

the carriage of ~~any one of claims~~claim 1~~ to 8~~; and

the child carrier.

10. The travel system of claim 9, wherein the child carrier is an infant car seat comprising:

a seat shell; and

a handle pivotably coupled to the seat shell, wherein the handle is configured to be transitioned between an upright position to carry the infant car seat when the infant car seat is detached from carriage and an angled position to push the carriage when the infant car seat is coupled to the carriage, and the handle is configured such that removal of the infant car seat from the carriage causes the handle to be removed from the carriage.

11. The travel system of claim 10, wherein the handle is configured to transition between an extended position in which the handle is configured to be used to push the carriage, and a retracted position in which the handle is configured to be used to carry the infant car seat.

12. The travel system of claim 9, wherein the child carrier is a toddler seat comprising:

a frame defining an opening therein;

soft goods seating supported by the frame within the opening to define a seating surface; and

a push handle attached to the frame, the push handle configured to be used to push the carriage when the toddler seat is coupled to the carriage and configured such that removal of the toddler seat from the carriage causes the push handle to be removed.

13. The travel system of claim 12, wherein the push handle of the toddler seat is configured to transition between an extended position and a retracted position.

14. The travel system of claim 13, wherein the push handle of the toddler seat is configured to telescope into and out of the frame of the toddler seat.

15. The travel system of ~~any one of claims~~claim 9 ~~to 14~~, wherein:

the pair of seat couplers comprises a pair of bayonets that are configured to removably couple to opposing sides of the child carrier; and

the child carrier comprises a pair of movable latches, each configured to releasably engage one of the bayonets of the pair of bayonets, and an actuator configured to actuate the pair of movable latches.

16. The travel system of ~~any one of claims~~claim 9 ~~to 15~~, wherein:

the child carrier has a movable latch, and an actuator that is configured to actuate the movable latch; and

the at least one other seat coupler of the carriage comprises a seat coupler that is configured to be engaged by the movable latch to affix the child carrier to the carriage so as to prevent the child carrier from being removed from the carriage along a vertical direction.

17. The travel system of ~~any of claims~~claim 9 ~~to 16~~, wherein:

the child carrier comprises a movable latch that is configured to affix the child carrier to a car seat base for installation in a vehicle, and an actuator that is configured to actuate the movable latch; and

the at least one other seat coupler of the carriage comprises a seat coupler that is configured to engage the movable latch that affixes the child carrier to the car seat base.

18. A travel system, comprising:

an infant car seat comprising:

a seat shell having a rear end, and a front end that is offset from the rear end along a forward direction so as to be disposed closer to a child's head when the child is seated in the seat shell;

a handle that is rotatably coupled to the seat shell by at least one hub; and

a coupler that is disposed on an underside of the infant car seat and is offset from the at least one hub along the forward direction;

a car seat base configured to attach the infant car seat to a vehicle seat, the car seat base having a lower end configured to rest on a vehicle seat, an upper end configured to support the infant car seat, and a seat coupler; and

a carriage for pushing the infant car seat, the carriage comprising:

a plurality of wheels; and

a frame comprising a lower frame end having the plurality of wheels attached thereto, an upper frame end configured to support the infant car seat, and a seat coupler,

wherein the seat coupler of the car seat base and the seat coupler of the carriage are each configured to removably couple to the coupler of the infant car seat so as to restrict removal of the infant car seat from the car seat base and the carriage, respectively, along an upwards direction.

19. The travel system of claim 18, wherein the carriage is devoid of any push handle that extends above the infant car seat, and the carriage is configured to be pushed by the handle of the infant car seat when the infant car seat is coupled to the carriage.

20. The travel system of claim 19, wherein the handle is configured to transition between an extended position in which the handle is configured to be used to push the carriage, and a retracted position in which the handle is configured to be used to carry the infant car seat.

21. The travel system of ~~any one of claims~~claim 18 ~~to 20~~, wherein:

the coupler of the infant car seat comprises a movable latch;

the infant car seat comprises an actuator that is configured to be engaged by a caregiver to actuate the movable latch;

wherein the seat coupler of the car seat base and the seat coupler of the carriage are each configured to removably couple to the movable latch of the infant car seat so as to restrict

removal of the infant car seat from the car seat base and the carriage, respectively, along an upwards direction.

22. The travel system of claim 21, wherein the movable latch comprises a hook.

23. The travel system of ~~any one of claims~~claim 18 ~~to 22~~, wherein the carriage comprises a pair of seat couplers disposed in front of or behind the seat coupler of the carriage, and the pair of seat couplers are configured to removably couple to opposing sides of the infant car seat.

24. The travel system of claim 23, wherein the seat coupler of the carriage couples the infant car seat to the carriage so as to limit torque applied to the pair of seat couplers when a force is applied to the handle of the infant car seat.

25. The travel system of ~~any one of claims~~claim 23 ~~and 24~~, wherein the pair of seat couplers comprises a pair of bayonets that are configured to removably couple to opposing sides of the child carrier.

26. The travel system of claim 25, wherein:

the infant car seat comprises a pair of movable latches at opposing sides of the seat shell, and an actuator configured to actuate the movable latches; and

each bayonet defines a recess on an inner side thereof that is configured to receive one of the latches of the pair of movable latches.

27. The travel system of ~~any one of claims~~claim 18 ~~to 26~~, wherein the frame comprises a first leg assembly and a second leg assembly, each comprising a front leg and a rear leg that are pivotably coupled to one another about a first pivot axis.

28. The travel system of claim 27, wherein:

the first and second leg assemblies comprise first and second linkages, respectively, that are configured to guide movement of the front and rear legs of the first and second leg assemblies as the frame is transitioned from an expanded configuration to a folded configuration.

29. The travel system of claim 28, wherein the seat coupler of the frame is defined by one of the first and second linkages.

30. The travel system of ~~any one of claims~~claim 28 ~~and 29~~, wherein:

the first linkage comprises a first link pivotably connected to the front leg of the first leg assembly, and a second link pivotably connected to the rear leg of the first leg assembly, the first and second links being pivotably coupled to one another; and

the second linkage comprises a first link pivotably connected to the front leg of the second leg assembly, and a second link pivotably connected to the rear leg of the second leg assembly, the first and second links of the second linkage being pivotably coupled to one another.

31. The travel system of ~~any one of claims~~claim 18 ~~to 30~~, wherein the handle of the infant car seat is configured to be transitioned to 1) an upright position to carry the infant car seat when the infant car seat is detached from carriage and 2) an angled position to push the carriage when the infant car seat is coupled to the carriage, and the handle is configured such that removal of the infant car seat from the carriage causes the handle to be removed from the carriage.

~~32. A travel system, comprising:~~

~~an infant car seat comprising a seat shell, a handle that is rotatably coupled to the seat shell, and a coupler;~~

~~a toddler seat comprising a frame defining an opening therein, soft goods seating supported by the frame within the opening to define a seating surface, a handle attached to the frame, and a coupler; and~~

~~a carriage for pushing the infant car seat and the toddler seat, the carriage comprising:~~

~~a plurality of wheels;~~

~~a frame comprising a lower frame end having the plurality of wheels attached thereto, and an upper frame end configured to selectively support the infant car seat and the toddler seat; and~~

~~at least one seat coupler configured to removably couple to the coupler of the infant car seat and to the coupler of the toddler seat,~~

~~wherein the carriage is devoid of any push handle that extends above the infant car seat or the toddler seat when attached to the carriage, and~~

~~wherein the carriage is configured to be pushed by the handle of the infant car seat when the infant car seat is coupled to the carriage and by the handle of the toddler seat when the toddler seat is coupled to the carriage.~~

~~33. The travel system of claim 32, wherein the handle of the infant car seat is configured to transition between an extended position in which the handle of the infant car seat is configured to be used to push the carriage, and a retracted position in which the handle of the infant car seat is configured to be used to carry the infant car seat.~~

~~34. The travel system of any one of claims 32 and 33, wherein the handle of the toddler seat is configured to transition between an extended position and a retracted position.~~

~~35. The travel system of claim 34, wherein the handle of the toddler seat is configured to telescope into and out of the frame of the toddler seat.~~

~~36. The travel system of any one of claims 34 to 35, wherein the at least one seat coupler of the carriage comprises a pair of seat couplers configured to removably couple to opposing sides of the infant car seat and opposing sides of the toddler seat.~~

~~37. The travel system of claim 36, wherein the at least one seat coupler of the carriage comprises at least one other coupler disposed behind the pair of seat couplers that is configured to removably couple to the coupler of the infant car seat.~~

~~38. The travel system of claim 37, wherein the coupler of the infant car seat comprises a movable latch that is configured to releasably couple to the at least one other coupler of the carriage, and the infant car seat comprises an actuator configured to be engaged by a caregiver to actuate the movable latch.~~

~~39. The travel system of claim 38, wherein the movable latch comprises a movable hook.~~

~~40. The travel system of any one of claims 37 to 39, wherein the at least one seat coupler of the carriage comprises at least one other coupler disposed in front of the pair of seat couplers that is configured to removably couple to the coupler of the toddler seat.~~

~~41. The travel system of claim 40, wherein the coupler of the toddler seat comprises a movable latch that is configured to releasably couple to the at least one other coupler of the carriage, and the toddler seat comprises an actuator configured to be engaged by a caregiver to actuate the movable latch of the toddler seat.~~

~~42. The travel system of claim 41, wherein the movable latch of the toddler seat comprises a movable hook.~~

~~43. The travel system of any one of claims 36 to 42, wherein the pair of seat couplers comprise a pair of bayonets.~~

~~44. The travel system of claim 43, wherein the infant car seat comprises a pair of movable latches, each configured to releasably engage a recess on an inner side of a respective one of the bayonets, and the infant car seat comprises an actuator that is configured to be engaged by a caregiver to actuate the movable latches.~~

~~45. The travel system of any one of claims 43 and 44, wherein the toddler seat comprises a pair of movable latches, each configured to releasably engage a recess on an inner side of a respective one of the bayonets, and the toddler seat comprises an actuator that is configured to be engaged by a caregiver to actuate the movable latches of the toddler seat.~~

~~46. The travel system of any one of claims 32 to 45, wherein the frame of the carriage comprises:~~

~~a first leg assembly and a second leg assembly, each comprising a front leg and a rear leg that are pivotably coupled to one another about a first pivot axis;~~

~~a first crosspiece that extends between the front legs of the first and second leg assemblies to space the front legs from one another; and~~

~~a second crosspiece that extends between the rear legs of the first and second leg assemblies to space the rear legs from one another.~~

~~47. A travel system, comprising:~~

~~an infant car seat, comprising:~~

~~a car seat shell having a rear end, and a front end that is offset from the rear end along a forward direction so as to be disposed closer to a child's head when the child is seated in the car seat shell;~~

~~a handle pivotably coupled to the car seat shell;~~

~~at least one movable latch that is disposed at the front end and is configured to affix the infant car seat to a car seat base for installation in a vehicle; and~~

at least one actuator configured to move the at least one movable latch between a latched position and an unlatched position; and

a carriage, comprising:

a plurality of wheels; and

a frame having an upper frame end and a lower frame end spaced from one another along the vertical direction, the plurality of wheels being attached to the lower frame end, and the upper frame end comprising a seat coupler that is configured to couple to the at least one movable latch of the infant car seat when the at least one movable latch is in the latched position so as to prevent movement of the infant car seat relative to the carriage along an upwards direction.

48. The travel system of claim 47, wherein the carriage is devoid of any push handle that extends above the infant, and the carriage is configured to be pushed by the handle of the infant car seat when the infant car seat is coupled to the carriage.

49. The travel system of any one of claims 47 and 48, wherein the at least one movable latch is disposed at an underside of the infant car seat.

50. The travel system of any one of claims 47 to 49, wherein the movable latch comprises a hook.

51. The travel system of any one of claims 47 to 50, wherein the carriage comprises a pair of seat couplers disposed in front of or behind the seat coupler of the carriage, and the pair of seat couplers are configured to removably couple to opposing sides of the infant car seat.

52. The travel system of claim 51, wherein the seat coupler of the carriage couples the infant car seat to the carriage so as to limit torque applied to the pair of seat couplers when a force is applied to the handle of the infant car seat.

53. The travel system of any one of claims 51 and 52, wherein the pair of seat couplers comprises a pair of bayonets that are configured to removably couple to opposing sides of the infant car seat.

54. The travel system of claim 53, wherein:

the infant car seat comprises a pair of movable latches at opposing sides of the car seat

shell, and an actuator configured to actuate the movable latches; and

each bayonet defines a recess on an inner side thereof that is configured to receive one of the movable latches of the pair of movable latches.

55. The travel system of any one of claims 47 to 54, wherein the frame comprises:

a first leg assembly and a second leg assembly, each comprising a front leg and a rear leg that are pivotably coupled to one another about a first pivot axis;

a first crosspiece that extends between the front legs of the first and second leg assemblies to space the front legs from one another; and

a second crosspiece that extends between the rear legs of the first and second leg assemblies to space the rear legs from one another.

56. The travel system of claim 55, wherein:

the first and second leg assemblies comprise first and second linkages, respectively, that are configured to guide movement of the front and rear legs of the first and second leg assemblies as the frame is transitioned from an expanded configuration to a folded configuration.

57. The travel system of any one of claims 47 to 56, wherein the handle of the infant car seat is configured to be transitioned between 1) an upright position to carry the infant car seat when the infant car seat is detached from carriage and 2) an angled position to push the carriage when the infant car seat is coupled to the carriage, and the handle is configured such that removal of the infant car seat from the carriage causes the handle to be removed from the carriage.