

WHAT IS CLAIMED IS:

1. A method for selectively displaying information regarding commercial activity in a geographic area, comprising:

receiving, by at least one processor, data regarding a plurality of card-present payment transactions that have been conducted in the geographic area during a time interval;

determining, by at least one processor, a plurality of segments of the geographic area;

assigning, by at least one processor, each of the plurality of card-present payment transactions to the segment corresponding to the segment of the geographic area in which the card-present payment transaction was conducted;

determining, by at least one processor, aggregate transaction data for each of the plurality of segments based on data regarding the card-present payment transactions that have been assigned to that segment;

generating, by at least one processor, a transaction index for each segment of the plurality of segments, the transaction index for each segment being generated based on a comparison of the aggregate transaction data of that segment with at least one of the following: aggregate transaction data of at least one different segment of the plurality of segments, at least one predetermined metric, or any combination thereof; and

generating, by at least one processor, a visual representation comprising data regarding the transaction index of at least one of the plurality of segments.

2. The method of claim 1, further comprising:

determining, for at least one segment of the plurality of segments of the geographic area and based on receiving the data regarding the plurality of card-present payment transactions, data regarding a total number and/or total amount of transactions in which each of at least one merchant located in the at least one segment was involved during the time interval; and

determining whether the at least one segment is an enhanced privacy protection requiring segment based on determining whether the fraction of the aggregate transaction data of the at least one segment that is attributable to at least one of the at least one merchant exceeds a threshold.

3. The method of claim 2, further comprising:

identifying, for each enhanced privacy protection requiring segment, at least one analogous segment, the at least one analogous segment, comprising a segment of the geographic area having at least one of the following characteristics: a predetermined geographic relationship with the privacy protection requiring segment, an aggregate transaction data falling within a specified range of the aggregate transaction data of the privacy protection requiring segment, or any combination thereof,

wherein generating the visual representation comprising data regarding the transaction index of at least one of the plurality of segments comprises displaying, for each privacy protection requiring segment, data regarding a masked transaction index, the masked transaction index being generated based on an average of the transaction indexes of the privacy protection requiring segment and the transaction indexes of the at least one analogous segment.

4. The method of claim 3, wherein the visual representation is generated by at least one second processor, the at least second processor not having access to the transaction data or the aggregate transaction data.

5. The method of claim 4, wherein the at least one second processor does not have access to the transaction index for the enhanced privacy protection requiring segments.

6. The method of claim 1, wherein determining a plurality of segments of a geographic area comprises generating a grid overlayed on a representation of the geographic area, the grid comprising a plurality of subunits, each subunit corresponding to one of the plurality of segments.

7. The method of claim 1, further comprising:

receiving data regarding a plurality of customers that have previously completed transactions with a user; and

excluding, from the plurality of card-present payment transactions, transactions that do not involve at least one of the plurality of customers that have previously completed transactions with the user.

8. A system for selectively displaying information regarding activity in a geographic area, comprising at least one processor configured or programmed to:

- receive data regarding a plurality of card-present payment transactions that have been conducted in the geographic area during a time interval;
- determine a plurality of segments of the geographic area;
- assign each of the plurality of card-present payment transactions to the segment corresponding to the segment of the geographic area in which the card-present payment transaction was conducted;
- determine aggregate transaction data for each of the plurality of segments based on data regarding the card-present payment transactions that have been assigned to that segment;
- generate a transaction index for each segment of the plurality of segments, the transaction index for each segment being generated based on a comparison of the aggregate transaction data of that segment with at least one of the following: aggregate transaction data of at least one different segment of the plurality of segments, at least one predetermined metric, or any combination thereof; and
- generate a visual representation comprising data regarding the transaction index of at least one of the plurality of segments.

9. The system of claim 8, wherein the at least one processor is further configured or programmed to:

- determine, for at least one segment of the plurality of segments of the geographic area and based on receiving the data regarding the plurality of card-present payment transactions, data regarding a total number and/or total amount of transactions in which each of at least one merchant located in the at least one segment was involved during the time interval; and

- determine whether the at least one segment is an enhanced privacy protection requiring segment based on determining whether the fraction of the aggregate transaction data of the at least one segment that is attributable to at least one of the at least one merchant exceeds a threshold.

10. The system of claim 9, wherein the at least one processor is further configured or programmed to:

identify, for each enhanced privacy protection requiring segment, at least one analogous segment, the at least one analogous segment, comprising a segment of the geographic area having at least one of the following characteristics: a predetermined geographic relationship with the privacy protection requiring segment, an aggregate transaction data falling within a specified range of the aggregate transaction data of the privacy protection requiring segment, or any combination thereof,

wherein generating the visual representation comprising data regarding the transaction index of at least one of the plurality of segments comprises displaying, for each privacy protection requiring segment, data regarding a masked transaction index, the masked transaction index being generated based on an average of the transaction indexes of the privacy protection requiring segment and the transaction indexes of the at least one analogous segment.

11. The system of claim 10, wherein the at least one processor comprises at least one second processor configured or programmed to generate the visual representation, wherein the at least second processor does not have access to the transaction data or the aggregate transaction data.

12. The system of claim 11, wherein the at least second processor does not have access to the transaction index for the enhanced privacy protection requiring segments.

13. The system of claim 8, wherein determining a plurality of segments of a geographic area comprises generating a grid overlayed on a representation of the geographic area, the grid comprising a plurality of subunits, each subunit corresponding to one of the plurality of segments.

14. The system of claim 8, wherein the at least one processor is further configured or programmed to:

receive data regarding a plurality of customers that have previously completed transactions with a user; and

exclude, from the plurality of card-present payment transactions, transactions that do not involve at least one of the plurality of customers that have previously completed transactions with the user.

15. A computer program product for selectively displaying information regarding activity in a geographic area, the computer program product comprising at least one non-transitory computer-readable medium comprising program instructions that, when executed by the at least one processor, cause the at least one processor to:

- receive data regarding a plurality of card-present payment transactions that have been conducted in the geographic area during a time interval;

- determine a plurality of segments of the geographic area;

- assign each of the plurality of card-present payment transactions to the segment corresponding to the segment of the geographic area in which the card-present payment transaction was conducted;

- determine aggregate transaction data for each of the plurality of segments based on data regarding the card-present payment transactions that have been assigned to that segment;

- generate a transaction index for each segment of the plurality of segments, the transaction index for each segment being generated based on a comparison of the aggregate transaction data of that segment with at least one of the following: aggregate transaction data of at least one different segment of the plurality of segments, at least one predetermined metric, or any combination thereof; and

- generate a visual representation comprising data regarding the transaction index of at least one of the plurality of segments.

16. The computer program product of claim 15, wherein the at least one non-transitory computer-readable medium further comprises program instructions that, when executed by at least one processor, cause the at least one processor to:

- determine, for at least one segment of the plurality of segments of the geographic area and based on receiving the data regarding the plurality of card-present payment transactions, data regarding a total number and/or total amount of transactions in which each of at least one merchant located in the at least one segment was involved during the time interval; and

determine whether the at least one segment is an enhanced privacy protection requiring segment based on determining whether the fraction of the aggregate transaction data of the at least one segment that is attributable to at least one of the at least one merchant exceeds a threshold.

17. The computer program product of claim 16, wherein the at least one non-transitory computer-readable medium further comprises program instructions that, when executed by at least one processor, cause the at least one processor to:

identify, for each enhanced privacy protection requiring segment, at least one analogous segment, the at least one analogous segment, comprising a segment of the geographic area having at least one of the following characteristics: a predetermined geographic relationship with the privacy protection requiring segment, an aggregate transaction data falling within a specified range of the aggregate transaction data of the privacy protection requiring segment, or any combination thereof,

wherein generating the visual representation comprising data regarding the transaction index of at least one of the plurality of segments comprises displaying, for each privacy protection requiring segment, data regarding a masked transaction index, the masked transaction index being generated based on an average of the transaction indexes of the privacy protection requiring segment and the transaction indexes of the at least one analogous segment.

18. The computer program product of claim 17, wherein the at least one processor comprises at least a second processor, wherein the at least one non-transitory computer-readable medium further comprises program instructions that, when executed by the at least second processor, cause the at least second processor to generate the visual representation,

wherein the at least second processor does not have access to the transaction data or the aggregate transaction data, and

wherein the at least second processor does not have access to the transaction index for the enhanced privacy protection requiring segments.

19. The computer program product of claim 15, wherein determining a plurality of segments of a geographic area comprises generating a grid overlayed on

a representation of the geographic area, the grid comprising a plurality of subunits, each subunit corresponding to one of the plurality of segments.

20. The computer program product of claim 15, wherein the at least one non-transitory computer-readable medium further comprises program instructions that, when executed by the at least one processor, cause the at least one processor to:

receive data regarding a plurality of customers that have previously completed transactions with a user; and

exclude, from the plurality of card-present payment transactions, transactions that do not involve at least one of the plurality of customers that have previously completed transactions with the user.

21. A method for selectively displaying information regarding commercial activity in a geographic area, comprising:

receiving, by at least one processor, data regarding a plurality of card-present payment transactions that have been conducted in the geographic area during a time interval;

determining, by at least one processor, a plurality of segments of the geographic area;

assigning, by at least one processor, each of the plurality of card-present payment transactions to the segment corresponding to the segment of the geographic area in which the card-present payment transaction was conducted;

determining, by at least one processor, aggregate transaction data for each of the plurality of segments based on data regarding the card-present payment transactions that have been assigned to that segment;

generating, by at least one processor, a transaction index for each segment of the plurality of segments, the transaction index for each segment being generated based on a comparison of the aggregate transaction data of that segment with at least one of the following: aggregate transaction data of at least one different segment of the plurality of segments, at least one predetermined metric, or any combination thereof; and

generating, by at least one processor, a visual representation comprising data regarding the transaction index of at least one of the plurality of segments.

22. The method of claim 21, further comprising:

determining, for at least one segment of the plurality of segments of the geographic area and based on receiving the data regarding the plurality of card-present payment transactions, data regarding a total number and/or total amount of transactions in which each of at least one merchant located in the at least one segment was involved during the time interval; and

determining whether the at least one segment is an enhanced privacy protection requiring segment based on determining whether the fraction of the aggregate transaction data of the at least one segment that is attributable to at least one of the at least one merchant exceeds a threshold.

23. The method of claim 21 or 22, further comprising:

identifying, for each enhanced privacy protection requiring segment, at least one analogous segment, the at least one analogous segment, comprising a segment of the geographic area having at least one of the following characteristics: a predetermined geographic relationship with the privacy protection requiring segment, an aggregate transaction data falling within a specified range of the aggregate transaction data of the privacy protection requiring segment, or any combination thereof,

wherein generating the visual representation comprising data regarding the transaction index of at least one of the plurality of segments comprises displaying, for each privacy protection requiring segment, data regarding a masked transaction index, the masked transaction index being generated based on an average of the transaction indexes of the privacy protection requiring segment and the transaction indexes of the at least one analogous segment.

24. The method of any of claims 21-23, wherein the visual representation is generated by at least one second processor, the at least second processor not having access to the transaction data or the aggregate transaction data.

25. The method of any of claims 21-24, wherein the at least one second processor does not have access to the transaction index for the enhanced privacy protection requiring segments.

26. The method of any of claims 21-25, wherein determining a plurality of segments of a geographic area comprises generating a grid overlayed on a representation of the geographic area, the grid comprising a plurality of subunits, each subunit corresponding to one of the plurality of segments.

27. The method of any of claims 21-26, further comprising:
receiving data regarding a plurality of customers that have previously completed transactions with a user; and
excluding, from the plurality of card-present payment transactions, transactions that do not involve at least one of the plurality of customers that have previously completed transactions with the user.

28. A system for selectively displaying information regarding activity in a geographic area, comprising at least one processor configured or programmed to:
receive data regarding a plurality of card-present payment transactions that have been conducted in the geographic area during a time interval;
determine a plurality of segments of the geographic area;
assign each of the plurality of card-present payment transactions to the segment corresponding to the segment of the geographic area in which the card-present payment transaction was conducted;
determine aggregate transaction data for each of the plurality of segments based on data regarding the card-present payment transactions that have been assigned to that segment;
generate a transaction index for each segment of the plurality of segments, the transaction index for each segment being generated based on a comparison of the aggregate transaction data of that segment with at least one of the following: aggregate transaction data of at least one different segment of the plurality of segments, at least one predetermined metric, or any combination thereof; and
generate a visual representation comprising data regarding the transaction index of at least one of the plurality of segments.

29. The system of claim 28, wherein the at least one processor is further configured or programmed to:

determine, for at least one segment of the plurality of segments of the geographic area and based on receiving the data regarding the plurality of card-present payment transactions, data regarding a total number and/or total amount of transactions in which each of at least one merchant located in the at least one segment was involved during the time interval; and

determine whether the at least one segment is an enhanced privacy protection requiring segment based on determining whether the fraction of the aggregate transaction data of the at least one segment that is attributable to at least one of the at least one merchant exceeds a threshold.

30. The system of claim 28 or 29, wherein the at least one processor is further configured or programmed to:

identify, for each enhanced privacy protection requiring segment, at least one analogous segment, the at least one analogous segment, comprising a segment of the geographic area having at least one of the following characteristics: a predetermined geographic relationship with the privacy protection requiring segment, an aggregate transaction data falling within a specified range of the aggregate transaction data of the privacy protection requiring segment, or any combination thereof,

wherein generating the visual representation comprising data regarding the transaction index of at least one of the plurality of segments comprises displaying, for each privacy protection requiring segment, data regarding a masked transaction index, the masked transaction index being generated based on an average of the transaction indexes of the privacy protection requiring segment and the transaction indexes of the at least one analogous segment.

31. The system of any of claims 28-30, wherein the at least one processor comprises at least one second processor configured or programmed to generate the visual representation, wherein the at least second processor does not have access to the transaction data or the aggregate transaction data.

32. The system of any of claims 28-31, wherein the at least second processor does not have access to the transaction index for the enhanced privacy protection requiring segments.

33. The system of any of claims 28-32, wherein determining a plurality of segments of a geographic area comprises generating a grid overlayed on a representation of the geographic area, the grid comprising a plurality of subunits, each subunit corresponding to one of the plurality of segments.

34. The system of any of claims 28-33, wherein the at least one processor is further configured or programmed to:

receive data regarding a plurality of customers that have previously completed transactions with a user; and

exclude, from the plurality of card-present payment transactions, transactions that do not involve at least one of the plurality of customers that have previously completed transactions with the user.

35. A computer program product for selectively displaying information regarding activity in a geographic area, the computer program product comprising at least one non-transitory computer-readable medium comprising program instructions that, when executed by the at least one processor, cause the at least one processor to:

receive data regarding a plurality of card-present payment transactions that have been conducted in the geographic area during a time interval;

determine a plurality of segments of the geographic area;

assign each of the plurality of card-present payment transactions to the segment corresponding to the segment of the geographic area in which the card-present payment transaction was conducted;

determine aggregate transaction data for each of the plurality of segments based on data regarding the card-present payment transactions that have been assigned to that segment;

generate a transaction index for each segment of the plurality of segments, the transaction index for each segment being generated based on a comparison of the aggregate transaction data of that segment with at least one of the following: aggregate transaction data of at least one different segment of the plurality of segments, at least one predetermined metric, or any combination thereof; and

generate a visual representation comprising data regarding the transaction index of at least one of the plurality of segments.

36. The computer program product of claim 35, wherein the at least one non-transitory computer-readable medium further comprises program instructions that, when executed by at least one processor, cause the at least one processor to:

determine, for at least one segment of the plurality of segments of the geographic area and based on receiving the data regarding the plurality of card-present payment transactions, data regarding a total number and/or total amount of transactions in which each of at least one merchant located in the at least one segment was involved during the time interval; and

determine whether the at least one segment is an enhanced privacy protection requiring segment based on determining whether the fraction of the aggregate transaction data of the at least one segment that is attributable to at least one of the at least one merchant exceeds a threshold.

37. The computer program product of claim 35 or 36, wherein the at least one non-transitory computer-readable medium further comprises program instructions that, when executed by at least one processor, cause the at least one processor to:

identify, for each enhanced privacy protection requiring segment, at least one analogous segment, the at least one analogous segment, comprising a segment of the geographic area having at least one of the following characteristics: a predetermined geographic relationship with the privacy protection requiring segment, an aggregate transaction data falling within a specified range of the aggregate transaction data of the privacy protection requiring segment, or any combination thereof,

wherein generating the visual representation comprising data regarding the transaction index of at least one of the plurality of segments comprises displaying, for each privacy protection requiring segment, data regarding a masked transaction index, the masked transaction index being generated based on an average of the transaction indexes of the privacy protection requiring segment and the transaction indexes of the at least one analogous segment.

38. The computer program product of any of claims 35-37, wherein the at least one processor comprises at least a second processor, wherein the at least one non-transitory computer-readable medium further comprises program instructions

that, when executed by the at least second processor, cause the at least second processor to generate the visual representation,

wherein the at least second processor does not have access to the transaction data or the aggregate transaction data, and

wherein the at least second processor does not have access to the transaction index for the enhanced privacy protection requiring segments.

39. The computer program product of any of claims 35-38, wherein determining a plurality of segments of a geographic area comprises generating a grid overlayed on a representation of the geographic area, the grid comprising a plurality of subunits, each subunit corresponding to one of the plurality of segments.

40. The computer program product of any of claims 35-39, wherein the at least one non-transitory computer-readable medium further comprises program instructions that, when executed by the at least one processor, cause the at least one processor to:

receive data regarding a plurality of customers that have previously completed transactions with a user; and

exclude, from the plurality of card-present payment transactions, transactions that do not involve at least one of the plurality of customers that have previously completed transactions with the user.

41. A method for selectively displaying information regarding commercial activity in a geographic area, comprising:

receiving, by at least one processor, data regarding a plurality of card-present payment transactions that have been conducted in the geographic area during a time interval;

determining, by at least one processor, a plurality of segments of the geographic area;

assigning, by at least one processor, each of the plurality of card-present payment transactions to the segment corresponding to the segment of the geographic area in which the card-present payment transaction was conducted;

determining, by at least one processor, aggregate transaction data for each of the plurality of segments based on data regarding the card-present payment transactions that have been assigned to that segment;

generating, by at least one processor, a transaction index for each segment of the plurality of segments, the transaction index for each segment being generated based on a comparison of the aggregate transaction data of that segment with at least one of the following: aggregate transaction data of at least one different segment of the plurality of segments, at least one predetermined metric, or any combination thereof; and

generating, by at least one processor, a visual representation comprising data regarding the transaction index of at least one of the plurality of segments.

42. The method of claim 41, further comprising:

determining, for at least one segment of the plurality of segments of the geographic area and based on receiving the data regarding the plurality of card-present payment transactions, data regarding a total number and/or total amount of transactions in which each of at least one merchant located in the at least one segment was involved during the time interval; and

determining whether the at least one segment is an enhanced privacy protection requiring segment based on determining whether the fraction of the aggregate transaction data of the at least one segment that is attributable to at least one of the at least one merchant exceeds a threshold.

43. The method of claim 42, further comprising:

identifying, for each enhanced privacy protection requiring segment, at least one analogous segment, the at least one analogous segment, comprising a segment of the geographic area having at least one of the following characteristics: a predetermined geographic relationship with the privacy protection requiring segment, an aggregate transaction data falling within a specified range of the aggregate transaction data of the privacy protection requiring segment, or any combination thereof,

wherein generating the visual representation comprising data regarding the transaction index of at least one of the plurality of segments comprises displaying, for each privacy protection requiring segment, data regarding a masked transaction

index, the masked transaction index being generated based on an average of the transaction indexes of the privacy protection requiring segment and the transaction indexes of the at least one analogous segment.

44. The method of claim 43, wherein the visual representation is generated by at least one second processor, the at least second processor not having access to the transaction data or the aggregate transaction data.

45. The method of claim 44, wherein the at least one second processor does not have access to the transaction index for the enhanced privacy protection requiring segments.

46. The method of any of claims 41-45, wherein determining a plurality of segments of a geographic area comprises generating a grid overlayed on a representation of the geographic area, the grid comprising a plurality of subunits, each subunit corresponding to one of the plurality of segments.

47. The method of any of claims 41-46, further comprising:
receiving data regarding a plurality of customers that have previously completed transactions with a user; and
excluding, from the plurality of card-present payment transactions, transactions that do not involve at least one of the plurality of customers that have previously completed transactions with the user.

48. A computer program product for selectively displaying information regarding activity in a geographic area, the computer program product comprising at least one non-transitory computer-readable medium comprising program instructions that, when executed by the at least one processor, cause the at least one processor to:

receive data regarding a plurality of card-present payment transactions that have been conducted in the geographic area during a time interval;
determine a plurality of segments of the geographic area;

assign each of the plurality of card-present payment transactions to the segment corresponding to the segment of the geographic area in which the card-present payment transaction was conducted;

determine aggregate transaction data for each of the plurality of segments based on data regarding the card-present payment transactions that have been assigned to that segment;

generate a transaction index for each segment of the plurality of segments, the transaction index for each segment being generated based on a comparison of the aggregate transaction data of that segment with at least one of the following: aggregate transaction data of at least one different segment of the plurality of segments, at least one predetermined metric, or any combination thereof; and

generate a visual representation comprising data regarding the transaction index of at least one of the plurality of segments.

49. The computer program product of claim 48, wherein the at least one non-transitory computer-readable medium further comprises program instructions that, when executed by at least one processor, cause the at least one processor to:

determine, for at least one segment of the plurality of segments of the geographic area and based on receiving the data regarding the plurality of card-present payment transactions, data regarding a total number and/or total amount of transactions in which each of at least one merchant located in the at least one segment was involved during the time interval; and

determine whether the at least one segment is an enhanced privacy protection requiring segment based on determining whether the fraction of the aggregate transaction data of the at least one segment that is attributable to at least one of the at least one merchant exceeds a threshold.

50. The computer program product of claim 49, wherein the at least one non-transitory computer-readable medium further comprises program instructions that, when executed by at least one processor, cause the at least one processor to:

identify, for each enhanced privacy protection requiring segment, at least one analogous segment, the at least one analogous segment, comprising a segment of the geographic area having at least one of the following characteristics: a predetermined geographic relationship with the privacy protection requiring segment,

an aggregate transaction data falling within a specified range of the aggregate transaction data of the privacy protection requiring segment, or any combination thereof,

wherein generating the visual representation comprising data regarding the transaction index of at least one of the plurality of segments comprises displaying, for each privacy protection requiring segment, data regarding a masked transaction index, the masked transaction index being generated based on an average of the transaction indexes of the privacy protection requiring segment and the transaction indexes of the at least one analogous segment.

51. The computer program product of claim 50, wherein the at least one processor comprises at least a second processor, wherein the at least one non-transitory computer-readable medium further comprises program instructions that, when executed by the at least second processor, cause the at least second processor to generate the visual representation,

wherein the at least second processor does not have access to the transaction data or the aggregate transaction data, and

wherein the at least second processor does not have access to the transaction index for the enhanced privacy protection requiring segments.

52. The computer program product of any of claims 48-51, wherein determining a plurality of segments of a geographic area comprises generating a grid overlayed on a representation of the geographic area, the grid comprising a plurality of subunits, each subunit corresponding to one of the plurality of segments.

53. The computer program product of any of claims 48-52, wherein the at least one non-transitory computer-readable medium further comprises program instructions that, when executed by the at least one processor, cause the at least one processor to:

receive data regarding a plurality of customers that have previously completed transactions with a user; and

exclude, from the plurality of card-present payment transactions, transactions that do not involve at least one of the plurality of customers that have previously completed transactions with the user.

54. A system for selectively displaying information regarding activity in a geographic area, comprising at least one processor configured or programmed to:

- receive data regarding a plurality of card-present payment transactions that have been conducted in the geographic area during a time interval;
- determine a plurality of segments of the geographic area;
- assign each of the plurality of card-present payment transactions to the segment corresponding to the segment of the geographic area in which the card-present payment transaction was conducted;
- determine aggregate transaction data for each of the plurality of segments based on data regarding the card-present payment transactions that have been assigned to that segment;
- generate a transaction index for each segment of the plurality of segments, the transaction index for each segment being generated based on a comparison of the aggregate transaction data of that segment with at least one of the following: aggregate transaction data of at least one different segment of the plurality of segments, at least one predetermined metric, or any combination thereof; and
- generate a visual representation comprising data regarding the transaction index of at least one of the plurality of segments.

55. The system of claim 54, wherein the at least one processor is further configured or programmed to:

- determine, for at least one segment of the plurality of segments of the geographic area and based on receiving the data regarding the plurality of card-present payment transactions, data regarding a total number and/or total amount of transactions in which each of at least one merchant located in the at least one segment was involved during the time interval; and

- determine whether the at least one segment is an enhanced privacy protection requiring segment based on determining whether the fraction of the aggregate transaction data of the at least one segment that is attributable to at least one of the at least one merchant exceeds a threshold.