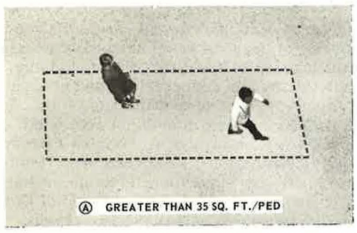
RESOURCE A

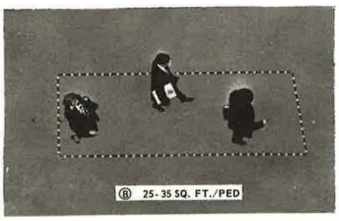
Visualizing the Volume of People "square feet allowed per person"

A.



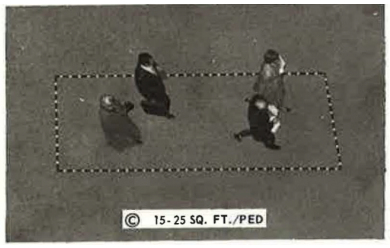
-Every person has more than 35 sq. ft. to themselves.
-People can move freely at their own pace and avoid obstacles.
- About 7 people per minute per 1 ft. width of walkway

B.



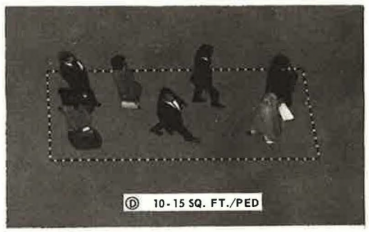
-Every person has 25 to 35 sq. ft. to themselves.
-People can mostly move freely at their own pace. May encounter obstacles in bidirectional traffic.

C.



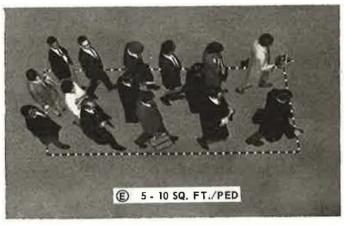
- Every person has 15 to 25 sq. ft. to themselves.
- People's walking speeds and ability to avoid obstacles is restricted.
- About 10 to 15 people per minute per 1 ft. width of walkway
- Reasonably fluid flow, but there could be friction or interaction between people

D.



-Every person has 10 to 15 sq. ft. to themselves
-Majority of people would have their walking speeds restricted and would encounter obstacles.
-Might have momentary stoppages of flow, and people might have to weave in the crowd to make forward progress.

E.



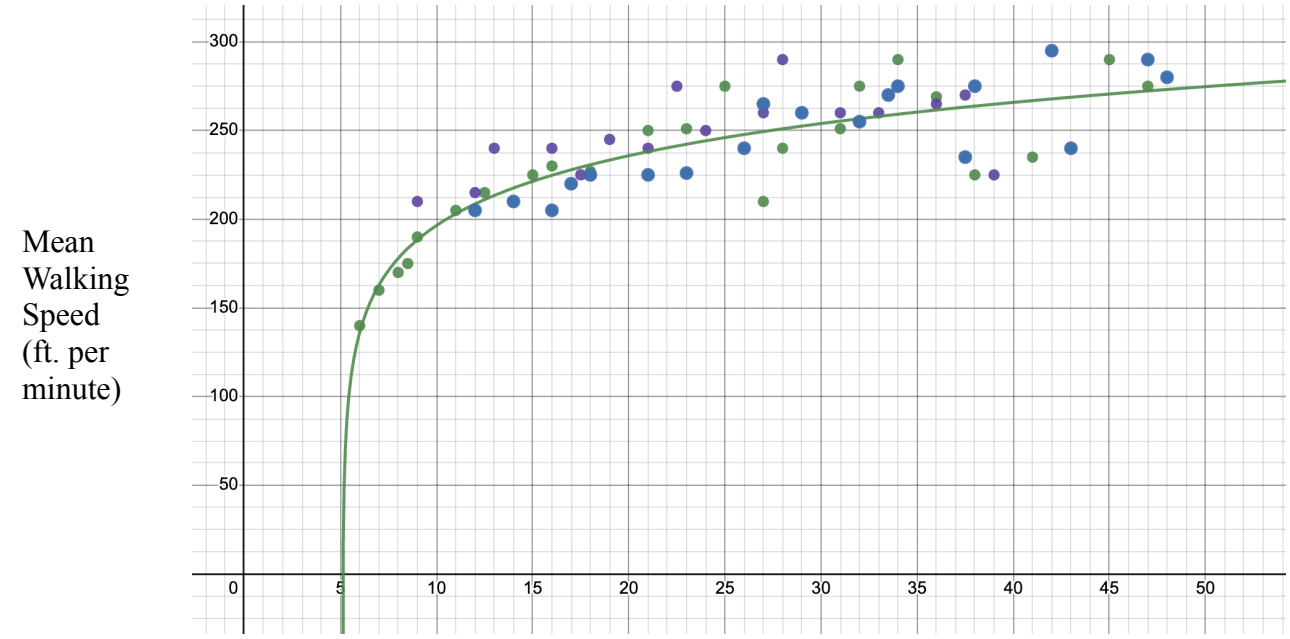
- Every person has 5 to 10 sq. ft. to themselves.
- Everyone would have their walking speeds restricted to a shuffle, and people would not be able to weave through the crowd to make progress.

F.

- Every person would have less than 5 sq. ft. to themselves.
- Walking speeds restricted to a shuffle. Movement is sporadic and based on those at the front. Complete flow breakdown.
- Not recommended.

RESOURCE B

Mean Walking Speed v.s. Space per Person



Best fit function – $f(x) = 81.2642log(2.97451x - 15.2104) + 102.024$

- Hallway width 6 ft
- Hallway width 7.5 ft
- Hallway width 10 ft