## HIGHWAY CAPACITY MANUAL

Special Report 209

TRANSPORTATION RESEARCH BOARD National Research Council

[atenticated]



# (SHOWING BIAS, CREATING BIAS)





UPGRADES? SURE IT'S GOT PLENTY. EVEN THE STREET GOT UPGRADED TO AN ARTERIAL JUST THE OTHER DAY.



## SCOTT KNEW THAT THE SIGNALS WERE TIMED TO ALLOW FOR THE SMOOTH FLOW OF TRAFFIC MOVING AT 25 MPH (40 km/h)







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# CAPACITY OF STREETS



## WILL NOT ONLY ENHANCE THE CAPACITY TO MEET FUTURE TRAFFIC DEMANDS, BUT THE LEVEL OF SERVICE WILL IMPROVE FROM "D" TO "B"

THE IMPROVEMENTS TO THE INTERSECTIONS

AND THE UPGRADING OF THE ROAD TO FOUR LANES



## TRANSPORTATION PROFESSIONALS

(NEED TO BE AND APPEAR TO BE UNBIASED)

THE CHANGES TO THE INTERSECTIONS AND ADDING TWO AUTOMOBILE LANES WILL ACCOMMODATE THE ADDITIONAL AUTOMOBILE TRAFFIC THAT WE FORECASTED. THE LEVEL OF SERVICE FOR AUTOMOBILE USERS WILL INCREASE FROM "D" TO "B" DURING THE WEEKDAY PEAK HOUR OF AUTOMOBILE USE.






























































## **Connected Street Networks**



Grid



Radial



**Grid & Squares** 



Irregular



Web



Curvilinear





## **Conventional Suburban Development**












































































PROPOSED FIGURE GROUND

PROPOSED TRAFFIC CONNECTIONS

**PROPOSED CONNECTIONS TO THE RIVE** 



TRANSPORTATION ELEMENTS























## **Livability and Its Consequences**

The Chos Chasis Inck: Mayor Jan

and with ears

the helped

Across the nation, citizens with vision and a new community spirit are transforming once run-down urban areas—such as in Chattanooga, Tennessee into exciting, people-friendly towns.

The Reborn American City A Place You Might Want To Live A Report By Lamar Graham

INSIDE: What Is "Deep Play"?...By Diane Ackerman

The Herald
































**Existing Network** 



**Future Network** 















## City Expansion along Abercorn Street

- 9 to 10 mile corridor spine that runs in the North South Direction
- Displays a range of urban conditions
- Chronicles the city's expansion over 200 years
- Helps identify a range of contexts for future work

# The Abercorn Street Helps Analyze:

- Street Patterns and Connectivity
- Built Density in a given area
- Street Character and treatments
- Character of Built Form



10.4 Miles of Streets



#### Abercorn Street: Landmark Historic District









8,600 Sq.Ft per Acre (Footprint Density)

### Abercorn Street: Historic District













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1334-55

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#### **Abercorn Street: Historic Neighborhoods**



4.3 Miles of Streets



#### Abercorn Street: Suburban Pattern



6,200 Sq.Ft per Acre (Footprint Density)



#### **Abercorn Street: Retail Mall District**



Sq.Ft per Acre (Footprint Density)



## **Abercorn Street: Big Box Retail with Suburban Residential**



Sq.Ft per Acre (Footprint Density)


































































































## **Conventional Development Cycle**



## **Healthy Development Cycle**





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## **Healthy Development Cycle**



## **Conventional Development Cycle**

