Densification on high ground

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Richard Kay, NYT Sept 10
Geography of New Orleans

Source: LSU
“Bowl effect”
Bowl effect: 16 days after storm

Maximum and Current Estimated Flood Extents

- Orleans East Bank (Metro)
  - Underwater Date: 2 Oct
  - 9 of 68 Pumps Operational
  - 6,186 cfs (current flow rate)
  - 13.67% of Total Flow Capacity

- Orleans East (CITRUS)
  - Underwater Date: 30 Sept
  - 9 of 29 Pumps Operational
  - 2,450 cfs (current flow rate)
  - 62.03% of Total Flow Capacity

- New Orleans East

Map Produced by FOO & ANN Gates Engineering - U.S. Army Corps of Engineers and NOAA
This Product Based on Data from NHC and NCEER
Map - Final Draft
PSC: Chase Mihalik/EOC.ncoa.army.mil
Backswamp sprawl: 1950s-1980s
Backswamp sprawl

Source: USGS
Backswamp sprawl: Problems

- Subsidence
- Impervious Surfaces
- Complacency

Source: USGS
Backswamp sprawl submerged

Source: NOAA

Source: LA DEQ
Hurricane history & floods

Flooding: 1947
Flooding: 1965
Densify on Natural Levee

Pontalba Bldg (1850s)

Source: US Census 2000

Data Classes

Persons/Sq Mile

- 34 - 2828
- 3056 - 5462
- 5641 - 8176
- 8320 - 11492
- 11798 - 14671
- 15400 - 19408
- 24032 - 40317

Features

- Major Road
- Stream/Waterbody
- Street

- (4 per acre)
- (5-8 per acre)
- (9-12 per acre)
- (13-18 per acre)
- (19-22 per acre)
- (22-30 per acre)
- (31-66 per acre)
Paris: 81 per acre
Compact City

Not just Density

- Mixed uses (zoning)
- Reduced car space
- Prioritize pedestrian & bicycle

Zurich: 15-25 per acre
Parking space

- 350 square feet (sf.) per space (off street)
  - 200 sf. for car
  - 150 sf. for circulation
- 400 sf. if landscaping
Reconfiguring urban space

Source: San Francisco Planning Dept
Reconfiguring urban space

Source: Dover-Kohl
Wal-Mart area

Source: Urban Conservancy
Portland: Pearl District
Pearl District
A & P Magazine Street
Tchoupitoulas Corridor

Riverside Market

Save-a-Center
Winn Dixie Treme
Pedestrian Space

Congruent with

- Transit
- Moderate – high density
- Slow car speeds
10 minutes = ½ Mile
Existing Built Environment:

- 49% of all trips less than 3 miles
- 40% shorter than 2 miles
- 28% shorter than 1 mile

Source: Pucher, et. al. (2000)
Barriers to Bike Space

**Incongruent with:**

- High speed cars
- Aggressive driving
- Pedestrians?
- Better than Ped. in existing low density (but not much)
Traffic Calming For Pedestrians & Bicyclists
Traffic Calming

• System-wide

• Methods:
  – Raised berms
  – Intersection chokers
  – Neck-downs
Reducing parking space

- City CarShare
- Reform on-street permitting
- Reduce maximum
- Eliminate independently accessible requirement
Light Rail: 15 per acre
Regional High Speed Rail

Connections to:

- N.O. CBD
- Airport
- Baton Rouge
- Houston-Memphis-Atlanta
Reconfigure the region

Source: USGS