Executive Summary

THE QUALITY OF LIFE ATLAS

LESTER KING, PhD.
Houston Community Sustainability:

The Quality of Life Atlas

by

Lester King, PhD, AICP, LEED

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Shell Center for Sustainability
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Front cover illustration:
The cover features 27 elementary school kids walking home from school on a beaten path without a sidewalk. Some of them are pulling wheeled bags, so on rainy days, their bags and shoes will probably become muddied. These students have to cross a gas station, avoiding incoming and outgoing cars. Programs such as ‘Safe Routes to School’, help to ensure that routes leading to and from school have kids in mind if they have to navigate dangerous and inhospitable land uses. Somethings as simple as adding sidewalks, goes a long way in keeping our kids safe.

In the background is the beautiful skyline of downtown Houston where students may eventually find lucrative jobs. At the very least an Associate’s degree may be the required threshold for entry into white collar jobs to be found in downtown Houston, such as clerical staff. Therefore 18 of those kids pictured on the front cover will not hold white collar jobs such as to be found in downtown Houston (Pg 13). Of these 18 kids not working in downtown Houston, six of them will be in poverty (Pg. 25).

Of the 27 students in the prior photograph, only 1 will take public transportation to work (Pg. 93), although according to local survey results 12 of them would prefer public transit. Assuming all except
the six students in poverty make the median household income in Houston and spend the expected 17% of their incomes on private car ownership (Pg. 35), the remaining 21 kids will spend an aggregate of $151,207 each year for transportation to and from the workplace. Over the length of their work life (44 years), that is a total of $6,653,123 going to owning and maintaining private autos. Houstonians drive an average of 17,534 miles per household each year, so over their work life these 21 students will drive in aggregate 16,201,416 miles (Pg. 89). This is the equivalent 10,441,200 gallons of gasoline consumed, or 216,216 barrels of oil, and 4,444 metric tons of carbon dioxide released to the atmosphere. We have not even included the cost of maintaining the roadways for these kids over their working life, or the cost of maintaining the parking lots and roads they will use. Maintaining and financing private autos in Houston is a heavy burden that will be placed on the shoulders of these kids.

A few of the things we can do to help our kids achieve a better quality of life include the following. Ensuring that there are sidewalks along strategic routes for at least ½ mile from each school. Ensure they graduate from school and understand the integral necessity of pursuing tertiary level degrees or training programs. Actively pursue investment for more efficient mass transportation options in Houston to curb the dependency on private automobiles.

We hope you find this report useful to better understand our city and the people who live here.

Lester O. King, PhD
Acknowledgements

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Executive Summary

In order for citizens, analysts and elected officials to successfully pursue the sustainable development of the City of Houston, a robust set of indicators are needed to identify those issues that are integral to sustainable development and measure progress toward managing those issues. Sustainable development indicators, by definition, are distinct from traditional performance metrics in that they are value laden with sustainability principles and themes and a growing sustainability knowledge base.

Sustainability principles and themes include: ensuring balance among the pillars of sustainability (social, economic and environmental awareness); comprehensiveness; reliability and validity, timeliness and sensitivity. The interconnectedness of the various systems of city development is also an important principle of sustainability.

Super Neighborhoods in Houston are administrative areas similar in composition to what would more universally be referred to as communities. These communities are composed of several neighborhoods, called subdivisions in Houston (Subdivisions in Houston are exclusively composed of houses, with very few exceptions). The Super Neighborhood is an excellent model in Houston for planning purposes, since they capture housing, services, transportation and other local land uses in one area. Therefore analysis of sustainable development at the Super Neighborhood level is representative of the types of social, economic and environmental patterns throughout various communities in Houston. Analyzing the city at this level, brings the effects and impacts closer to the residents and captures the dynamics of community development. Breaking the issues into a community by community analysis creates more opportunities for empowerment of residents who require resources to aid in the articulation of their needs.

Indicator measures used in this study were analyzed to determine whether there were correlation patterns of significance. Significant correlations between indicators were identified as groups and referenced in the report. These groups represent social, economic and environmental interrelations among the Super Neighborhoods in Houston. The groups can be described as representing related processes and phenomena of sustainable development and as such are a reliable way to identify the ‘Big Trends’ in Houston. Super Neighborhoods were ranked according to these groups as a useful measure of performance on how Super Neighborhoods compare to the ‘Big Trends’ in the city. These rankings are presented in the conclusion of the report.

The study is primarily intended to assist citizens, staff analysts, and decision makers to address the question, ‘How are Houston Super Neighborhoods developing with regards to sustainability?’

Other titles in this series on sustainable development indicators published by the Shell Center for Sustainability:

- Sustainable Development of Houston Districts: The Health of the City (King, 2013)
- Measuring City Sustainability: Project Houston (Blackburn, 2010).
Table 1: Super Neighborhoods Ranking: Table shows the top 5, bottom 5 and average performing Super Neighborhoods. Green to red indicates High rank to Low rank in sustainability. The Min score is either High rank or Low rank in sustainability based on the indicator. Example is Min score for ‘Poverty’ is High rank in sustainability vs Min ‘Voting’ score is Low rank in sustainability.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Super Neighborhood Performance</th>
<th>Super Neighborhood ID #s (Check Pg. xi for names)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Average</td>
</tr>
<tr>
<td>Social Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PopGrowth %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Degrees %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voting %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ave Spending on Health $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HousingCost &gt; 30%Income %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pop 1/4 mile to Parks %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pop in Food Deserts %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Jobs %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Household Income $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing 1/4 mile to Jobs %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor Streets %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pop 1/4 mile to Bus Stops %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle Miles Traveled #</td>
<td></td>
<td></td>
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<tr>
<td>Pop using Transit %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Air - AQI - Ozone #</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water-Household (ac ft/y) #</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flooding-Pop in FloodZone %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land: High Intensity** %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Use Mix (index) #</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land - Commercial %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land - MultiFamily %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land - SingleFamily %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Forty-one neighborhoods had 0 housing units in business centers.  ***Unclear whether the high percentages on this indicator are good or bad trend towards sustainability.
Super Neighborhoods in Houston

1. WILLOWBROOK
2. GREATER GREENSPoint
3. CARVERDALE
4. FAIRBANKS / NORTHWEST CROSSING
5. GREATER INWOOD
6. ACRES HOME
7. HIDDEN VALLEY
8. WESTBRANCH
9. ADDICKS PARK TEN
10. SPRING BRANCH WEST
11. LANGWOOD
12. CENTRAL NORTHWEST
13. INDEPENDENCE HEIGHTS
14. LAZY BROOK / TIMBERGROVE
15. GREATER HEIGHTS
16. MEMORIAL
17. ELDORIDGE / WEST OAKS
18. BRIARFOREST AREA
19. WESTCHASE
20. MID WEST
21. GREATER UPTOWN
22. WASHINGTON AVENUE COALITION / MEMORIAL PARK
23. AFTON OAKS / RIVER OAKS AREA
24. NEARTOWN - MONTROSE
25. ALief
26. SHARPSTOWN
27. GULFTON
28. UNIVERSITY PLACE
29. WESTWOOD
30. BRAEBURN
31. MEYERLAND AREA
32. BRAESWOOD PLACE
33. MEDICAL CENTER AREA
34. ASTRODOME AREA
35. SOUTH MAIN
36. BRAYS OAKS
37. WESTBURY
38. WILLOW MEADOWS / WILLOWBEND AREA
39. FONDREN GARDENS
40. CENTRAL SOUTHWEST
41. FORT BEND / HOUSTON
42. IAH / AIRPORT AREA
43. KINGWOOD AREA
44. LAKE HOUSTON
45. NORTHSIDE/NORTHLINE
46. EASTEX - JENSEN AREA
47. EAST LITTLE YORK / HOMESTEAD
48. TRINITY / HOUSTON GARDENS
49. EAST HOUSTON
50. SETTEGAST
51. NORTHSIDE VILLAGE
52. KASHMIERE GARDENS
53. EL DORADO / OATES PRAIRIE
54. HUNTERWOOD
55. GREATER FIFTH WARD
56. DENVER HARBOR / PORT HOUSTON
57. PLEASANTVILLE AREA
58. NORTHSHORE
59. CLINTON PARK TRI-COMMUNITY
60. FOURTH WARD
61. DOWNTOWN
62. MIDTOWN
63. SECOND WARD
64. GREATER EASTWOOD
65. HARRISBURG / MANCHESTER
66. MUSEUM PARK
67. GREATER THIRD WARD
68. OST / SOUTH UNION
69. GULFGATE RIVERVIEW / PINE VALLEY
70. PECAN PARK
71. SUNNYSIDE
72. SOUTH PARK
73. GOLFCREST / BELLOUT / REVEILLE
74. PARK PLACE
75. MEADOWBROOK / ALLENDALE
76. SOUTH ACRES / CRESTMONT PARK
77. MINNETEX
78. GREATER HOBBY AREA
79. EDGEBROOK AREA
80. SOUTH BELT / ELLINGTON
81. CLEAR LAKE
82. MAGNOLIA PARK
83. MACGregor
84. SPRING BRANCH NORTH
85. SPRING BRANCH CENTRAL
86. SPRING BRANCH EAST
87. GREENWAY / UPPER KIRBY AREA
88. LAWNSDALE /ewaySIDE
89. HOLLYWOOD / MIDTOWN
90. MEMORIAL
91. GLOUCESTER / WILLOWBEND
92. AFTON OAKS / TIMBERGROVE
93. FAIRBANKS / NORTHWEST CROSSING
94. GREATER GREENSPoint
95. WILLOWBROOK
96. CARVERDALE
97. GREATER INWOOD
98. ACRES HOME
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148. DENVER HARBOR / PORT HOUSTON
149. PLEASANTVILLE AREA
150. NORTHSHORE
151. CLINTON PARK TRI-COMMUNITY
152. FOURTH WARD
Table 1 shows a comparison of the 88 Super Neighborhoods in the study across the major sustainability indicators chosen for this report. Super Neighborhoods are described first by the numerical values of minimum performance, city average and then maximum performance. Then the Super Neighborhoods are rank ordered from left to right according to minimum to maximum performance. In some cases the minimum performance among the Super Neighborhoods are actually the better (high) rank according to sustainability and in some cases the minimum performance is the lowest rank. Therefore the color gradation codes of green to yellow to red were meant to illustrate the sustainability performance rank of better ranking to city average to low ranking on the sustainability indicators across the 11 districts.

The reader should note that the sustainability indicators effort is not meant to establish an index, so Super Neighborhoods were not ranked with a single number across all of the indicators. That said, the visual inspection of the ranking (as depicted in Table 1) to determine whether some Super Neighborhoods fall more often than others in either the better or lower ranks according to the indicators, is a valid use of the data presented in this research. Some of those findings are presented throughout the report.
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