

Texas Southern University

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July 15, 2015

Assessing the urban forest values an institutional sector approach

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Available at: <https://works.bepress.com/rodriguezam/3/>

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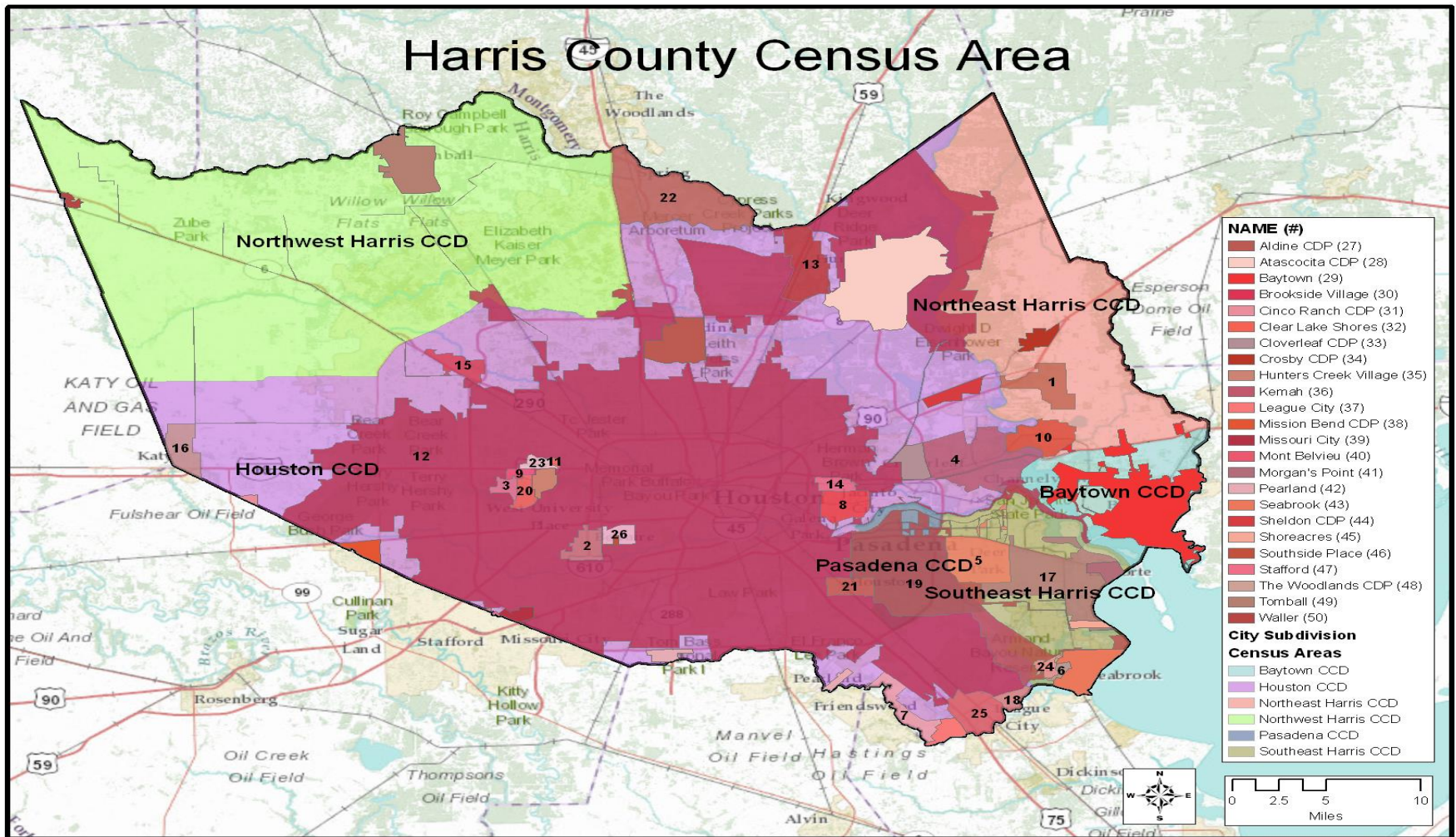
Raiven Williams

Assessing the urban forest values an institutional sector approach.

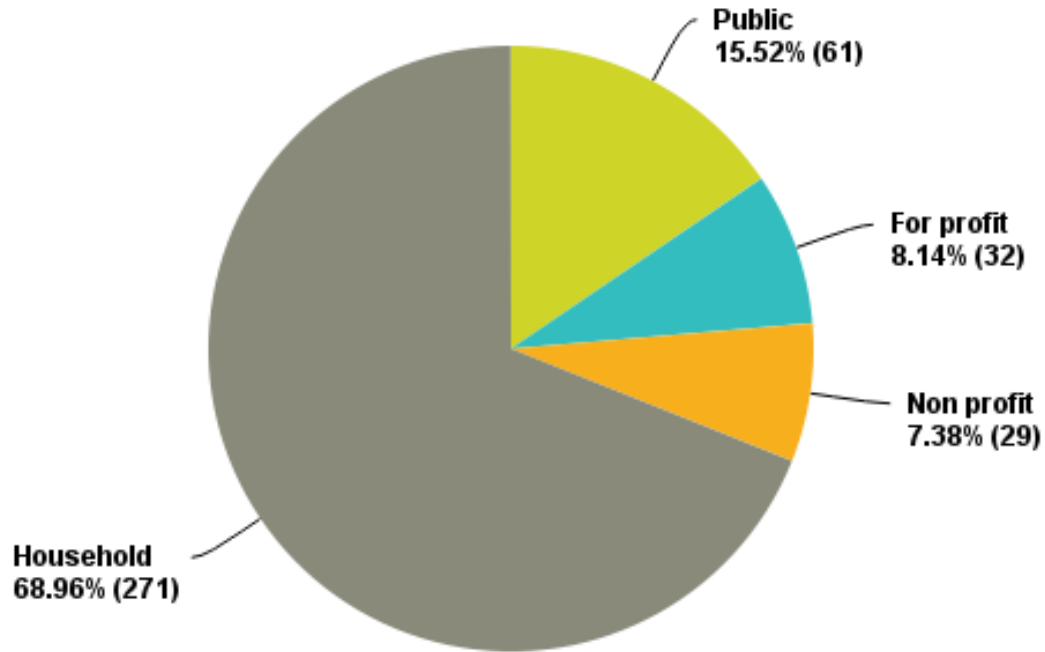
Tuesday, July 15, 2014

Study Area – Harris County
Method – Community Survey
Sector Analysis - Four
Sectors
Spatial Component – Three
Levels

Harris County Census Area



Q1: The questions can be answered from the following frame of references: Public Sector - For Profit/business Sector, Non Profit Sector, or Household Sector.



Q1: The questions can be answered from the following frame of references: Public Sector - For Profit/business Sector, Non Profit Sector, or Household Sector. Choose which sector will best represent your responses.

	Public	For profit	Non profit	Household	Total
Q1: Public	100.00% 56	0.00% 0	0.00% 0	0.00% 0	56
Q1: For profit	0.00% 0	100.00% 28	0.00% 0	0.00% 0	28
Q1: Non profit	0.00% 0	0.00% 0	100.00% 23	0.00% 0	23
Q1: Household	0.00% 0	0.00% 0	0.00% 0	100.00% 242	242
Total Respondents	56	28	23	242	349

Spatial Ecosystem Continuum

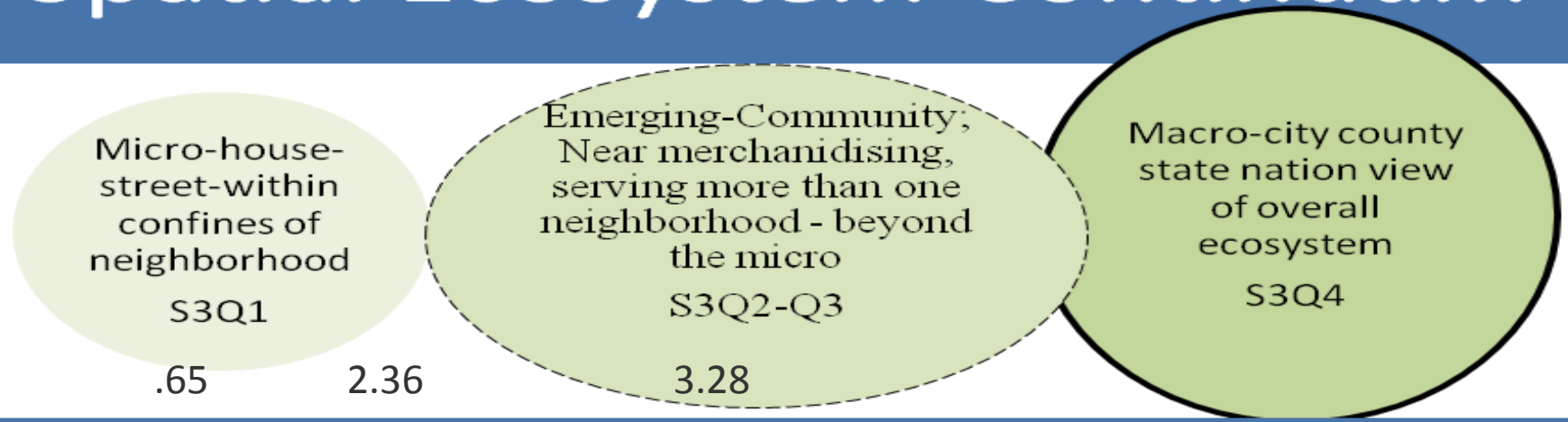
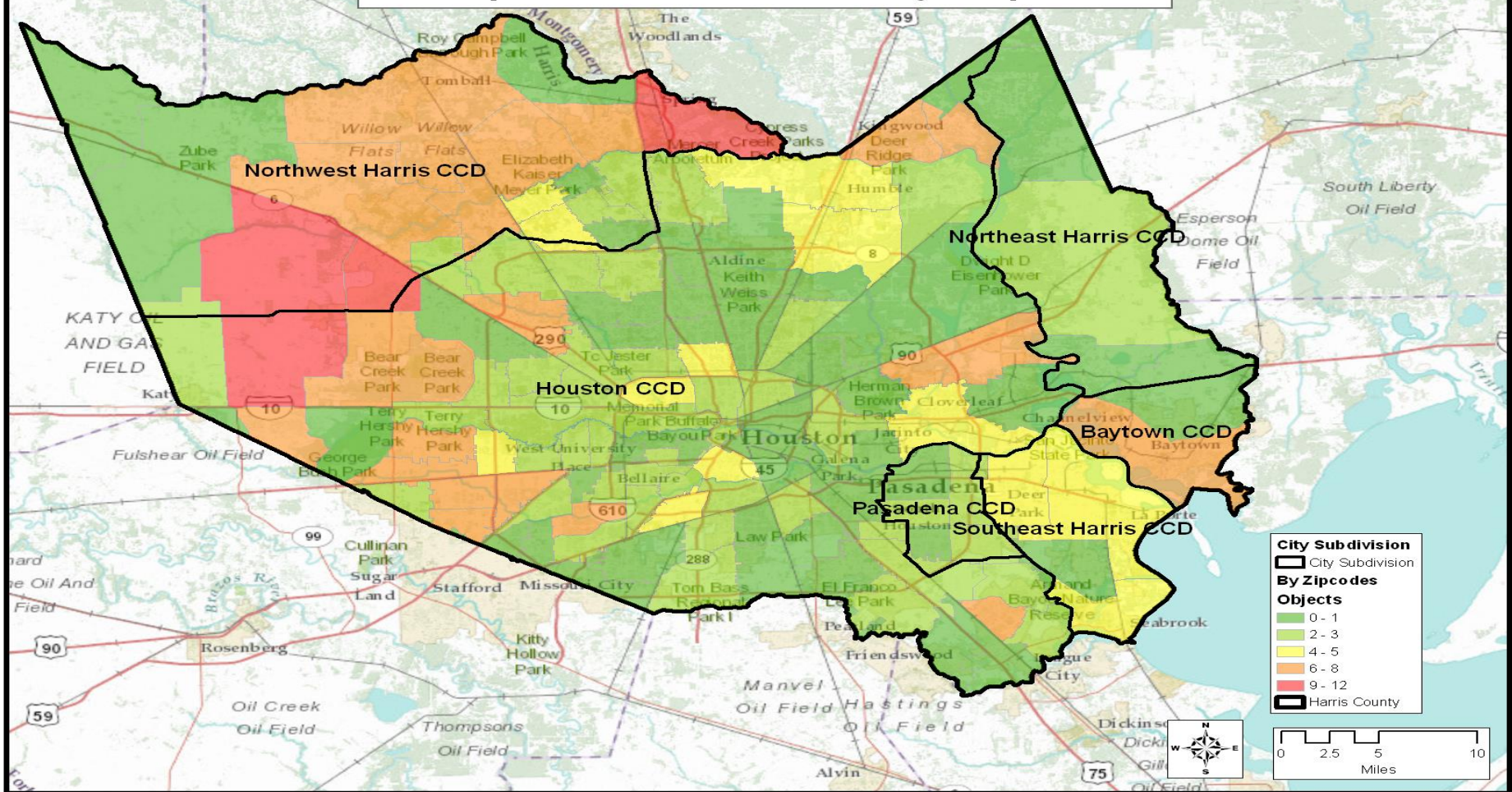


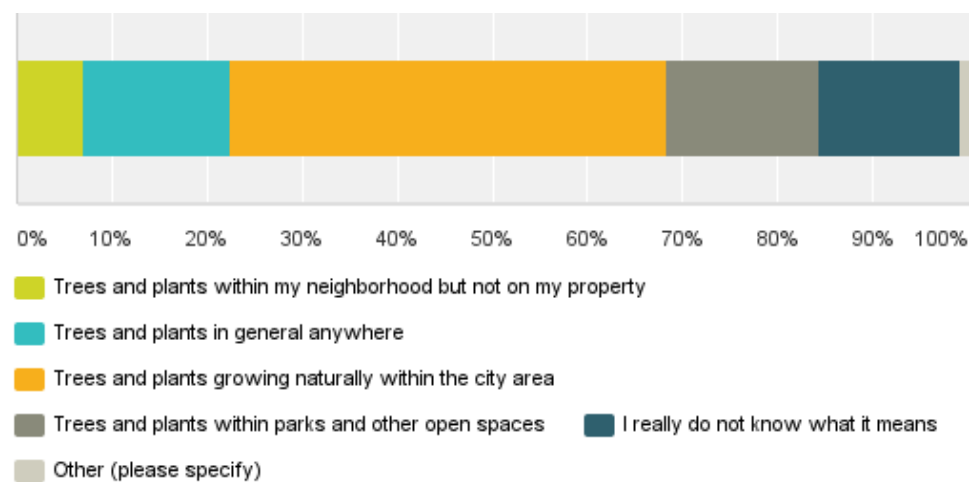
Figure 19. Spatial Interconnection and Continuum

Source: Rodriguez (2012)

Sample Distribution by Zipcode



Q2: Based on your knowledge which statement best describes what is meant by the Urban Forest



Q2: Based on your knowledge which statement best describes what is meant by the Urban Forest

	Trees and plants within my neighborhood but not on my property	Trees and plants in general anywhere	Trees and plants growing naturally within the city area	Trees and plants within parks and other open spaces	I really do not know what it means	Other_Your Definition	Other (please specify)	Total
Q1: Public	10.71% 6	14.29% 8	46.43% 26	17.86% 10	10.71% 6	0.00% 0	0.00% 0	56
Q1: For profit	7.14% 2	14.29% 4	35.71% 10	25.00% 7	17.86% 5	0.00% 0	0.00% 0	28
Q1: Non profit	17.39% 4	30.43% 7	34.78% 8	13.04% 3	4.35% 1	0.00% 0	0.00% 0	23
Q1: Household	5.37% 13	11.57% 28	49.17% 119	16.94% 41	16.53% 40	0.00% 0	0.41% 1	242
Total Respondents	25	47	163	61	52	0	1	349

Q3: Did you know that trees correctly placed on your lot can specifically reduce your energy cost both in the winter and the summer

	Yes I knew that	No I did not know that	It is good to know that	I do not care one way or the other	Total
Q1: Public	57.14% 32	28.57% 16	14.29% 8	0.00% 0	56
Q1: For profit	75.00% 21	25.00% 7	0.00% 0	0.00% 0	28
Q1: Non profit	56.52% 13	21.74% 5	21.74% 5	0.00% 0	23
Q1: Household	63.22% 153	21.90% 53	14.88% 36	0.00% 0	242
Total Respondents	219	81	49	0	349

Q4: Do you think the conservation of the urban natural environment, which include the trees, foliage, wild small animals, birds, bees, and other aspects of the unbuilt urban area is important to your personal well being

	I am not sure one way or the other	Yes I generally agree with the above statement	No, I generally do not agree with the above statement	I do not care one way or the other	I care and would like to do something to protect it.	Total
Q1: Public	8.93% 5	73.21% 41	3.57% 2	5.36% 3	8.93% 5	56
Q1: For profit	17.86% 5	64.29% 18	3.57% 1	3.57% 1	10.71% 3	28
Q1: Non profit	4.35% 1	82.61% 19	4.35% 1	0.00% 0	8.70% 2	23
Q1: Household	2.89% 7	82.64% 200	2.07% 5	1.24% 3	11.16% 27	242
Total Respondents	18	278	9	7	37	349

Q6: Generally speaking comparing you and your local officials to the above items, which response best fits

	My local officials are about as aware as I am	I believe I am more aware than my local officials	My local officials are likely more aware than I	Total
Q1: Public	25.45% 14	40.00% 22	34.55% 19	55
Q1: For profit	46.43% 13	32.14% 9	21.43% 6	28
Q1: Non profit	21.74% 5	52.17% 12	26.09% 6	23
Q1: Household	31.67% 76	25.42% 61	42.92% 103	240
Total Respondents	108	104	134	346

Q7: At least one large tree in every yard is

	1. Very Unimportant	2. Somewhat Unimportant	3. Neutral	4. Somewhat Important	5. Very Important	Total
Q1: Public	25.00% 14	3.57% 2	7.14% 4	23.21% 13	41.07% 23	56
Q1: For profit	17.86% 5	10.71% 3	7.14% 2	32.14% 9	32.14% 9	28
Q1: Non profit	8.70% 2	13.04% 3	13.04% 3	43.48% 10	21.74% 5	23
Q1: Household	10.33% 25	5.37% 13	8.26% 20	28.51% 69	47.52% 115	242
Total Respondents	46	21	29	101	152	349

Q8: Outdoors, including parks with many trees and other natural features

	1. Very Unimportant	2. Somewhat Unimportant	3. Neutral	4. Somewhat Important	5. Very Important	Total
Q1: Public	21.43% 12	5.36% 3	10.71% 6	17.86% 10	44.64% 25	56
Q1: For profit	21.43% 6	0.00% 0	3.57% 1	28.57% 8	46.43% 13	28
Q1: Non profit	17.39% 4	4.35% 1	17.39% 4	4.35% 1	56.52% 13	23
Q1: Household	14.46% 35	1.65% 4	1.65% 4	16.53% 40	65.70% 159	242
Total Respondents	57	8	15	59	210	349

Q9: Clusters of trees growing throughout the neighborhood is

	1. Very Unimportant	2. Somewhat Unimportant	3. Neutral	4. Somewhat Important	5. Very Important	Total
Q1: Public	21.43% 12	5.36% 3	14.29% 8	25.00% 14	33.93% 19	56
Q1: For profit	17.86% 5	7.14% 2	3.57% 1	28.57% 8	42.86% 12	28
Q1: Non profit	4.35% 1	21.74% 5	21.74% 5	30.43% 7	21.74% 5	23
Q1: Household	8.68% 21	6.20% 15	9.09% 22	28.51% 69	47.52% 115	242
Total Respondents	39	25	36	98	151	349

Q10: Trees and shrubbery cover to support small wildlife is

	1. Very Unimportant	2. Somewhat Unimportant	3. Neutral	4. Somewhat Important	5. Very Important	Total
Q1: Public	23.21% 13	7.14% 4	14.29% 8	21.43% 12	33.93% 19	56
Q1: For profit	17.86% 5	7.14% 2	3.57% 1	32.14% 9	39.29% 11	28
Q1: Non profit	13.04% 3	4.35% 1	13.04% 3	39.13% 9	30.43% 7	23
Q1: Household	9.09% 22	4.13% 10	7.02% 17	22.73% 55	57.02% 138	242
Total Respondents	43	17	29	85	175	349

Q11: The amount of trees on your lot

	1. Very Dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Very Satisfied	Total
Q1: Public	8.93% 5	12.50% 7	14.29% 8	46.43% 26	17.86% 10	56
Q1: For profit	7.14% 2	21.43% 6	10.71% 3	50.00% 14	10.71% 3	28
Q1: Non profit	0.00% 0	13.04% 3	13.04% 3	56.52% 13	17.39% 4	23
Q1: Household	8.68% 21	20.25% 49	11.16% 27	38.84% 94	21.07% 51	242
Total Respondents	28	65	41	147	68	349

Q12: The amount of trees, and clusters of trees within walking distance of your home, including parks.

	1. Very Dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Very Satisfied	Total
Q1: Public	3.57% 2	21.43% 12	16.07% 9	39.29% 22	19.64% 11	56
Q1: For profit	7.14% 2	32.14% 9	25.00% 7	28.57% 8	7.14% 2	28
Q1: Non profit	0.00% 0	17.39% 4	21.74% 5	43.48% 10	17.39% 4	23
Q1: Household	7.02% 17	15.70% 38	17.36% 42	42.56% 103	17.36% 42	242
Total Respondents	21	63	63	143	59	349

Q13: The amount of public trees along streets

	1. Very Dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Very Satisfied	Total
Q1: Public	7.27% 4	18.18% 10	21.82% 12	36.36% 20	16.36% 9	55
Q1: For profit	3.70% 1	18.52% 5	18.52% 5	44.44% 12	14.81% 4	27
Q1: Non profit	0.00% 0	21.74% 5	34.78% 8	34.78% 8	8.70% 2	23
Q1: Household	8.68% 21	26.86% 65	21.49% 52	33.06% 80	9.92% 24	242
Total Respondents	26	85	77	120	39	347

Q14: The sighting of birds and small wild animals

	1. Very dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Very Satisfied	Total
Q1: Public	5.56% 3	16.67% 9	18.52% 10	33.33% 18	25.93% 14	54
Q1: For profit	3.57% 1	28.57% 8	17.86% 5	39.29% 11	10.71% 3	28
Q1: Non profit	8.70% 2	0.00% 0	13.04% 3	56.52% 13	21.74% 5	23
Q1: Household	4.96% 12	14.05% 34	22.31% 54	42.15% 102	16.53% 40	242
Total Respondents	18	51	72	144	62	347

Q15: The ability to get away and be part of the natural environment (connect with nature)

	1. Very Dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Very Satisfied	Total
Q1: Public	12.50% 7	8.93% 5	30.36% 17	32.14% 18	16.07% 9	56
Q1: For profit	10.71% 3	28.57% 8	17.86% 5	35.71% 10	7.14% 2	28
Q1: Non profit	13.04% 3	13.04% 3	34.78% 8	26.09% 6	13.04% 3	23
Q1: Household	6.61% 16	20.25% 49	27.27% 66	35.95% 87	9.92% 24	242
Total Respondents	29	65	96	121	38	349

Q20: What if property owners are requested to give up small corners of their property to create tree clusters

	A very bad idea.	Some people may consider that as a good idea.	Neutral.	That is a good idea and I may support it.	Very good idea, you have my full support.	Total
Q1: Public	12.50% 7	25.00% 14	17.86% 10	28.57% 16	16.07% 9	56
Q1: For profit	3.57% 1	25.00% 7	14.29% 4	46.43% 13	10.71% 3	28
Q1: Non profit	13.04% 3	39.13% 9	8.70% 2	30.43% 7	8.70% 2	23
Q1: Household	8.68% 21	32.23% 78	17.36% 42	27.69% 67	14.05% 34	242
Total Respondents	32	108	58	103	48	349

Q21: A city ordinance requiring a minimum number of trees on each property and location.

	A very bad idea.	Some people may consider that as a good idea.	Neutral.	That is a good idea and I may support it.	Very good idea, you have my full support.	Total
Q1: Public	14.29% 8	16.07% 9	21.43% 12	32.14% 18	16.07% 9	56
Q1: For profit	25.00% 7	17.86% 5	17.86% 5	25.00% 7	14.29% 4	28
Q1: Non profit	17.39% 4	13.04% 3	17.39% 4	34.78% 8	17.39% 4	23
Q1: Household	14.05% 34	25.62% 62	19.83% 48	23.55% 57	16.94% 41	242
Total Respondents	53	79	69	90	58	349

Q22: A property tax reduction or credit for every tree on your property.

	A very bad idea.	Some people may consider that as a good idea.	Neutral.	That is a good idea and I may support it.	Very good idea, you have my full support.	Total
Q1: Public	1.79% 1	10.71% 6	7.14% 4	32.14% 18	48.21% 27	56
Q1: For profit	7.14% 2	7.14% 2	7.14% 2	32.14% 9	46.43% 13	28
Q1: Non profit	4.35% 1	4.35% 1	17.39% 4	26.09% 6	47.83% 11	23
Q1: Household	3.72% 9	11.57% 28	9.09% 22	28.10% 68	47.52% 115	242
Total Respondents	13	37	32	101	166	349

Q23: Will you be willing to pay additional taxes in order to expand and maintain the urban tree cover

	I am not willing to pay	I am willing to pay	I do not know	I am more willing to pay if a tax deduction for personal tree planting is developed	I am willing to give up some other public service in order to enhance and expand the urban tree cover	Total
Q1: Public	28.57% 16	16.07% 9	26.79% 15	19.64% 11	8.93% 5	56
Q1: For profit	42.86% 12	7.14% 2	17.86% 5	25.00% 7	7.14% 2	28
Q1: Non profit	26.09% 6	21.74% 5	34.78% 8	13.04% 3	4.35% 1	23
Q1: Household	25.62% 62	4.13% 10	33.47% 81	32.23% 78	4.55% 11	242
Total Respondents	96	26	109	99	19	349

Q24: An ordinance requiring a permit to remove trees from private property

	A very bad idea.	Some people may consider that as a good idea.	Neutral.	That is a good idea and I may support it.	Very good idea, you have my full support.	Total
Q1: Public	33.93% 19	12.50% 7	19.64% 11	16.07% 9	17.86% 10	56
Q1: For profit	25.00% 7	17.86% 5	21.43% 6	32.14% 9	3.57% 1	28
Q1: Non profit	30.43% 7	13.04% 3	30.43% 7	17.39% 4	8.70% 2	23
Q1: Household	33.88% 82	16.12% 39	24.38% 59	16.53% 40	9.09% 22	242
Total Respondents	115	54	83	62	35	349

Q25: Requiring all new developments to show how they will protect and enhance the urban forest.

	A very bad idea.	Some people may consider that as a good idea.	Neutral.	Thats a good idea and I may support it.	Very good idea, you have my full support.	Total
Q1: Public	7.14% 4	16.07% 9	17.86% 10	32.14% 18	26.79% 15	56
Q1: For profit	3.57% 1	14.29% 4	17.86% 5	28.57% 8	35.71% 10	28
Q1: Non profit	8.70% 2	21.74% 5	13.04% 3	39.13% 9	17.39% 4	23
Q1: Household	2.50% 6	10.42% 25	13.75% 33	30.83% 74	42.50% 102	240
Total Respondents	13	43	51	109	131	347

Q26: Requiring existing communities (HOA'S-Home Owner Associations) to identify their current tree coverage and tree clusters

	A very bad idea.	Some people may consider that as a good idea.	Neutral.	That is a good idea and I may support it.	Very good idea, you have my full support.	Total
Q1: Public	10.71% 6	25.00% 14	12.50% 7	30.36% 17	21.43% 12	56
Q1: For profit	7.41% 2	14.81% 4	22.22% 6	44.44% 12	11.11% 3	27
Q1: Non profit	4.35% 1	30.43% 7	17.39% 4	39.13% 9	8.70% 2	23
Q1: Household	3.73% 9	15.77% 38	24.48% 59	38.17% 92	17.84% 43	241
Total Respondents	18	63	76	130	60	347

Sectors Policy Influence: Matrix of Factors

		FACTORS			
		SOCIAL CHANGE	ENVIRONMENT	ECONOMICS	GOVERNANCE
SECTORS	Public	public health	urban ecology	Business interest	democratic theory
	Private/ Business	neighborhood ecology	ecological Community theory	Management	community building
	Non- Profit	Land use	Organic city approach	economic value	public opinion
	Private- Kith/Kin	Aesthetics	Urban Expansion	Infrastructure	Party change

Spatial Ecosystem Continuum

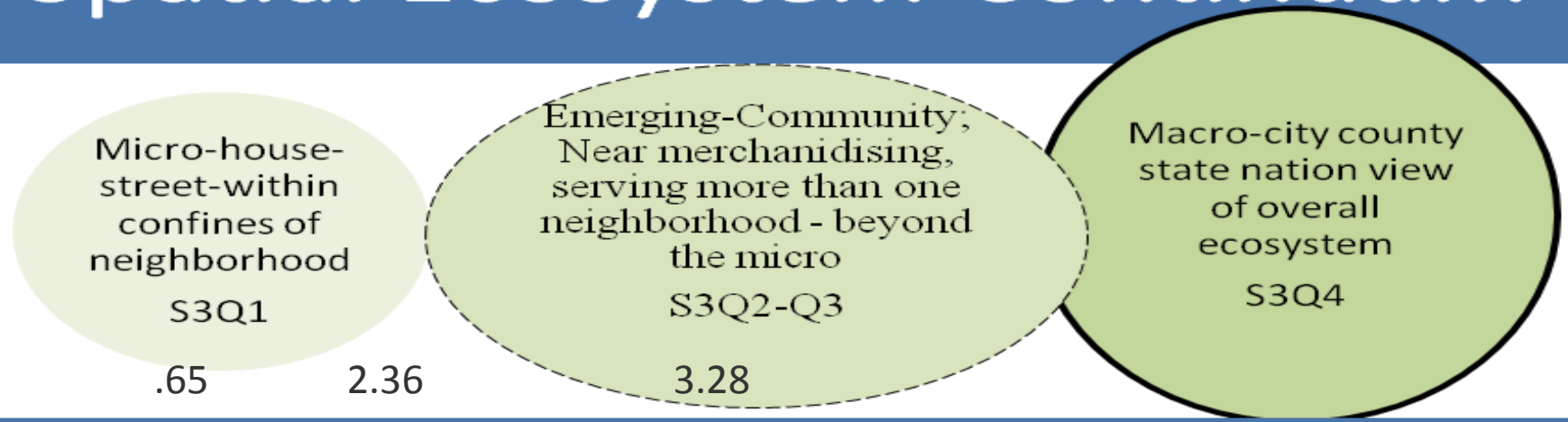


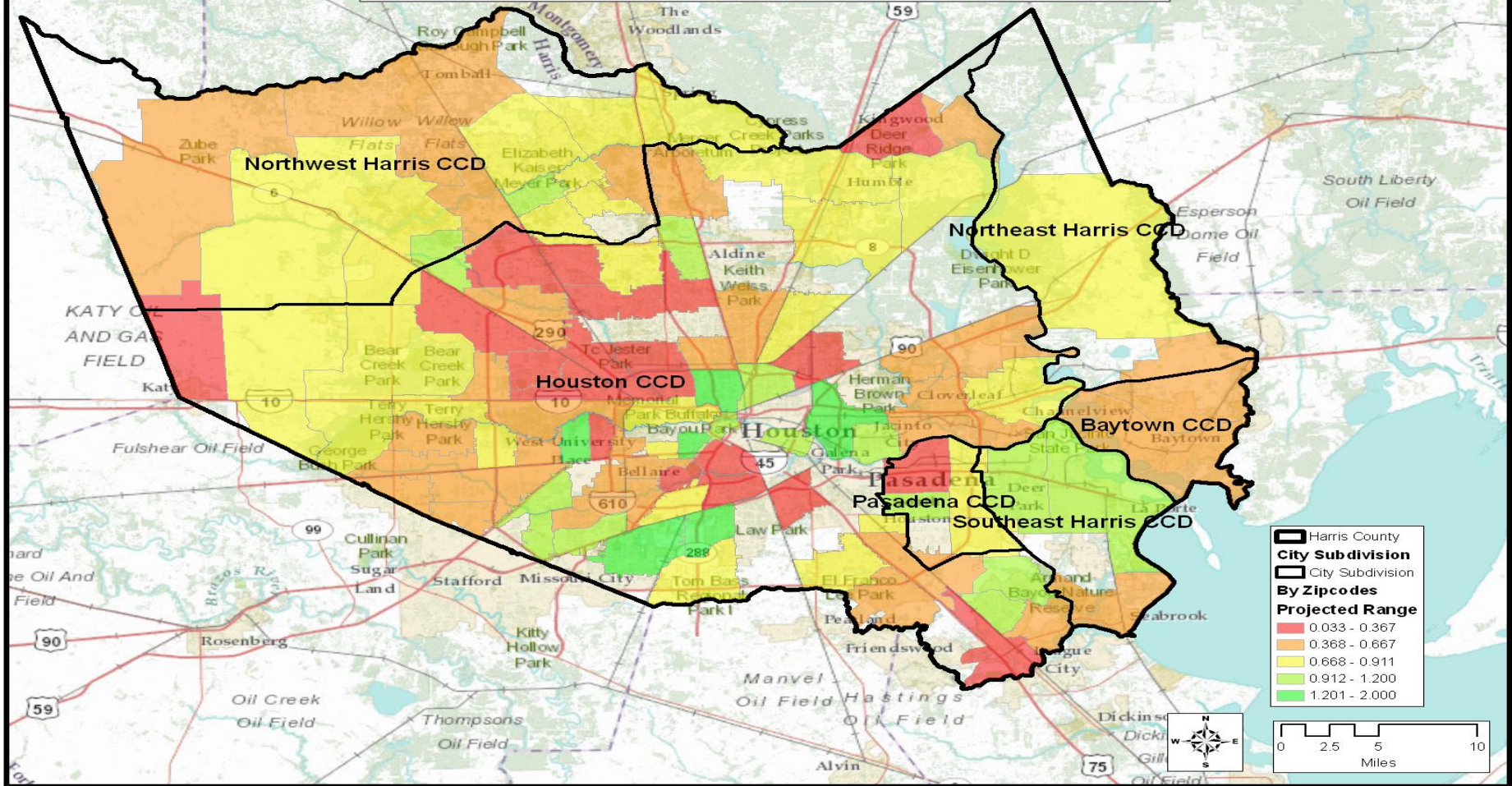
Figure 19. Spatial Interconnection and Continuum

Source: Rodriguez (2012)

Multiple Regression Results

				95% CI	
Predictor	B	SE	β	Upper	Lower
My lot	0.41	.07	.03	-0.10	0.19
My neighborhood	-.003	.02	-.01	-0.04	0.04
My city	0.03	.02	.12*	0.004	0.06
(Constant)	3.19	.08		3.04	3.34

Harris County Growth Potential



Where do We Go From Here

Sectors Do Matter
Public Health and Wellbeing
can drive change
Communicative Action and
multi-sectorism is an
important dynamic
Planners has to utilize both
skill and influence for
change
Knowledge importance

Household Sector expects
leaders to lead
Public Operators – Planners
have a higher responsibility
The natural Environment
needs a new standing
Home Owner Associations –
Potential Opportunity