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REVITALIZATION OF URBAN ALLEYS

by

Shusei Kakimoto

A THESIS

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirement

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Major: Community and Regional Planning

Under the Supervision of Professor Gordon Scholz

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REVITALIZATION OF URBAN ALLEYS

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University of Nebraska, 2013

Adviser: Gordon Scholz

Alley revitalization is becoming more widely acknowledged as a viable urban redevelopment strategy in United States cities. Currently, most alleys in U.S. cities are underutilized, and they evoke a number of negative images—fearful places, waste-strewn, stinky, etc. The successful revitalization of alleys presents many benefits, such as economic development, enhanced walkability, visual enhancement, reduction of crime, etc. Revitalization of alleys leads to more productive and effective utilization of public space. In fact, cities in many countries have long utilized alleys as places where many aspects of ordinary daily life of the city take place. However, the potentials of alleys and the approaches that other cities have utilized to creatively revitalize alleys are not widely known, especially in the U.S.

This thesis presents multiple cases of alley revitalization, mainly in the U.S., Australia, and Japan. Based on analysis of these cases, types of alley revitalization are categorized, and general design ideas and strategies for achieving the desired characteristics in each type of alley are presented. The intention of this thesis is to provide a tool for decision makers who are interested in implementing alley revitalization projects.

Utilizing the knowledge gained from the review of alley revitalization cases, the author proposes alternative ideas for the revitalization of a selected downtown alley in Lincoln, Nebraska.

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CONTENTS

ABSTRACT.....	ii
ACKNOWLEDGEMENT.....	iv
LIST OF TABLES.....	xiii
LIST OF FIGURES.....	xiv
CHAPTER 1: INTRODUCTION	1
Section 1.1: What is an alley?.....	1
Section 1.2: History of alleys	2
Section 1.3: Problems facing alleys.....	4
Section 1.3.1: Awareness of the potential for revitalization of alleys...4	
Section 1.3.2: Financial Costs	4
Section 1.3.3: Crime.....	5
Section 1.3.4: Land Use.....	6
Section 1.3.5: Maintenance.....	7
Section 1.3.6: Water Treatment.....	8
Section 1.4: Potential solutions to alleys.....	9
Section 1.4.1: Leave as is.....	9
Section 1.4.2: Close.....	9
Section 1.4.3: Revitalize.....	10
Section 1.5: Research Question: Revitalizing Alleys.....	11
Section 1.5.1: The change to the front and back of the alley.....	13
Section 1.5.2: More walkable (Connectivity, Quality of path, Path context).....	13
Section 1.5.3: Involvement of communities.....	14
Section 1.5.4: More variety of human activities.....	14
Section 1.5.5: Economic development.....	15

Section 1.5.6: More beautiful cities (tourism, economic, walkability, maintenance).....	16
Section 1.5.7: Possibility of reduction of crime rate (visibility, eye on alleys, economic).....	17
Section 1.5.8: Sustainability (city beautiful, reduction of crime, walkability).....	18
Section 1.5.9: Possibility of alleys.....	18
Section 1.6: Statement of research questions.....	19
Section 1.7: Description of research methodology.....	20
Section 1.7.1: Lincoln/Downtown/An Alley.....	22
CHAPTER 2: REVIEW OF CASE STUDIES/ANALYSIS.....	26
Section 2.1: Methodology of case study analysis.....	26
Section 2.2: Alleys type and criteria.....	34
Section 2.2.1: Type of alley revitalization strategy.....	37
Section 2.2.2: Criteria of alley revitalization strategy.....	44
Section 2.3: Analysis of case and conclusion.....	54
CHAPTER 3: SUCCESSFUL ALLEY.....	69
Section 3.1: Alley Potential Benefits.....	69
Section 3.2: Successful Alley.....	73
CHAPTER 4: TYPE OF ALLEY.....	78
Section 4.1: Residential District.....	78
Section 4.2: Commercial District.....	78
Section 4.3: Art, Cultural/Historical District.....	79
Section 4.4: Mixed Use District.....	79
Section 4.5: Multiple Alleys.....	80
Section 4.6: Parking Alley.....	80
Section 4.7: Temporary Idea.....	81

	vii
Section 4.: Originally Arranged Alley.....	81
CHAPTER 5: REVITALIZATION OF ALLEY IN LINCOLN: ALLEY SELEC-	
TION (PROJECT OVERVIEW).....	82
Section 5.1: Existing Conditions in City of Lincoln.....	82
Section 5.1.1: Demographics.....	82
Section 5.1.2: Walkscore.....	89
Section 5.1.3: Hot spot of Crime in Laincoln.....	92
Section 5.1.4: Selection Result.....	94
Section 5.2: Existing conditions in the Downtown and around Downtown are	
a.....	95
Section 5.2.1: Projects around Downtown Area.....	95
Section 5.2.2: Grid Pattern.....	100
Section 5.2.3: Borders of Downtown Lincoln.....	107
Section 5.2.4: Zoning/Land Use.....	109
Section 5.2.5: Traffic Volume.....	112
Section 5.2.6: Mean of Transportation.....	114
Section 5.2.7: Crime.....	116
Section 5.2.8: Building Use.....	125
Section 5.2.9: Building Condition.....	128
Section 5.2.10: Width of Alley.....	131
Section 5.2.11: Open Spaces in Downtown Lincoln.....	133
Section 5.2.12: Field Study.....	136
Section 5.2.12.1: Building Condition in the Downtown and	
around Downtown area.....	136
Section 5.2.12.2: Alley Condition in the Downtown and	
around Downtown area.....	140
Section 5.2.13: Proposal Area.....	165

Section 5.3: Existing Conditions in the Downtown and around Downtown Ar	
ea.....	167
CHAPTER 6: REVITALIZATION OF ALLEY IN LICOLN.....	179
Section 6.1: Key Elements.....	179
CHAPTER 7: PROPOSAL.....	185
Section 7.1: Alternative 1: Asian Alley.....	187
Section 7.2: Alternative 2: Art Alley.....	207
Section 7.3: Alternative3: Green Alley.....	226
CHAPTER 8: CONCLUSION/RECOMMENDATIONS.....	237
REFERENCES.....	240
APPENDIX A: Demographics.....	257
APPENDIX A-1: Population Growth in City of Lincoln.....	257
APPENDIX A-2: Population Change of Each Race.....	257
APPENDIX A-3: Comparison between Housing Occupancy, Tenure, and Vacant Status in Lincoln and Lancaster County, Nebraska between 2000 and 2010.....	258
APPENDIX A-4: Absolute comparison of age group distribution in City of Lincoln between 2000 and 2010 Census Data.....	258
APPENDIX A-5: Percentage Change of Age Group Distribution in Lincoln and Lancaster County between 2000 and 2010 Census Data.....	259
APPENDIX A-6: Percentage Change of Race in Lincoln and Lancaster County between 2000 and 2010 Census Data.....	259
APPENDIX A-7: Four Races Contribution in Each Census Tracts.....	260
APPENDIX A-8 Age Comparison between White and Total Population.....	262
APPENDIX A-9: Age Comparison between Black African American and Total Population.....	262
APPENDIX A-10: Age Comparison between American Lindian and Alaska Native and Total Population.....	263
APPENDIX A-11: Age Comparison between Asian and Total Population.....	263
APPENDIX A-12: Age Comparison between Native Hawaiian and Other Pacific Slander and Total Population.....	264

APPENDIX A-13: Age Comparison between Some Other Race and Total Population.....	264
APPENDIX A-14: Age Comparison between Two or More Races and Total Population.....	265
APPENDIX B: Case Study Outcome.....	266
APPENDIX C: Case Study Analysis.....	277
APPENDIX C-1. Case Study Analysis; Green Infrastructure (Projects).....	277
APPENDIX C-2. Case Study Analysis; Green Infrastructure (Alleys).....	278
APPENDIX C-3. Case Study Analysis; Retails (Projects).....	279
APPENDIX C-4. Case Study Analysis; Retails (Alleys).....	280
APPENDIX C-5. Case Study Analysis; Art (Projects).....	281
APPENDIX C-6. Case Study Analysis; Art (Alleys).....	282
APPENDIX C-7. Case Study Analysis; Events (Projects).....	283
APPENDIX C-8. Case Study Analysis; Events (Alleys).....	284
APPENDIX C-9. Case Study Analysis; Maintenance (Projects).....	285
APPENDIX C-10. Case Study Analysis; Maintenance (Alleys).....	286
APPENDIX C-11. Case Study Analysis; Paving (Projects).....	287
APPENDIX C-12. Case Study Analysis; Paving (Alleys).....	288
APPENDIX C-13. Case Study Analysis; Lighting (Projects).....	289
APPENDIX C-14. Case Study Analysis; Lighting (Alleys).....	290
APPENDIX C-15. Case Study Analysis; Canopies (Projects).....	291
APPENDIX C-16. Case Study Analysis; Canopies (Alleys).....	292
APPENDIX C-17. Case Study Analysis; Opening Facade (Projects).....	293
APPENDIX C-18. Case Study Analysis; Opening Facade (Alleys).....	294
APPENDIX C-19. Case Study Analysis; Identity (Projects).....	295
APPENDIX C-20. Case Study Analysis; Identity (Alleys).....	296
APPENDIX C-21. Case Study Analysis; Furniture (Projects).....	297
APPENDIX C-22. Case Study Analysis; Furniture (Alleys).....	298

	x
APPENDIX C-23. Case Study Analysis; Bollard (Projects).....	299
APPENDIX C-24. Case Study Analysis; Bollard (Alleys).....	300
APPENDIX C-25. Case Study Analysis; Water Runoff (Projects).....	301
APPENDIX C-26. Case Study Analysis; Water Runoff (Alleys).....	302
APPENDIX C-27. Case Study Analysis; On-site Water Treatment (Projects)..	303
APPENDIX C-28. Case Study Analysis; On-site Water Treatment (Alleys)...	304
APPENDIX C-29. Case Study Analysis; Steps (Projects).....	305
APPENDIX C-30. Case Study Analysis; Steps (Alleys).....	306
APPENDIX C-31. Case Study Analysis; Colors (Projects).....	307
APPENDIX C-32. Case Study Analysis; Colors (Alleys).....	308
APPENDIX C-33. Case Study Analysis; Setback (Projects).....	309
APPENDIX C-34. Case Study Analysis; Setback (Alleys).....	310
APPENDIX C-35. Case Study Analysis; Building Height (Projects).....	311
APPENDIX C-36. Case Study Analysis; Building Height (Alleys).....	312
APPENDIX C-37. Case Study Analysis; Lines (Projects).....	313
APPENDIX C-38. Case Study Analysis; Lines (Alleys).....	314
APPENDIX C-39. Case Study Analysis; Trash Removal/Enclosure (Projects)	315
APPENDIX C-40. Case Study Analysis; Trash Removal/Enclosure (Alleys)..	316
APPENDIX C-41. Case Study Analysis; Trees or Plants (Projects).....	317
APPENDIX C-42. Case Study Analysis; Trees or Plants (Alleys).....	318
APPENDIX C-43. Case Study Analysis; Banning Motor Vehicles (Projects)..	319
APPENDIX C-44. Case Study Analysis; Banning Motor Vehicles (Alleys)....	320
APPENDIX C-45. Case Study Analysis; Cultural Involvement (Projects).....	321
APPENDIX C-46. Case Study Analysis; Cultural Involvement (Alleys).....	322
APPENDIX C-47. Case Study Analysis; Vendor (Projects).....	323
APPENDIX C-48. Case Study Analysis; Vendor (Alleys).....	324
APPENDIX C-49. Case Study Analysis; Recycling (Projects).....	325

	xi
APPENDIX C-50. Case Study Analysis; Recycling (Alleys).....	326
APPENDIX C-51. Case Study Analysis; Gathering Places or Centers (Projects).....	327
APPENDIX C-52. Case Study Analysis; Gathering Places or Centers (Alleys).....	328
APPENDIX C-53. Case Study Analysis; Network for Pedestrians and Bicyclists (Projects).....	329
APPENDIX C-54. Case Study Analysis; Network for Pedestrians and Bicyclists (Alleys).....	330
APPENDIX C-55. Case Study Analysis; Noise Control (Projects).....	331
APPENDIX C-56. Case Study Analysis; Noise Control (Alleys).....	332
APPENDIX C-57. Case Study Analysis; Recycled Materials (Projects).....	333
APPENDIX C-58. Case Study Analysis; Recycled Materials (Alleys).....	334
APPENDIX D-1: Case Study.....	335
APPENDIX D-1: McNeel Alley.....	335
APPENDIX D-2: Luzerne-Glover Alley.....	341
APPENDIX D-3: Jack Kerouac Alley.....	346
APPENDIX D-4: Belden Place.....	351
APPENDIX D-5: Cass Farms Green Alley.....	358
APPENDIX D-6: EaCa Alley (East Cauenga Corridor Alley).....	366
APPENDIX D-7: Commercial Alley.....	371
APPENDIX D-8: Residential Alley.....	377
APPENDIX D-9: Nord Alley.....	382
APPENDIX D-10: ACDC Lane (AC/DC Lane) (formerly Corporation Lane).....	390
APPENDIX D-11: Pontocho.....	393
APPENDIX D-12: KakurenboYokocho.....	398
APPENDIX D-13: Avalon Green Alley Network (South Park Green Alley Network).....	404
APPENDIX D-14: Alley Gating and Greening Program.....	410
APPENDIX D-15: Baltimore Blue Alleys.....	417

	xii
APPENDIX D-16: The Los Angeles Green Alley Program.....	422
APPENDIX D-17: Hollywood Alley Retrofit Project.....	434
APPENDIX D-18: Activating Alleys for a Lively City.....	437
APPENDIX D-19: Melbourne’s Revitalized Laneways.....	444
APPENDIX D-20: Laneways Business Development Program.....	449
APPENDIX D-21: The Planned Alleys in Gion.....	454
APPENDIX D-22: The Planned Alleys in Kagurazaka.....	459
APPENDIX D-23: Good Alleys.....	466
APPENDIX D-23-1: Greece.....	466
APPENDIX D-23-2: Spain.....	473
APPENDIX D-23-3: France.....	478
APPENDIX D-23-4: Ireland.....	481
APPENDIX D-23-5: England.....	482
APPENDIX D-23-6: Italy.....	485
APPENDIX D-23-7: Germany.....	487
APPENDIX D-23-8: Austria.....	488
APPENDIX D-23-9: Turkey.....	489
APPENDIX D-23-10: Tunisia.....	490
APPENDIX D-23-11: Syria.....	493
APPENDIX D-23-12:Romania.....	494
APPENDIX D-23-13: Australia.....	495
APPENDIX D-23-14: Morocco.....	496
APPENDIX D-23-15: USA.....	499
APPENDIX D-23-16: China.....	501

TABLES

Table 1. Case Study Tactics

33

FIGURES

Figure 1. Housing Neighborhoods with Alleys Running between Lots in Toronto	3
Figure 2. Relationship of Connectivity and Grid Pattern	13
Figure 3. Case Study Diagram	31
Figure 4. Relationship between Block Size and Walkability	36
Figure 5. Population in the City of Lincoln in 2010 Based on Block Group	84
Figure 6. Population Density in the City of Lincoln in 2010 based on Block Group	85
Figure 7. Comparison of Population Density between Younger Generation and Older Generation in Lincoln	86
Figure 8. Housing Density in Lincoln	87
Figure 9. Four Races Contribution in Lincoln	88
Figure 10. Walk Score of Each Neighborhood in Lincoln	91
Figure 11. Hot Spot of Crime in Lincoln	93
Figure 12. Existing Projects around Downtown Lincoln 1	97
Figure 13. Existing Projects around Downtown Lincoln 2	98
Figure 14. Existing Projects around Downtown Lincoln 3	99
Figure 15. Existing Projects around Downtown Lincoln 4	100
Figure 16. Grid Pattern, Lincoln, NE; Gridiron	103
Figure 17. Grid Pattern, Heijokyo; Gridiron	104
Figure 18. Grid Pattern, New York, NY; Fragmented Parallel	105
Figure 19. Grid Pattern, San Francisco, CA; Fragmented Parallel	105
Figure 20. Grid Pattern, Paris, Italy; Warped Parallel	106
Figure 21. Grid Pattern, Sienna, Italy; Loops and Lollipop	106
Figure 22. Border of Downtown Lincoln	108
Figure 23. Zoning in Downtown Lincoln	110
Figure 24. Land Use in Downtown Lincoln	111
Figure 25. Traffic Volume in Downtown Lincoln	113
Figure 26. Mean of Transportation in Downtown Lincoln	115

Figure 27. Hot Spot of Crime in Downtown Lincoln	xv 118
Figure 28. Hot Spot and Location of Burglary in Downtown Lincoln	119
Figure 29. Hot Spot and Location of Criminal Damage, Fraud, and Forgery in Downtown Lincoln	120
Figure 30. Hot Spot and Location of Narcotics and Other including Weapon in Downtown Lincoln	121
Figure 31. Hot Spot and Location of Robbery and Larceny in Downtown Lincoln	122
Figure 32. Hot Spot and Location of Theft of A Motor Vehicle and Larceny from A Motor Vehicle in Downtown Lincoln	123
Figure 33. Hot Spot and Location of Violence against the Person and Sexual Offence in Downtown Lincoln	124
Figure 34. Hot Spot of Each Building Use in Downtown Lincoln	126
Figure 35. Hot Spot of Total Building Uses (Residential, Retails Offices, Services) in Downtown Lincoln	127
Figure 36. Year Built in Downtown Lincoln	129
Figure 37. Assessed Parcels in Downtown Lincoln	130
Figure 38. The Width of Alleys in Downtown Lincoln	132
Figure 39. Open Spaces in Downtown Lincoln	134
Figure 40. Open Spaces without Alleys in Downtown Lincoln	135
Figure 41. Building Materials in Downtown Lincoln	137
Figure 42. Building Height in Downtown Lincoln	138
Figure 43. Building Height Hot Spot in Downtown Lincoln	139
Figure 44. Existence of Business at Alleys in Downtown Lincoln	143
Figure 45. Existence of Parking at Alleys in Downtown Lincoln	144
Figure 46. Parking Facilities Locations in Downtown Lincoln	145
Figure 47. Steepness of Slope at Alleys in Dwontown Lincoln	146
Figure 48. Existence of Graphics at Alleys in Downtown Lincoln	148
Figure 49. Existence of Drains at Alleys in Downtown Lincoln	150
Figure 50. Existence of Canopies at Alleys in Downtown Lincoln	151
Figure 51. Existence of Furniture at Alleys in Downtown Lincoln	152

	xvi
Figure 52. Existence of Plant Life at Alleys in Downtown Lincoln	153
Figure 53. Number of Garage Doors at Alleys in Downtown Lincoln	155
Figure 54. Number of Doors at Alleys in Downtown Lincoln	156
Figure 55. Existence of Trash Containers at Alleys in Downtown Lincoln	157
Figure 56. Number of Utility Pole at Alleys in Downtown Lincoln	158
Figure 57. Number of Lights at Alleys in Downtown Lincoln	159
Figure 58. Number of Windows at Alleys in Downtown Lincoln	161
Figure 59. Alley Paving Materials in Downtown Lincoln	162
Figure 60. Alley Paving Condition in Downton Lincoln	163
Figure 61. Selected Proposal Area and Eight Adjacent Blocks	166
Figure 62. Building Uses in the Adjacent Eight Blocks and Proposal Area	168
Figure 63. Parcel Owners in the Eight Adjacent Block and Proposal Area	171
Figure 64. Street and Site View at the Edges of Each Block	172
Figure 65. Entrance View of Each Alley in the Eight Adjacent Block and Proposal Area	176
Figure 66. Comprehensive Analysis of the Eight Adjacent Block and Proposal Area	177
Figure 67. Comprehensive Analysis of Downtown Lincoln	178
Figure 68. Key Elements	182
Figure 69. Comprehensive Analysis of the Proposal Area	183
Figure 70. Existing Condition of the Proposal Area	184
Figure 71. Percentage of Each Race in Lancaster County Based on 2010 Census Data	191
Figure 72. Lincoln and Lancaster County 2010 Census Tracts and Asian Concentration	192
Figure 73. Site Analysis and Proposal Idea (Asian Block)	193
Figure 74. Public Space Fees	194
Figure 75. Day in the Asian Block	196
Figure 76. Ground Plan of Asian Block	197
Figure 77. The Details of Ground Plan (Asian Block); Smaller Open Space	198

Figure 78. The Details of Ground Plan (Asian Block); Alley	198
Figure 79. The Details of Ground Plan (Asian Block); Bigger Open Space	198
Figure 80. Cross Section of the Asian Block	199
Figure 81. Impact of Huge Gate from 14th Street (at North-west Corner of the block)	200
Figure 82. Impact of Huge Gate from 14th Street (at West of the block)	200
Figure 83. Impact of Huge Gate from 14th Street (at South-west Corner of the block)	200
Figure 84. Existing Condition of the Alley; View from 14th Street)	202
Figure 85. Proposal for the Alley (Asian Block); View From 14th Street	202
Figure 86. Existing Condition of the Bigger Open Space	203
Figure 87. Proposal for the Bigger Open Space (Asian Block)	203
Figure 88. Existing Condition of the Smaller Open Space (Asian Block)	204
Figure 89. Proposal for the Smaller Open Space	204
Figure 90. Existing Condition of the Alley; View from Centennial Mall	205
Figure 91. Proposal for the Alley (Asian Block); View from Centennial Mall	206
Figure 92. A Local Event in Sydney	208
Figure 93. A Local Art Event in Sydney	208
Figure 94. Lincoln Public Art	210
Figure 95. Site Analysis and Proposal Idea (Lincoln Alley)	213
Figure 96. Day in the Lincoln Alley	214
Figure 97. The Entrance of Event	215
Figure 98. The Sign of the Event	215
Figure 99. Temporary Fence	215
Figure 100. Decorations at the Event	215
Figure 101. Temporary Liquor Section	216
Figure 102. People at the Event	216
Figure 103. Temporary Stage	216
Figure 104. Temporary DJ Booth	216

	xviii
Figure 105. Huge Screen at the Duffy's	216
Figure 106. Decorations and People	216
Figure 107. Performance at the Event	217
Figure 108. Temporary Lights	217
Figure 109. Customers at the Event	217
Figure 110. Location of the Liquor Section	217
Figure 111. Project Bus Stop	218
Figure 112. Office in Public Spaces	218
Figure 113. Modular Pop-up Park	218
Figure 114. Movie at a Parking	218
Figure 115. Ground Plan of Lincoln Alley	219
Figure 116. The Details of Ground Plan (Lincoln Alley); Smaller Open Space	220
Figure 117. The Details of Ground Plan (Lincoln Alley); Alley	220
Figure 118. The Details of Ground Plan (Lincoln Alley); Bigger Open Space	220
Figure 119. Cross Section of the Lincoln Alley	221
Figure 120. Proposal for the Alley (Lincoln Alley); View From 14th Street	223
Figure 121. Proposal for the Bigger Open Space (Lincoln Alley)	224
Figure 122. Existing Condition of the Smaller Open Space (Lincoln Alley)	225
Figure 123. Site Analysis and Proposal Idea (Green River)	227
Figure 124. Day in the Green River	228
Figure 125. Ground Plan of Green River	230
Figure 126. The Details of Ground Plan (Green River); Smaller Open Space	231
Figure 127. The Details of Ground Plan (Green River); Alley	231
Figure 128. The Details of Ground Plan (Green River); Bigger Open Space	231
Figure 129. Cross Section of the Green River	232
Figure 130. Proposal for the Alley (Green River); View From 14th Street	234
Figure 131. Proposal for the Bigger Open Space (Green River)	235

Figure 132. Existing Condition of the Smaller Open Space (Green River)

Chapter One - Introduction:

Section 1.1: What is an alley?

According to the *Activating Alleys for a Lively City* by Mary Fialko and Jennifer Hampton (2011), an alley is a narrow lane running between buildings and it is used mainly for trash access, delivery, parking and the provision of utilities. However, it can be also used as a short-cut pathway for pedestrians, bikes and automobiles. There are some different definitions of alleys in other countries. Moreover, the use and various elements of the alleys could change the definition and context. An alley is usually considered as a space for residential and commercial services, but it is also public space (Mary Fialko and Jennifer Hampton, 2010). As mentioned above, alleys are considered public space in the U.S., however, Carmichael (2011) says the following about alleyways in Australia, “Laneways are small-scale public streets that adjoin directly to buildings. Both vehicles and pedestrians can be accommodated in a laneway” (Carmichael, 2011, 2). Conversely, alleyways in Australia are defined as part of private sites and their definition of alleys are public space traditionally serve as laneways (Carmichael, 2011). According to the Construction Standard Act in Japan, streets wider than four meters (approximately 13.1 ft) are not recorded as alleys, but streets. So the definition of alleys in Japan is totally different from the definition of alleys in the U.S. and Australia.

“Alleyways are subject to operational works at the discretion of the private owners” (Carmichael, 2011, 2). So there are differences of the definition of alleys between the U.S. and Australia based primarily on use. The laneways in Australia have similar characteristics of alleys in the United States. Alleys could function as alternative transportation spaces for pedestrians and bikes, and they could also bring new economic and social activity. The City of Lincoln currently has a lack of quality public space and the activity that is created from having an adequate amount of public spaces. To activate these areas

there have been some devices such as sculptures placed around public walkways, but the sculptures do not activate the space with the type of human activity that provision of new public spaces can in the same dense urban settings.

Section 1.2: History of the Alley:

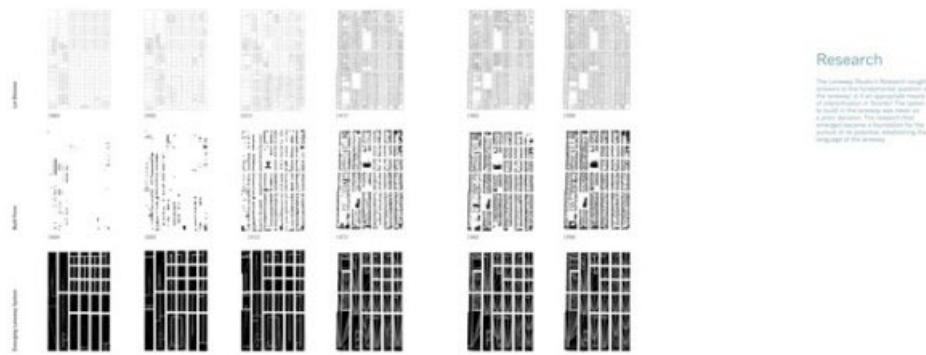
For more than 2000 years, alleys have contributed to spaces at which neighbors to communicate and interact, children to play, infrastructure services access, and many other human activities going on (Beasley, 1996) (Borchert, 1980) (Martin, 2002). Those characteristics have remained in some cities, such as found in Asia and Europe, due to their long history of urban development and also from an effort of historic preservation in the oldest part of their cities. In the early 19th century, alleys in the U.S. were parts of a large system that included many services such as water, police, gas, and electricity. They were also considered as an element of a single system dealing with mass produced access, especially access to the rears of buildings and businesses when automobiles were a less common tool of transport (Clay, 1978). Grady Clay (1978) mentions the dynamic change of alleys in American culture. The change was mostly caused by the explosion of popularity of automobiles. Clay (1978) said the rapid increase of national automobile ownership implied that alleys no longer served their original purpose (access for horses, barns, and stables that smelled of manure). In addition, in the 1920s, many thousands of lots were laid out with the cheapest cost and the easiest plotted forms--which means there was minimum access and minimum utilities, and alleys essentially became obsolete (Clay, 1978). At this point, alleys became the storage place for garbage, car repair, boats, and trailers moved off of the street in residential districts. In the 1940s, cars were moved to the front yards because of their increase in size, and garbage stayed in the back of the lot (Clay, 1978). Therefore, in the U.S., alleys use to be considered as unfavorable places in the late nineteen century because they were seen as dangerous, unhealthy places (Ford,

2001). U.S. Federal housing policy had effectively declined alleys until the 1930s, and urban design and municipal services had focused attention on streets and front yards (Martin, The question of alleys, revisited, 2001). and Clay (1978) specifically mentions alleys' underuse condition in 1970's (Clay, 1978). The underuse of alleys spontaneously created have recently received more attention, and there have been several revitalization projects in the U.S., Australia, and Canada.

There have been two kinds of alleys: the sort created spontaneously by the construction of buildings, and the sort that were planned. Brigitte Shim and Donald Chong (2004) have a powerful image of the result of a survey, and this survey shows housing neighborhoods with alleys running between lots (Brigitte Shim, Donald Chong, 2004) (Figure 1). This image shows how the alleys have grown in specific neighborhoods in Toronto, and also how the alleys were spontaneously created. Toronto had similar issues the U.S. had when it came to suburban sprawl.

The alleys built as part of a plan such as the Planned Alley in Japan (Appendix B, Appendix D-11, Appendix D-12, Appendix D-21, Appendix D-22) existed along the way to shrines and temples. These alleys have been heavily used and have extensive histories, to say the least. The form of alleys, such as length, shape, and connectivity to other streets, is strongly influenced by grid pattern (Section 2.2).

Figure 1: Housing Neighborhoods with Alleys Running between Lots in Toronto



Source: Site Unseen: Toronto Laneway Architecture and Urbanism (2004)

Section 1.3: Problems facing alleys:

Because of the history of alleys, several problems facing alleys have arisen. By first studying the problems pertaining to alleys, it is easier to consider ways that their revitalization could be beneficial, successful, and facing alleys feasible. This thesis will propose solutions for the problems identified.

Section 1.3.1: Awareness of the potential for revitalization of alleys

One problem facing alleys is the low level of awareness of the potential for the revitalization of alleys, which causes more difficulties of implementing the revitalization. To achieve revitalization of an alley, people related to the project need to envision how the alley could function if it is revitalized and what benefits will result. Showing other examples from cities from other nations raises the level of awareness of alley under-utilization, and if these examples show public and private benefits people will take account of the revitalization. There are many excellent examples of alley revitalization projects in cities around the globe. Some of these will be shown as case studies in this thesis.

Section 1.3.2: Financial Costs

Another problem or challenge for revitalizing alleys is the cost of revitalization. For example, the Greening America's Capitol Project (Appendix B, Appendix D-7, Appendix D-8) was funded by the Federal government. However, a relatively small city such as Lincoln usually does not have adequate financial resources to help redevelop alleyways mainly because they are considered underserving of significant public reinvestment. To achieve revitalization funding is one of the essential factors. The availability of funding mainly depends on the fiscal situation of that local government. Although, if

people do not care about thorough downtown core revitalization, then there will be no budget for redeveloping public spaces that would typically not gain much attention such as alleyways. A first step to get funding is educate the citizens about the benefits and potential of alley revitalization. It is important to see economic improvement as a result of alley revitalization program. It is also important to make sure that any new project will be carefully crafted so it comes in on budget after getting public funding because many public projects which were over-budget gain negative attention and prevent further progress.

Section 1.3.3: Crime

Alleys are usually thought of as dangerous places, where undesirable incidents occur. There are many articles and online news stories written about alleys mention that this is how people think of alleys, such as in the article *Alleys: Paths to Urban Revitalization* by Wendy Waters (2006). Even Clarke (2006) mentions the risk to personal safety in streets and alleys because offenders may be familiar with the area and know “vulnerable areas” and offenders know where they are likely to be able to escape or hide (Clarke, 2006). The focus group of study entitled *Back Alleys LA* by the Center for Sustainable Cities (CSC) at the University of Southern California and by local nongovernmental organizations such as the Trust for Public Land (TPL), TreePeople, mentioned about how residents felt about alleys. Residents thought alleys in the study area were “dirty, poorly maintained, and potentially dangerous, only using them when necessary” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 7). Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, and Travis Longcore talked about the Baltimore’s Alley Gating and Greening Program which focused on “crime, dumping, and pest control” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 3). It implied that there are some projects seeing the possibilities to reduce crime by the revitalization of alleys. University of Cambridge and

Sheffield Hallam University (2000) report *Design Against Crime*, discusses the possibility of economic improvement by reducing crime. By eliminating places that are usually thought of as unsafe areas, there would be many benefits, such as reduction of crime and economic growth in the area (University of Cambridge, Sheffield Hallam University, 2000).

Section 1.3.4: Land Use

The actual proportion of land occupied by alleys in a city is higher than what it is usually assumed. Some bigger cities, such as Los Angeles, Seattle, Chicago, etc., are realizing the importance of alleys and creating programs for redevelopment in certain areas. In the alley project handbooks of Los Angeles (Zaldivar, 2009), Chicago (Byrne, 2007), and Seattle (Jenny Kempson, Mary Fialko, Nancy Rottle, 2012), the proportion of the land area occupied by alleys was calculated and there is a strong reference made to its significance due to alleys large amount of available square footage and its potential impact on increasing quality public space in these cities that may not have a great amount of land to develop on due to build out. The result of Kempson, Fialko, and Rottle estimation was that approximately 217,500 square feet of alleys in Seattle's downtown and that eighty five percent of this area are under-utilized. There are 456,390 square feet of total public space in Seattle, therefore the calculation concluded that if these alleys are considered for redevelopment it will increase public spaces in the City core by fifty percent (Mary Fialko and Jennifer Hampton, 2010, 4).

It is necessary to know the accurate square footage of alley occupation to know how important it is to consider revitalization of alleys. For instance, the city of Chicago has approximately 1,900 miles of alleys, comprising more than 3,500 acres of paved impermeable surface (Byrne, 2007). The City of Los Angeles has an estimated 6,500 miles of streets with 10,000 miles sidewalk, 12,309 alley segments, 900 linear miles of alley

(Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012), or approximately 1998 acres (Arly Cassidy, Josh Newell, Jennifer Wolch, 2008), and 34,000 catch basins (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012), while Baltimore's alleys network encompasses over 600 linear miles (Wolch, 2012) "Alleys are thus a significant though typically overlooked, urban public infrastructure resource" (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012,1). Alleys account for a significant percent of urban areas because every block usually has an alley. The length of each block may be about 300 feet, such as in the City of Lincoln. The width of an alley in Lincoln is usually sixteen feet, so the square footage of land occupied by the alleys is 4,800 square feet or about 18.75 percent of the total square footage of a block. If the block has a T-shaped alley or a cross-shaped alley, the proportion of land occupied by the alleys would be even higher.

Section 1.3.5: Maintenance

Another problem facing alleys is continual maintenance. The few cities that consider alleys as useful urban areas are likely to provide guidebooks, which determine which party is responsible for the upkeep of the alleys and how maintenance could be achieved. Examples include the Alley Cleanup Brochure 2012, Transforming Alleys into Green Infrastructure for Los Angeles (2008).

Even though revitalization of an alley may be successful, if the condition of the alley is not maintained it will eventually deteriorate. The City of Lincoln has a street maintenance operations and unpaved alley maintenance manuals implemented by the Department of Public Works (Appendix B), but it is in existence only for half a year, from late March or early April to November, and it has covered 1,095 alleys so far (City of Lincoln Public Works/Utilities). Indeed, there is no regular maintenance service in Lincoln. To get the pavement service to an alley in need, the adjacent property owner needs

to request it and an inspector will check the alley for problems. An alley which has no adjacent property owner around would not be maintained. Alleys may be requested to be paved, but there must be consideration as to why those alleys have been unpaved and who would maintain the alley condition after the paving occurs; otherwise, the basic problems of maintaining adequate-functioning alleys would not be solved.

There are interesting examples of solutions for this maintenance issue. The City of Fresno Community Revitalization Division (Appendix B) requested all property owners to clean up alleys by a set deadline. Many handbooks, such as Green Alley Project in Chicago and Los Angeles, Activating Alleys Projects in Seattle, and Austin's Guadalupe Neighborhood, mention the involvement of the neighborhood groups and organizations as a way to address maintenance issues.

Section. 1.3.6: Water Treatment

Some solutions to the maintenance issue can also provide added benefits to the surrounding area. For instance, alleys could be the an appropriate place in urban areas to manage water. Urban areas are usually occupied by many buildings and paved with impenetrable surfaces; therefore, it would be hard to drain the water after rainfall and water will often accumulate in alleys. As a result pedestrians would hesitate to go through these alleys. Many green alley projects are designed to solve their water and alley maintenance issues simultaneously (Appendix B, Appendix D-5, Appendix D-7, Appendix D-8, Appendix D-13, Appendix D-15, Appendix D-16, Appendix D-17, Appendix D-18).

Section 1.4: Potential solutions to alleys

Section 1.4.1: Leave as is

Currently most alleys in the City of Lincoln are used mainly for services such as product delivery and waste removal, and it also is used by automobiles. One justification for changing the alley is crime, but the crime rate in the City of Lincoln is relatively low. Lack of use of the alleys suggest that residents in Lincoln may not be interested in the additional use of the alleys. Conversely, this may suggest that residents do not know what alternative uses alleys could have if revitalized.

Section 1.4.2: Close

Alleys in urban areas have been associated with blight and crime. According to the “Closing Streets and Alleys to Reduce Crime”, written by Ronald Clarke (2006), police sometimes close streets or alleys to reduce crime such as street prostitution, gang activity, robbery, burglary, and drug dealing. This technique as often proven successfull. (Clarke, 2006). However, the closure of streets and alleys is conducted after police have determined that there is a high crime rate. It is not directly connected to prevention of crime.

There are consequences when closing streets and alleys. Closing an alley may create less walkability due to the reduction in connectivity of walkways. Michael Southworth suggests that one of the significant factors to improve walkability is connectivity (Southworth, 2005). According to Southworth, connectivity is determined by the side-walk and the condition of the paths. A higher density of intersections and small block sizes make connectivity better and therefore help improve walkability.

Section 1.4.3: Revitalize

Back alley has recently been heralded by new urbanists for their ability to reinvigorate pedestrian activity through neighborhoods (Andres Duany, Elizabeth Plater-Zyberk, Jeff Speck, 2003). (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012). Andres Duany, Elizabeth Plater-Zyberk, and Jeff Speck (2003) mention about the traditional neighborhoods used to defend against sprawl and what makes traditional neighborhoods distinct from present neighborhoods. There are six perspectives such as neighborhood center, five minute walk, street network, narrow street, mixed use zoning, and special site for special housing, and those perspectives matches the concept of walkable city (Andres Duany, Elizabeth Plater-Zyberk, Jeff Speck, 2003). The utilization of alleys would bring not only walkability but also it would control sprawl because the utilization enhance street network, pedestrian activities, and possibly mixed use zoning.

“Redesigned alleys may provide services such as park and recreational space, improvements, and pedestrian linkages within the community” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012). As safe, attractive, usable public space, revitalized alleys may improve neighborhoods by contributing to increased visibility and use of previously feared spaces. (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 1).

It also helps to empower neighborhoods and communities by involvement of residents in the alley design process. Yukio Nishimura (2006) says that alleys make people safe because cars are not going through and they are enclosed. In addition, the alleys are very complicated like a maze in Japan, therefore it is likely to be used only by residents in the neighborhood.

Because of the safety, alleys become playgrounds (Nishimura, 2006, 24). However, this is not true for alleys in the U.S. Alleys are places where incidents likely happen

and cars sometimes go through. Those differences between alleys in Japan and the U.S. are caused by their history and communities. In Japan, alleys sometimes become part of their community. Alleys are places that make people feel a connection to their neighborhood and their community because of their scale and they are used as part of people's lives. In Japan, the scale of alleys is even narrower than alleys in the U.S. Therefore, these alleys could have some unique functions that other alleys do not have. Nishimura (2006) says that alleys function as connections between communities and people. A street is used as a path that people from inside or outside of city are using, therefore, it works as segmentation of local space, community, and street view by its width. However, an alley functions not only as a path but also a place in which local people feel intimate (Nishimura, 2006, 26).

Nishimura (2006) mentions an alley in Taiwan. The alley became not simply streets but open spaces by setting a stage. Nishimura (2006) says that it is possible to make alleys open space by giving them uniqueness which is different from daily life, such as holding events there or using the alley's characteristics. So alleys could be places not only that people are passing through but also places where people can stay (Nishimura, 2006, 22). This is also happening at the Pioneer Square, Seattle, WA, (Appendix D-9). If alleys are considered as places not only that people go through but also places where people can stay, there will be a possibility to implement unique ideas (Nishimura, 2006, 25).

Section 1.5: Research Question: Revitalizing Alleys

Alleys potentially have a strong future in urban areas. Revitalization of alleys is a relatively new area of study in urban planning in America; however, many cities in the world, such as in Italy, Germany, Britain, Japan, China, Australia, and so forth, have shown how important it is to use alleys more effectively as viable and productive urban

spaces; they historically have used alleys as viable and multi-functional parts of the urban environment. Those cities use “capacities of alleys to stimulate public life, interpersonal commerce, and enhance ecological function” (Jenny Kempson, Mary Fialko, Nancy Rottle, 2012, 2).

The goal of this thesis is to initiate discussion of these possibilities for downtown Lincoln alleys and to suggest ways in which these alleys could be revitalized to increase the vitality of downtown. The project will provide some suggestions for specific alleys in Lincoln.

Many of these cities have existed for a long time, since before the invention of automobiles; therefore, the scale of streets and alleys in these cities were originally built on a human scale. Many projects that have been going on recently and today, such as Activating Alleys for a Lively City project in Seattle and Alley Network Project (Appendix D-9), written by Jenny Kempson and Mary Fialko, talk about this scale. One of the important characteristics of an alley is its scale. An alley is likely on a human scale, which implies that the alley serves different purposes from streets. Another reason why other cities have used alleys effectively is because those countries, especially many Asian countries, are densely populated. All areas in the urban environment are occupied, so it is necessary to utilize all kinds of spaces in the urban area, and alleys would not be an exception. Therefore, there are usually many retails/shops or other parts of the neighborhood community located in alleys. Alleys in European cities are often regarded as tourist areas. These cities consider alleys as viable and important parts of the urban environment; moreover, even in the U.S., alleys have gotten more attention as unique places recently. There is a published book titled *Los Angeles Alleys*, written by Jeremy Oberstein (2011), that shows unique or beautiful alleys in Los Angeles (Oberstein, 2011), and there is another book titled *TIGHT URBANISM*, written by Daniel Toole (2011), and showing interesting alleys in Seattle and in other cities such as Osaka, Japan, Tokyo, Japan, Chicago, Los Angeles, Sydney, Australia, Perth, Australia, and Melbourne, Australia (Toole,






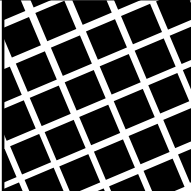
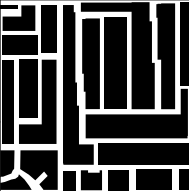

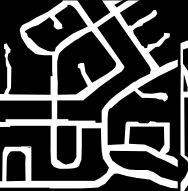

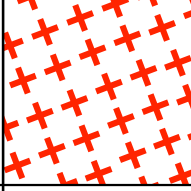
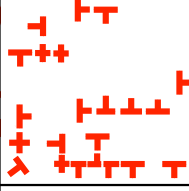
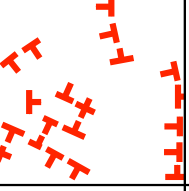
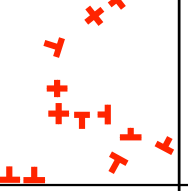
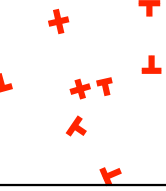
2011).

Section 1.5.1: The change to the front and back of the alley

According to Nobu Mizusawa (2006), in German cities where some alleyways were revitalized, the backsides of the buildings became important façades (Mizusawa, 2006). The building owners often renovated the rear exterior walls of their buildings, which made alleys more beautiful. As a result, people started to walk through the alleys to reach the rear entrances to the businesses, which brought economic benefits (Mizusawa, 2006, 2).

Section 1.5.2: More walkable (Connectivity, Quality of path, Path context)

Figure 2: Relationship of Connectivity and Grid Pattern

					
	Gridiron (c. 1900)	Fragmented Parallel (c. 1950)	Warped Parallel (c. 1960)	Loops and Lollipops (c. 1970)	Lollipops on a Stick (c. 1980)
Street Patterns					
Intersections					
Lineal Feet of Streets	20,800	19,000	16,500	15,300	15,600
# of Blocks	28	19	14	12	8
# of Intersections	26	22	14	12	8
# of Access Points	19	10	7	6	4
# of Loops & Cut-de-Sacs	0	1	2	8	24

Source: Designing the Walkable City (2005)

Certain age groups such as the elderly and children could be considered as people with limited access to transportation; however, according to Southworth (2005), walking is considered as one of the means of movement available to all kinds of people; therefore, it is necessary to improve walkability (Southworth, 2005, 248).

Section 1.5.3: Involvement of communities

Many cities, such as New York, Los Angeles, and Tokyo, usually have considered that alleys may be relevant to their cultural background. There are many ethnic groups in bigger cities and ethnic towns. In these ethnic towns, alleys often match their culture because they are part of the town. There are also specific neighbors in the area. So, alleys are also used by limited neighborhoods. These uses are related to the enhancement of communities.

Section 1.5.4: More variety of human activities

According to *Life between Buildings* by Jan Gehl (1987), there are three kinds of outdoor activities pursued by humans: humans' activities outside: (1) necessary activities such as commuting; (2) optional activities, which people do when they have time, such as a stroll; and (3) social activities such as festivals (Gehl, *Life Between Buildings*, 1987). Optional activities and social activities would not take place in a poor quality environment (Gehl, *Life Between Buildings*, 1987) which means if there are attractive and interesting alleys, more activities, not only walking through the alley but also other activities at the alley, could take place there. According to Jen Gehl (1987),

“It is difficult to pinpoint precisely what life between buildings means...opportunities for meetings and daily activities in the public spaces of a city or residential area enable one to be among, to see, and to hear others, to experience other people

functioning in various situations” (Gehl, *Life Between Buildings*, 1987).

Alleys possess potential to produce the secondary public realm that might have potential to repair ecological performance (Jenny Kempson, Mary Fialko, Nancy Rottle, 2012, 2) and that will offer more variety of social activities. The public space is used for a gathering place in many cases, so there is always the potential for spurring more human activities. It is important to imagine what activities could be there and how alleys could be used as places which accommodate a variety of human activities.

Section 1.5.5: Economic development

Reno, Nevada, has been working on the revitalization of retail in its central business district. The City and the Economic Development/Redevelopment Agency in Reno set up four goals: (1) “First, Commercial-retail development has been used in downtown Reno to enhance and increase tourism” (Steinmann, 2009, 15); (2) “the second goal for both the City and the Agency has been to attract area residents back to the downtown area” (Steinmann, 2009, 15); (3) “The third goal for both the City and the Agency has been to increase the number of new permanent residents actually living within the immediate downtown Reno urban core” (Steinmann, 2009, 15); and (4) “the fourth goal of both the City and the Agency has been the development of new employment opportunities, in addition to tourism-related jobs” (Steinmann, 2009, 15). Those goals also mention overlapped benefits and strategies. For example, if the revitalization of retail is successful, it would bring new employment opportunities, new tourists, and new residents. The Reno example also shows that it is important to give new businesses and local businesses opportunities to achieve. The project has focused on development of “cultural centers, entertainment venues, and new commercial-retail to accomplish this goal” (Steinmann, 2009, 14). Art is also considered as a local service. “These studies approach the arts as a predominantly local-serving industry, especially for museums and the performing arts

where, with exceptions like New York and London, the majority of tickets are purchased by local residents” (Ann Markusen, Greg Schrock, 2006, 1662). Although it has less effect on tourists, for instance, “Visitors may also attend, but they do not base their travel destinations on the opportunity to see local theatre or dance” (Ann Markusen, Greg Schrock, 2006, 1662). The project talks about the importance of local business. Revitalization of local business is significant for economic development. If economic growth is achieved by revitalizing alleys, it would help to stimulate other alley projects, to bring new tourists, and to make the city more beautiful. In Lincoln, as long as the population has been growing, and there have been some projects going on, it is necessary to consider the utilization of unused areas, increases in new employment opportunities, and new or local business opportunities.

Section 1.5.6: More beautiful cities (Tourism, economic, walkability, maintenance)

If a city becomes more beautiful, more people might visit the city, which could bring more congestion. Those facts would require more public spaces for human activities and walkability. New tourists will bring more money for the cities. And according to Southworth (2005), path context is one of the factors that makes a city walkable. There are many factors related to path context. Path context makes pedestrians comfortable, which brings positive walking experiences to pedestrians. Some elements of good path context include street trees and attractive buildings (Southworth, 2005, 251). According to Mizushima (2006), better-looking cities raise communities’ awareness of the importance of maintenance, and as mentioned above, it is necessary to involve communities to achieve maintenance. The improvement of beauty would help improve the city’s economy. An article by Markusen and Schrock discusses the relationship between art and economics. This relationship has the attention of policy-makers: “Over the past two decades, urban and regional policy-makers have increasingly looked to the arts and culture as an

economic panacea, especially for the urban core” (Ann Markusen, Greg Schrock, 2006, 1661). There would be more benefits than we currently estimate. The article entitled “The Artistic Dividend” mentions the underestimation of art’s regional contribution to economics. Markusen and Schrock say that the approach which measured the contribution by totaling the revenue of larger arts organizations, and associated expenditures by patron and multiplier effects, underestimates the contributions of creative artists to a regional economy, “because of high rates of self-employment and direct export activity, because artists’ work enhances design, production and marketing of products and services in other sectors and because artists induce innovation on the part of suppliers” (Ann Markusen, Greg Schrock, 2006, 1661).

Section 1.5.7: Possibility of reduction of crime rate (visibility, eye on alleys, economics)

According to the University of Cambridge, Sheffield Hallam University (2000), design could help to reduce crimes. To achieve this goal, it is necessary to know what kinds of crimes are there. Jane Jacobs (1961) also mentions that eyes on the streets would reduce the number of offenders. There is an example of the first completed project of Baltimore’s Alley Gating, referred as the Luzerne-Glover alley (Appendix D-2). The project “has already successfully reduced crime, illegal dumping, and features elements including potted flowers and seating, and it works as a residential pocket park and a social space, and these achievements has contributed to reconnection of neighbors” (Arly Cassidy, Josh Newell, Jennifer Wolch, 2008). The Design Against Crime team mentions that a reduction in the crime rate would help to grow the local economy.

Section 1.5.8: Sustainability (city beautiful, reduction of crime, walkability)

Sustainability is a major emphasis for some projects in cities that are working on the revitalization of alleys. It is the most common revitalization strategies for alleys.

Strategies for sustainability may generate many benefits, not only for walkability and water treatment, but also spin-off benefits, such as better-looking communities that are improved by the greening and paving of alleys with permeable materials, and those better community and city beautiful benefits will bring other benefits such as the reduction of crime.

Section 1.5.9: Possibility of alleys

As mentioned above, the revitalization of alleys could have many benefits, and one benefit sometimes bring other benefits. Therefore, benefits can overlap.

Green Alley projects in some cities have been seeking the possibility of more sustainable alleys; however, some alley projects in other countries or some cities in the U.S. have a different focus, such as marketing, art, and tradition. The keys of existing alley projects are safety, sustainability, and economics. Those keys and benefits would interact with each other.

Alleys possess potential to produce the secondary public place, which may offer the possibility of social activities in environments such as pedestrian paths, playgrounds, gathering spaces for neighbors, and so forth, and it may also have potential to repair the economical performance. The public space is used for a gathering place in many cases, so there is always the potential for spurring more human activities. It is important to imagine what activities could be there and how alleys could be used as places which have full of human activities. The goal of this thesis is to initiate the selection of downtown Lincoln and to suggest the ways to revitalize alleys to increase the vitality of downtown activities.

This paper will provide some suggestions for specific alleys in Lincoln.

Section 1.6: Statement of research questions

This thesis explores how cities can enliven human economic and social activities by revitalizing alleys. Types for the revitalization of alleys will be generalized by examining case studies. The purpose of this research is to generalize alley revitalization strategies by analyzing case studies, and the City of Lincoln will be a study area as an example to show the possibilities of alleys. The Lincoln example will show not only generalized strategies and common characteristics of alleys in each type but also the difficulties of revitalization, as well as the uniqueness of each alley. This study will consider how alleys in the City of Lincoln could be improved, and, therefore, how alleys could contribute to city life. Many alley projects in other cities are often based on community surveys, which implies that alleys are part of communities and that alley revitalization would have strong effect on city life. It is important to determine the potential for human activities in alleys after revitalization, and this requires consideration of the question: How can alleys contribute to city life? To revitalize alleys, communities and neighborhoods cannot be disregarded. This thesis will show the potential of alley revitalization and activities at alleys, and how strategies for alley revitalization have been successfully implemented in number of cities, as well as how similar strategies could be transferred to alleys in Lincoln.

The unique characteristics of alleys in Lincoln need to be considered. There are many projects going on in the U.S., and there are also many alleys effectively utilized around the world; however, it would be difficult to apply every idea and strategy from these projects to alleys in the city of Lincoln, because there are different characteristics between the City of Lincoln and other cities; therefore, it is important to consider the applicability and feasibility of each strategy to specific alleys in Lincoln. There would be some potential for unique ideas to emerge by using the characteristics of alleys in

Lincoln, such as the grid pattern, specific buildings, and local characteristics, which could enhance tourism in Lincoln. The differences between cities make adapting all aspects of specific case study projects difficult. There are different strategies for projects going on in the U.S. because there are some differences among states and areas. One important goal for this thesis is to derive generalized strategies from other cities using case studies and then applying unique strategies at selected alleys in Lincoln. The general strategies derived from case studies should be applicable to a variety of existing alleys with existing buildings; therefore, classification of types and identification of alleys with potential for revitalization are important.

Section 1.7: Description of research methodology

The research for this thesis has been accomplished in two phases to reach the respective goals of identifying general types of revitalization strategy and showing an example in Lincoln. The first phase was conducted by collecting online cases, articles, journals, books, and so forth, making tables for cases, making sheets for case studies, analyzing them, finding common types of revitalization strategies and common criteria of their potentials, and analyzing each common type and each criterion to seek the suitable strategies to each situation such as district, year, country, size of projects, and their purpose, which are originally hypothesis of influential factors on the type of alleys. The common types of revitalization strategy are selected by their frequency of appearing in the cases found and documents. If a type of strategy is used in more than forty percent of cases, it could be considered a common type of alley revitalization strategy. The criteria will be chosen based on the frequency of appearance in the cases found. The standard of the frequency will be based on whether or not the criterion shows up more than two times. To choose the criteria, some resource review will be used. There will be a list of case studies for the alleys including alleys in other cities. There are thirty six alley project

cases and twenty nine alleys including existing utilized alleys. They will be categorized to analyze what types of revitalization strategies are likely to apply to each alley project type. Analyzing the case study makes them, but there also will be sub-categories such as country, year, and size of projects as the hypothesis of factors affecting the types and criteria. This is to allow more detail in the comparison and the delineation of strategies. After classifying alley project type and talking about their potential, there will be some general suggestions for alleys for each alley project types. To provide general suggestions, deeper analysis is needed.

General criteria will be suggested for evaluating the revitalization possibilities of alleys. The criteria will be based on article and project review. These criteria will be used for a field study of alleys in the downtown area of the City of Lincoln as well. Alley project types will be classified by the hypothesis. It has stronger influence on the type of alley revitalization and the criteria; therefore the alternatives in Lincoln will be based on these types. There would be new alley project types based on the field study.

The evaluation of revitalization of alleys is based on the case studies, articles and book reviews to define successful alleys and the most common types of revitalization strategy for specific situations. The articles and books provide some factors of successful urban design and existing considerations for successful alleys, and the case studies. There would be new alley types defined for Lincoln, based on the field study.

The evaluation of revitalization of alleys is based on the case studies, articles and book reviews to define successful alleys and the most common types of revitalization strategy for specific situations and revitalization purposes. The articles and books provide some factors of successful urban design and existing considerations for successful alleys, and the case studies will give actual situations, revitalization purposes, and common types of revitalization strategy. A table comparing each case will show the type of revitalization strategies that could be applied to alleys in specific project types. These are mainly districts that are considered as the most influential factor or hypothesis, such as a

residential district, a commercial district, an art, cultural or historic district, or a mixed-use district. Other factors will be created due to cases not being applicable to districts with multiple alleys, parking alley, temporary idea, or originally arranged alleys. If there is a strategy usually applied to alleys in a specific project type, it could be one of the general strategies for an alley in a given project type and it will be analyzed in the table using Excel. In this way, this thesis will aim to create new criteria for successful alley revitalization. The case studies also represent physical aspects as criteria, and each criterion will be analyzed using the table.

Section 1.7.1: Lincoln/Downtown/an Alley

The second phase was conducted by analyzing Lincoln in order to choose certain neighborhoods, analyzing downtown specifically in order to choose an alley (for the example of revitalization), analyzing eight adjacent blocks and the block that surrounds the proposed alley, preparing alternatives with previous case study results and these processes, and showing these alternatives as an example. Much previous research has been done on revitalizing alleys to identify features in the study area and identify which alleys should be revitalized, such as the Activating Alleys project in Seattle, WA (Appendix D-18), the Green Alley Program in Los Angeles, CA (Appendix D-16), the Green Alley project in Chicago, IL, and so forth. The type of revitalization strategy likely to be found during the case study depends on its purpose. Its purpose could be economic development, green infrastructure, art, maintenance, or what sorts of events are held there.

There also will be some specific suggestions for selected alley in Lincoln to physically show the suggestions with more details as examples at the end of this thesis. There will be demographic analysis using graphs and maps. The maps of the City of Lincoln would show population in the City of Lincoln, the density in the City of Lincoln, and households in the city of Lincoln to analyze recent trends of population. To create maps

to select a site, GIS will be used to find a suitable area for alley revitalization in the City of Lincoln. There will also be a map created by GIS showing the hot spots of crime where the highest crime rates occur. These data for the maps will be developed from Census Bureau data. Walkscore will give the information about the congestion of amenities and neighborhoods' walkability. Those maps have been created to gather general information about the City of Lincoln. This will be compared with other cities to know where alley revitalization has occurred. Walkscore was described by Ms. Hadasa Lev (2012) at the American Planning Association National Conference in 2012. The Walkscore provides a walkability score by walking distance to certain amenities such as parks, restaurants, schools, bars, grocery stores, coffee shops, and so forth, and reveals this information on a map by the walking distance, therefore, the Walkscore will give a walkability measure of a selected area such as downtown Lincoln, Nebraska as determined by distances to amenities. The purpose of creating these maps is to narrow down the area within which alley revitalization might be appropriate by analyzing the City of Lincoln. Maps for the downtown area will show (1) projects around downtown Area; (2) grid pattern comparing other cities; (3) borders of downtown Lincoln; (4) zoning and land use; (5) traffic volume; (6) the means of transportation by Transportation Analysis Zones (TAZ); (7) hot spots of crime and the location of the crimes in downtown; (8) building use which shows hot spots of four land use categories as accessibility to the four types of use such as residential, office, retail, and service; (9) building condition; (10) alley widths in the downtown; (11) open space in downtown; and (12) maps showing the result of the field study with the criteria on the table. These maps will show information that will help narrow down suggestions for physical change in the alley(s). The maps also help determine (prioritize) which areas could be the first ones to be revitalized. The maps also help the reader to know the study area and what is there. The 3D modeling will be shown to analysis the downtown area more deeply. The 3D image will show the how the downtown area is organized, and it simply provides a better image of downtown Lincoln. The 3D image will be made

using SketchUp and Illustrator. The accessibility map will show specific blocks, indicating where the four land uses of retail, residential, service, and office are most densely concentrated in downtown Lincoln, which also means these would be the most mixed-use areas even though officially, there are different zoning codes. The hot spot crime map and maps for each crime will show high crime rate areas and more detailed information. There is also a map for TAZ. TAZ is defined for CTPP 2000, the Census Transportation Planning Package 2000. "The CTPP 2000 is a set of special tabulations from the decennial census designed for the transportation planner using large sample surveys conducted by the Census Bureau" (U.S. Department of Transportation). The TAZ map would show the means of transportation to reveal how people commute in the downtown. An alley width map will show where the narrower or wider alleys are located, and how wide alleys in downtown Lincoln are, to find their potential for revitalization. Zoning and land use maps will be important to consider the possibilities of revitalization. They are strongly related to building use, building height, alley width, and what could be there. The map for traffic volume will be created to show current traffic conditions and hot spots of traffic volume. The revitalization project should consider the current projects going on in downtown Lincoln, therefore, the project maps showing what projected are planned in downtown Lincoln will be made. The alternatives that will be suggested at the end of this thesis should consider the existing projects in Lincoln. Eventually, the field study results will be shown. They are based on the criteria from the case studies, therefore, these maps will connect this project strongly to the case studies. These criterion are chose because they frequently show up on case studies or literature review--which means they should be taken into consideration when an alley revitalization project is planned. To select areas and specific alleys, it is necessary to study the area to figure out which alleys should be revitalized as the first steps. The suggestions that will be shown here should stimulate revitalization of other alleys in the City of Lincoln.

There is site analysis for eight adjacent blocks. The maps for these eight blocks

will show (1) building use; (2) parcel owners; (3) street and site view at the edges of each block; (4) each alley view in the eight blocks and the proposal alley from the entrance of the alley; and (5) maps for site analysis. Since the alleys are selected before this process, this process goes into much more detail on the features and characteristics of the areas. The building use map will show each building use and the names of the businesses in order to show more minute building use information. The map for street and site view and each alley view will show what the area looks like and it allows more fine-grained site analysis. The maps for site analysis will show the detailed site analysis information and general function of each place. It will also show some suggestions on the map.

Three alternatives will be provided, and these three alternatives have different purposes and varieties of feasibility. It is necessary to prepare not only one, but several alternatives due to alley revitalization projects usually involving and interacting with communities in their area. Different alternatives will also show more of the potential of these areas. To revitalize alleys, the suggestions that would be shown here should stimulate other revitalization of alleys in the City of Lincoln, therefore, The next step will be included in the consideration when the alternatives are suggested. To show physical suggestions for alley revitalization, SketchUp and Photoshop are used to visualize these alternatives and analyze the area.

Chapter Two - Review of Case Studies/Analysis

Section 2.1: Methodology of case study analysis

Case studies are used and thought adequate when investigators need to define topics broadly, to cover contextual conditions, and to depend on multiple sources of evidence (Yin, 2012). The quantitative case study also provides “in-depth knowledge of an phenomenon that barely been researched” (Josée Audet, Gérald d’Amboise, 2001). To implement case studies, certain questions are significant. The first question will be “what is the case” (Yin, 2012). In this paper, the case will be the strategies for the revitalization. Once it is decided, it will provide stability of a case study design (Yin, 2012). According to Rober Yin, it is important to set questions for each case study before starting the case studies, which help in designing the case study and analyzing the results. Therefore, the questions of this thesis for the case study will be what is the general strategy for revitalizing alleys and what are the more and less common criteria among alleys in cities for revitalization. This paper will research and explain why. Those questions will help to achieve the theoretical proposition, the most preferable strategy (Yin, 2013).

Yin mentions the importance of theory not only in exploratory or descriptive case studies but also in explanatory and multiple-case studies based on replication designs for critical examples (Yin, 2012). An exploratory case study’s purpose is to define the questions and hypotheses of a subsequent study or to determine the feasibility of the desired research procedures (Yin, 2012). “The descriptive case study also presents a complete description of a phenomenon within its context” (Yin, 2012). “An explanatory case study presents data bearing on case-effect relationships which explain” (Yin, 2012) which causes produce which effects.

An explanatory case study shows fieldwork and data collection to define the study questions and hypotheses” (Barney G Glaser,Anselm L Strauss, 1967). You may be

genuinely trying to discover theory by directly observing a social phenomenon in its raw form. “When the final study questions and hypotheses are settled, your final study may not necessarily be a case study but may assume some other form” (Yin, 2012). During the process of data collection, criteria and project types have been defined (Appendix B) and these will help to define the questions and hypothesis.

The importance of the case study is to describe the phenomenon and context, and especially, why the phenomenon occurred. The relation between the phenomenon and context permits two interpretations such as “the context is hypothesized to contain important explanatory variables about phenomenon or the boundaries between phenomenon and context are not clearly evident” (Yin, 2012). Some alleys are revitalized or some existing alleys are well used. Those could be considered as phenomena; however, the purposes, such as green infrastructure, economic development, maintenance, or beatification for activation, may be different. Those types of revitalization could be considered as context. There are existing alleys which are also well used. For those situations, the context is hypothesized. To see the relationship of phenomenon and context, it is necessary to figure out its purpose and type of revitalization. In addition, if each type of revitalization is considered as phenomenon, the details of each strategy will be the context. In this case, the context is hypothesized. Yin mentions that “the complete design will specify the case selection criteria” (Yin, 2012), therefore, these case selection criteria are created by the case study for the relationship between type and detail.

The information for this case study was collected from websites, books, articles, and journals. According to Yin, “the important aspect of case study data collection is the use of multiple sources of evidence - converging on the same set of issues” (Yin, 2012). Therefore, the same set of categories of information were collected in this paper, such as: general information, site information, funding, planning information, and categories on Appendix B. The case study is the method with its own designs and analytic routines. For a complete methodology for the case study, it is necessary to attend to four components,

the conditions for designing an investigation, collecting the adequate data, analyzing the data, and reporting the findings (Yin, 2012). Both the new and previous editions of *Applications of Case Study Research* emphasized data collections rather than designs (Yin, 2012).

The case study design has many parts and processes such as determining between single- or multiple- case studies, choosing the specific cases to be studied, “developing a case study protocol, and to defining the relevant data collection strategies” (Yin, 2012) to deal with “the logic whereby initial hypotheses or research questions can be subjected to empirical testing” (Yin, 2012). In this paper, the case study design was configured as multiple case studies because the case study will not describe any casual or critical situations. The single case study is preferred usually only when there are compelling reasons because the multiple-case study is stronger and broader than the single case study. For the multiple-case study, the logic of bringing cases together should be considered a replication logic rather than any sampling logic, therefore, two or more cases might be selected in the hopes of replicating a certain finding such as similar results (Yin, 2012). This paper will determine the similarity using Excel tables and graphs. Sampling logic does not work well with multiple-case studies because it require pre-identified representation criteria (Yin, 2012). There are three ways to select the multiple cases: criticality for the theory being tested; topical relevance; and feasibility and access (Yin, 2012). In this paper, the third method will be used to select the cases because the information of revitalization of alley are limited. The process of selection is supposed to be vast, collecting preliminary information from a large number of candidates and performing screening analysis (Yin, 2012).

The cases were selected in this paper by location, type created in the process of making questions, and availability of information. Before working on the multiple-case study, it is of consequence to distinguish if whether the cases will be related to one another through literal replication or theoretical replication. The literal replication is to find

where the cases are designed to corroborate each other, and the theoretical replication is to find where the cases are designed to cover the different theoretical conditions. In the theoretical replication, there will be predictable different results, it is not possible to determine the project before the data collection process because of the exploratory case study. It will be used for this paper since there are many examples of alleys. Therefore, the decision depended on the projects that differed on the range of measures such as availability of information, geographical location, organizational structure, and type of alleys and projects. This provided the greatest coverage and best chance of identifying patterns of difference and similarity.

The case study data in this paper has been basically collected between 2012 and 2013. Therefore, it is not longitudinal data and will be a one-time data collection effort. There are no on-site observations in this case study section because of the difficulty of accessibility to all of the different case study locations, which would be costly, time-consuming, and would require special access to facilities. If the on-site observation is implemented, more critical information should be collected using documents and interviews (Yin, 2012). Therefore, there will be a limitation on the information, however, the case study will show quantitative samples that come from a wide range of years, such as leading-edge project samples and as well as some existing well used alley samples.

This case study will determine multiple relationships of revitalization of alleys, such as between location and type, between year and type, between type and criteria, between location and criteria for each situation such as project, each alley, including existing alleys, alleys where a project is currently taking place, and alleys that will have a project in the future. Moreover, by analyzing the starting date of the project, the results will show the trend patterns for each generation. When each case study is implemented, complex process-outcome framework and illustrative evaluation question are needed. The cause and effect relationship will be explained as a hypothesis, and the case study will show the causal relation. The measurable outcomes are preferred (Yin, 2012). The

hypothesis for the relationships between and type will be type. The type would be determined by locations such as land use and district. The hypothesis for the relationships between type and criteria will be criteria. The criteria may be chosen by type. The hypothesis for the relationships between location and criteria will be criteria because the criteria may be influenced by land use and location. Those hypotheses were created to discover the answer to the following question: what is the most common strategies for revitalization of alleys?

According to Yin, the design processes will be 1. “specify the outcomes of concern”, 2. “reference existing causal theories”, 3. “decompose these questions into a series of casually linked hypotheses,” and finally, 4. “develop operational definitions of the outcomes and hypotheses” (Yin, 2012). If it is poorly specified, it will be called a factor theory (Yin, 2012). The theory will seek the effectiveness, however, it will be shaky as the foundation of the case study because of the unclearness of sequence. Since the specification creates strengths, weaknesses, and feasibility for each theory, this paper will try to specify as much as possible to avoid the factor theory; in addition, “the correct specification of a theory will provide predicted pattern of events” (Yin, 2012). The pattern will be a series of benchmarks, therefore, the benchmarks will allow the comparison with other cases (Yin, 2012). The benchmarks in this paper are the alley type and criteria. Those have been created during the data collection processes. By analyzing those data, the paper will attempt to identify the most common criteria and the least common criteria for each type or criterion. These benchmarks will be useful when some alleys are going to be implemented. These benchmarks will help to compare the alleys. The analysis process by testing with a single case study and only with empirical evidence is called pattern-matching process (Yin, 1989), so there is a process to make sure the benchmarks are functioning. By comparing two or more theories, the result will be clearer because it shows the exclusive patterns and helps to find out more valid patterns (Yin, 2012).

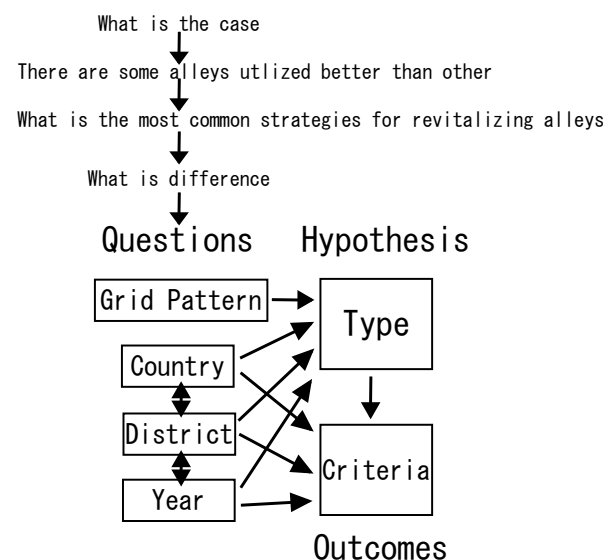
The case study is supposed to help to improve “understanding of theoretical

propositions and hypotheses in those situations where the context is important and events cannot be manipulated (as in an experiment)” (Yin, Applications of Case Study Research, 2012).

There are four considerations as the last step for the case study design, which are “construct validity, internal validity, external validity, and reliability” (Yin, 2012). According to Yin, the case study needs to go through those case study processes during design, data collection, data analysis, and reporting. The construction information is limited since it is not on-site observation, therefore, the construction validity in this paper needs to be improved by on-site observation methods such as interviewing. The construction validity needs to be considered when the case study is developed because considering its interest is important, though it is limited for this paper (Yin, 2012). To achieve the internal validity, it is necessary to set “the specification of the units of analysis, the development of a priori rival theories, and the collection and analysis” (Yin, 2012). Therefore, the units of analysis should be specialized for this paper. To specialize the units, how much of each type and criteria are used will be considered. Since this case study has focused on general strategies for revitalization of alleys, the units of analysis will be social artifacts (which are objects or products of individuals, groups, social behaviors and activities). So, the social artifacts themselves will be

projects or alleys in this paper, and units will be how much each type and criteria are used. The case study will also show the results of analysis for each alley (individual) and projects (groups) to analyze trends and general strategies. The rival theory is “a theory different from the original theory explains the result better” (Yin, 2013). The external validity could

Figure 3: Case Study Diagram



be achieved through the specification of theoretical relations, from which generalizations can then be made. Finally, the reliability will be supported “through the use of formal case study protocols and development of a case study database” (Yin, 2012). The protocols are important to follow for the multiple-case study. Table 1 shows the eleven recommended tactics covering these four tests and also indicates ways that the research design and conduct for this case study responded to these recommendations. For the conduct validity, the Use Multiple Sources of Evidence was used, which included websites, articles, journals, videos, and reports during the data collection. Unfortunately, there is no on-site observation. If on-site observation were to be included, there would be more information, and analyses such as time series and the logic model would be implementable.

The analysis depends on the investigator’s own style of strict empirical thinking (Yin, 2013), side by side with “the sufficient presentation of evidence and careful consideration of alternative interpretations” (Yin, 2013). The tools will be useful to analyze case studies. In this paper, the tool used for the case study will be Excel. Analysis of the case study using Excel will show whether there are any meaningful patterns emerging (Yin, 2013). This paper’s strategy will be the combination of relying on the theoretical propositions and using both qualitative and quantitative data (Yin, 2013). The quantitative data has at least two adequate reasons supporting its application here. First, “the data may cover the behavior or events” that this paper for which this paper attempts to show outcomes in the evaluative case study. Second, “the data may be related to an embedded units of analysis” (Yin, 2013) within this paper’s broader case study. However, there is the limitation of information, hence, the table for the case study will focus on the quantitative by restricting the required information and the case study itself will have less quantity of case studies. However, there will be more qualitative information. Since the paper is trying to determine the common strategies, the quantitative is of significance.

The replication logic, not sampling logic, for multiple-case studies, is analogous to that used in multiple experiments. For example, upon uncovering a significant finding

Table: 1:Case Study Tactics

Tests	Case Study tactic	Research Phase that tactic occurs	Actions taken in this paper
Construct Validity	Use Multiple Source of Evidence	Data Collection	Use of websites, articles, journals, videos, and reports
	Establish Chain of Evidence	Data Collection	Multiple evidence sources entered into customised object-oriented database
	Have Key Information Review Draft Case Study Report	Composition	This paper based on case studies reviewed by key informants before the paper is done
Internal Validity	Do Pattern Matching	Data Analysis	Patterns identified across cases
	Do Explanation Alleys	Data Analysis	Some causal links identified
	Do Time Series Analysis	Data Analysis	Not performed in this research due to the limited availability of information
	Do Logic Model	Data Analysis	Not performed in this research - requires time series data
External Validity	Use Rival Theories within Single Cases	Research Design	Not used because of exploratory nature of research and lack of existing theory
	Use Replication Logic in Multiple-Case Studies	Research Design	Multiple cases investigated using replication logic
Reliability	Use Case Study Protocol	Data Collection	Same data collection procedure followed for each case; consistent set of initial questions used in the table and the case
	Develop Case Study Database	Data Collection	Articles, links to online, journals, videos and tables entered into database

from a single experiment, an ensuing and pressing priority would be to replicate this finding by conducting a second, third, and even additional experiments.

This study will seek to discover what alley revitalization strategies are commonly used in specific situations with varying characteristics such as district, year, country, and size of a project, to deeply understand their strategies and to find out the types of revitalization used for these alleys.

Section 2.2: Alley type and criteria

District

To create general strategies, it is significant to take districts or land uses into consideration because the range of strategies and budgets for the revitalization will be different based on what kind of area it is. Type of districts and land uses would also effect on the requirement of the type of revitalization. For example, it is inevitable to take economic development in commercial districts into account, however, it is necessary to think about communities and neighbors' requirements in residential districts.

Grid Pattern

By the case studies, it should be observed, what kinds of strategies can be applied to each grid pattern. The function of grid patterns and their history and characteristics may need to be considered. The motivation for creation of the grid pattern was to facilitate military arrangements, religious covenants, mercantile capitalism, and industrial planning, with the main purposes being facilitation of orderly settlement, and colonization in its broad sense, which involve both the acquisition of distant territory and the settlement of reclaimed or newly opened-up land (Kostof, 1991, 102). This happened in

some cities including the American Midwest after about 1800. The grid pattern was an instrument of modernization and of contrast to what previously existed, which was less orderly. The modern movement developed its own basic grid, to serve as a matrix for a revolutionary new way of planning or re-planning cities in different countries and climates (Kostof, 1991, 100).

The grid pattern of parallel of squares has existed since ancient times. The principal of grid organization has been traced to as far back as 2500 to 3000 BC at Mehengirjo Daro, Pakistan, The town was laid out on the rectangular grid of main streets and smaller lanes (Kostof, 1991). Though popular in only some cities at first, the trend of the square grid pattern gradually became the norm all around the civilized world. However, in the 20th century, the grid pattern replaced modern building typologies, so the square grid pattern has become much less of a trend. The cities are no longer as simple as cities with a square grid pattern. Structures of ancient cities were less complicated than cities now. Main priorities for urban form in ancient cities included palaces, temples, kingdoms, religion, canals, trade, agricultural development, and so forth. In Japan, ancient king castle cities such as Heijokyo (ancient Nara), Heiankyo (ancient Kyoto), and so forth were constructed around the 8th century. According to Spiro Kostof (1991);

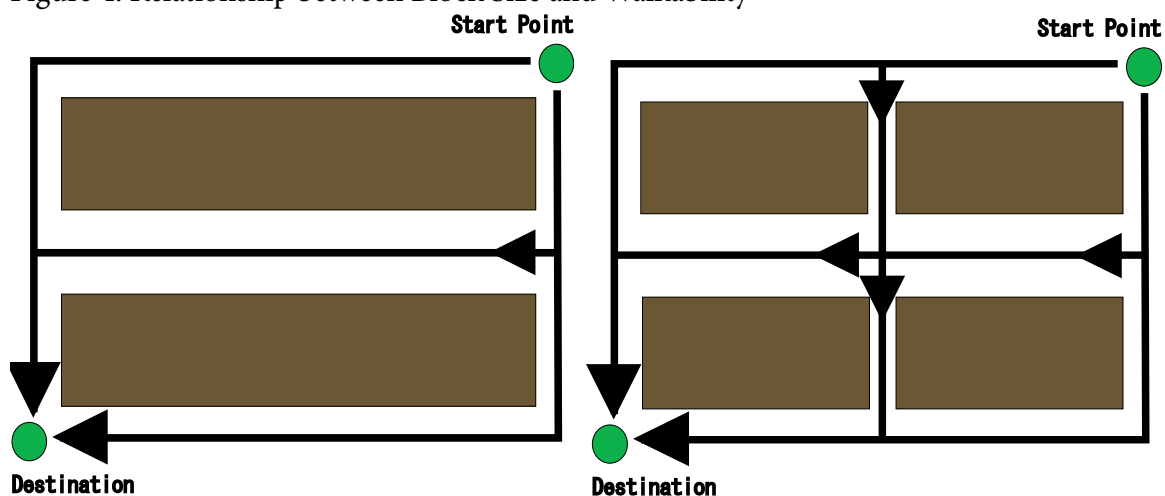
“The grid has served the symbolic needs of the most absolute governments, China and Japan chief among them. The Chang’an of the Tang dynasty ranks among the strictest of grids, and its example was exported to Japan to guide the planning of Heijokyo (modern Nara) in the early 8th century” (Kostof, 1991, 99).

There were nine main East and West streets and nine main North and South streets. The center of North and South Street was the widest street and was continued to the main entrance of the main governmental building. Those streets made the grids squares. This kind of urban planning is called Jobosei, which can be seen in some ancient king castle cities in China, Japan, and Korea. The city of Lincoln also has the alternative form of the center street and the governmental building, which would be the centennial streets and the

capitol building (Kostof, 1991). There was no universal urban planning theory for ancient cities, however, at the time ancient cities were created, there were no automobiles; therefore, the grid pattern was created for the human scales, meaning that it was created for human activities and pedestrians.

As mentioned above, the grid pattern has been strongly related to the town structure. Therefore, the structure of the grid pattern needs to be considered. Jane Jacobs (1961) also mentions consideration of the grid pattern to make the city more attractive and walkable. According to Jane Jacobs (1961), large blocks should be avoided to increase walkability. The larger blocks offer fewer choices for routes to one's destination, therefore, larger blocks force pedestrians to always walk on the same streets, which weakens economic development because they do not have much choice. Having the ability to explore an area and having many choices for walking routes causes people to get excited about trying something different (Jacobs, 1961).

Figure 4: Relationship between Block Size and Walkability



To think about the neighborhood, the grid pattern will be one of the most important factors. The complicated grid pattern would strengthen the community and some visitors may even coax them to explore the area. On the other hand, a simple grid pattern would make navigation easier, enhance walkability, and possibly draw more people to an area than a complicated grid pattern would. By these case studies, it should be observed

what kinds of strategies can be applied to each grid pattern.

Section 2.2.1: Type of alley revitalization strategy

Type of Alley Revitalization Strategies

•Green Infrastructure •Retails •Art •Events • Maintenance

Green Infrastructure

Green Infrastructure is one of the main streets for revitalization alleys. Any projects can adopt this type of project. There are many strategies are used to revitalize alleys such as stormwater management, permeable paving, bioswales, planting, drainage systems, and so forth. The alley has often been left as neglected space; however, alleys have great opportunities to provide ecosystem services.

There are huge potential benefits of greening alleys, such as “water runoff management through infiltration, groundwater recharge, heat island reduction, and expanded wildlife habitat” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 1). The goal of greening alley programs in the U.S. is toward stormwater management. Traditional water runoff management is traditionally managed by sewer systems, however, peak storm events overwhelmed system capacity (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 3). Permeable surface materials, bioswales, and pitched surface will be the future solutions of water runoff management because these allow water to infiltrate into the subsoil.

There some kinds of permeable materials available, such as “permeable concretes, permeable asphalts, pavers, and Grasscrete, which is a paver-grass hybrid” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 3).

There is a study on the efficacy of green street programs implemented in Seattle

called Seattle's Street Edge Alternatives (SEAs) program (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 3), "which installs permeable surfaces along with bioswales and tree and shrub plantings - estimated the program has prevented dry season water discharge and reduced wet season runoff by ninety eight percent" (Richard R. Horner, Heungkook Lim, Stephen J. Burges, 2002).

To get approval of stormwater management through public hearings, one of the keys will be public education, such as occurred during the process for the Blue Alley in Baltimore, MA. The Baltimore residents were "unaware of relationship between stormwater, waterway pollution, and health" (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 6). In addition, the city of Los Angeles thinks it is important to let residents know the benefits of greening infrastructure benefits including pollution prevention and community health.

The greening alleys also help to improve beautification, which achieves reduction of crime and encourages improvement of communities. These would eventually cause the reduction of crime.

Greening Infrastructure projects have focused on safety, health and community, and additionally economic development and social equity.

Retails

Restaurants may exclude people since they are conceived as providing a purely food service to discrete individuals. But they are effective attractions not only to people who eat in them but also people pondering where to live and work. Restaurants are more than just food on their plate because the presence of distinct restaurants redefines the local context (Clark, 2003, 104).

Projects for retail bring not only economic development but also other benefits. The City of Reno has experienced redevelopment projects which are traditional

commercial-retail projects. These projects involve many communities. Communities are learning that:

“retail development is more than just pursuing traditional commercial-retail projects. Retail development encompasses building demand for new commercial-retail opportunities through residential development and tourism-oriented development, in addition to specialty-boutique retail, during and nightlife-oriented retail, and neighborhood-oriented service retail” (Steinmann, 2009, 14).

The retail-development may have several benefits such as bringing residents back to the downtown area, new commercial-retail opportunities for area residents, attractive entertainment to both tourists and residents, increase in the number of new permanent residents, and the development of new employment opportunities, if goals are well planned and successfully revitalized (Steinmann, 2009).

Retail development provides more new employment opportunities, in addition to tourism-related jobs, and Steinmann (2009) notes that “the development of new commercial-retail throughout the downtown area needed to support a growing employment base for both the standard 9am to 5pm work day, as well as for making the downtown area attractive to area workers after 5pm” (Steinmann, 2009, 15).

Different types of new commercial-retail development will prevent an aging urban core, so it is important to invest in “new forms of commercial-retail development, looking ‘outside the box’ to the incorporation of new artistic, entertainment, and cultural centers” (Steinmann, 2009), and so forth.

The retail and art often collaborate. Art works to attract people to the retail area, and retail helps artists to demonstrate or sell their work.

Art

To apply art to the revitalization of alleys, it is important to know the benefits

art may bring. The obvious benefit will be city beauty. Art will enhance the city's beauty. However, art will contribute not only to the city beauty but also to other endeavors such as economic improvement. Ann Markusen and Greg Schrock (2005) say there will be some economic benefits of arts in the urban core. "Artist creates import-substituting entertainment options for regional customers and spend large shares of their own incomes on local arts output" (Ann Markusen, Greg Schrock, 2006, 1661). In addition, artists will not be forced to choose work based on the size or growth of a town; artists give unique experiences to people. Artists themselves are also considered as unique. According to Markusen and Schrock (2005), "artists sort themselves out among American cities in irregular fashion" (Ann Markusen, Greg Schrock, 2006, 1661), therefore, art could be evolved on any scale bring and unique opportunities to alleys and open space.

As mentioned above, art has an effect on economic development. Moreover, "artists comprise a relatively footloose group that can serve as a target of regional and local economic development policy" (Ann Markusen, Greg Schrock, 2006, 1661) and it is not dependent on the region. It could be exported.

"Few performing artists, then—musicians, dancer, actors and performance artists—are believed to export their art out of the region. Other artists— painters, sculptors, photographers, authors— may more easily export their work as well as sell it locally, since it is embodied in a product that stores artistic value for consumption elsewhere" (Ann Markusen, Greg Schrock, 2006, 1662).

Therefore, the artist works could be anywhere, and there are many artists seeking opportunities to show their work. It is difficult to determine how much artists' work contributes to the economy, however, there are definitely some contributions. Markusen and Schrock (2005) mention that "resident artists and artistic establishments are not generally considered a part of the economic base of the region, especially because economic base analysis has relied on industries rather than occupations in identifying base components" (Ann Markusen, Greg Schrock, 2006, 1662). However, for the most part, artists also enhance

local markets, and “artists in these occupations are seen as initially creating for a local market” (Ann Markusen, Greg Schrock, 2006, 1662). However, there is a problem of art. It is its invisibility of artist’s economic contribution. “Restricting itself to arts organizations and the impact of events associated with them, it fails to trace the many ways in which a region’s artistic talent contributes to regional productivity and output” (Ann Markusen, Greg Schrock, 2006, 1662). Since it is difficult to estimate artists’ contribution to the local economy, their approaches understate the full economic contribution of an artistic community to a regional economy (Ann Markusen, Greg Schrock, 2006, 1662). “It cannot capture, for instance, the work that artists do to enhance the design features of a region’s manufacturing products or marketing efforts” (Ann Markusen, Greg Schrock, 2006, 1662). Thus it actually enhances other businesses, and “since artists themselves heavily patronise other artists’ work, and so much of this work is labour-intensive, the multiplier effect of local arts consumption may be higher than expected” (Ann Markusen, Greg Schrock, 2006, 1662). Steinmann (2009) also says that “They are contributors to the region economic base – goods and services exported out of the region that enable the producers to earn incomes that are in turn spent in support of local-serving businesses as well as on imports of yet other goods and services” (Steinmann, 2009, 16). Beside these facts, “there is a growing ‘artistic tourism’ market in the United States” (Steinmann, 2009). It means even though the artist’s work may not be estimated, artists obviously have an effect on the region as contributors.

“Artistic activity produces dividends for a regional economy in two ways—as current income streams and as returns to the region as a whole on past investments” (Ann Markusen, Greg Schrock, 2006, 1662). For example, Artists also need materials, equipment, and labor to create their works, and these will generate and enhance income in the region, which artists can use to enhance the quality and sale ability of products and services of other business in the region (Ann Markusen, Greg Schrock, 2006, 1662).

Art attracts not only regional customers but also people from other places.

Steinmann (2009) also says that new sources of tourism will be attracted by communities investing in the arts and new cultural centers. The new sources of tourism will happen through artistic dividends that will give back to the community through turn pays such as increased purchasing of tickets, restaurant meals, hotels, and other local purchases (Steinmann, 2009, 16), and Markusen and Schrock (2005) also found that by enhancing the local economic base, artists can even enhance quality and sale-ability of other locally produced products and services of other businesses in the region (Ann Markusen, Greg Schrock, 2006).

Art is also used for development to improve the area and increase property values. Steinmann (2009) notes that “In some specific urban central city areas where both property tax revenues and sales tax revenues have declined sharply, local governments and local redevelopment agencies have used new artistic and cultural centers to help stabilize declining property values and encourage new retail sales” (Steinmann, 2009, 17). It is difficult to tell the value of art to the economic development, however, art has been used as a contributor to regions to improve the area and market.

Events

As it is mentioned above, the musicians, dancers, actors and performance artists would be a little bound by region since it is necessary for them to find a site, versus making a product. On the other hand, they will enhance the community and local business. This category is also very vague regarding its contribution to economic development or community enhancement, however, it may attract more people into an alley, and the alley may get more attention than it otherwise would. It is indirectly related to economic development. And those events are usually performed by local people or communities, therefore, it could enhance communities as well.

Maintenance

Maintenance is different from other types because the other four types will cause changes, however, this type of revitalization strategy is about aftercare. However, this type is important to have successful revitalization. To maintain good quality of alleys, it is sometimes necessary to have communities' help or help from the government system.

“The cost of new construction also continues to rise at a rate that outpaces the increase in revenues. These financial challenges demand a closer look at the priorities of the community.” (LPLan 2040, Lincoln Metropolitan Planning Organization, 2011, 10.6)

According to LPLan 2040 and Lincoln Metropolitan Planning Organization;

“Maintenance costs can be significantly reduced if maintenance is done when streets and other transportation infrastructure are in relatively good condition. As maintenance is deferred, condition continues to decline and the costs of repairs rise dramatically. Techniques for reducing traffic demands by deferring trips to alternate modes or minimizing peak demands can reduce the need for projects that increase capacity on roads, resulting in a reduction in the cost for new projects”(LPLan 2040, Lincoln Metropolitan Planning Organization, 2011, 10.6).

So if alleys are used instead of sidewalks, it might decrease the cost of maintenance of sidewalks because there would be less people walking through and less damage of streets.

It may also reduce the maintenance cost at alleys if alleys are full of pedestrians and therefore there is less automobile access. There are some certain factors that streets or alleys would be damaged such as automobile accesses, snow, rain, and so forth. If the revitalization successfully protects from these factors, the alley could be maintained longer. There are two ways to maintain alleys. The first is related to the upkeep of a city, such as cleaning up and constant repaving. Another way is that it needs to be protected from damage.

Section 2.2.2: Criteria of alley revitalization strategy

Type

1.Paving 2.Lighting 3.Canopies 4.Opening Façade 5.Identity 6.Furniture 7.Bollard 8. Water runoff 9.On-site water treatment 10.Steps 11.Colors 12.Setback 13.Building Height 14.Lines 15.Trash removal/enclosure 16.Trees or Plants 17.Banning motor vehicles 18.Cultural Involvement 19. Vendor 20.Recycling 21.Gathering places or centers 22.Network for pedestrians and bicyclists 23. Noise control 24. Recycling materials

Paving

Improvement an alley using new paving has the highest impact. To have better environmental impacts by paving, it is important to choose new pavers based on criteria such as material, strength, color, and style. One of important considerations for paving is materials. They should be able to tolerate the loads of service trucks. It should also be as permeable as possible, so it would preferably be tiled pavers rather than asphalt or concrete. The strategies of the Green Alley program in Los Angeles included features such as high albedo pavement and permeable pavers. They help water to drain into the ground and filter and retain runoff instead of conveying polluted water into the street drains. In addition, high albedo or reflective materials help to reduce heat in the summer, and recycled materials reduce the footprint of the project and are usually more cost effective (Mary Fialko and Jennifer Hampton, 2010, 11). There is another benefit for materials. If a same material is often used in a certain area, such as pavement of alleys, buildings, and sidewalks, the area and the alley might be classified consciously. Therefore, this may help improve the identity of the alley.

Lighting

Lighting provides safety. Providing good lighting in alleys is imperative to maintaining safe alley environments. Well-lit alleys help the reduction of crime and encourage pedestrians, and it also helps to create artful elements. New fixtures should be specified for outdoor use. It is better to choose dark sky compliant fixtures to avoid light pollution at night. LEDs would be another choice for low-energy lighting option. Lighting brings a different ambience to a space. For example, adding softer lights, creating spaces with lighting, and considering lighting temperature would bring new life and atmosphere to an alley (Mary Fialko and Jennifer Hampton, 2010, 11). Among the physical changes, installing lighting could be not high cost performance . Lighting is comparatively less expensive than other physical changes.

Canopies

Canopies are one of the options for spatial reconfiguration in alleys and they are low-cost. They provide many benefits for alleys such as creating intimate spaces for people, bringing protection from rain, snow and other elements, bringing interest to alleys, drawing attention to entrances, bringing more visitors into alleys, and creating comfort within the alley. Canopies make buildings feeling more comfortable because they identify the height of human scales. The height must be high enough to retain access for services, but low enough to keep rain out (Mary Fialko and Jennifer Hampton, 2010, 11). The protection from rain and snow will bring another benefit which is lower cost of maintenance due to less damage of alleys. This criterion allows project stuffs to choose permanent canopies or temporary canopies.

Opening Façade

Reopening facades and also constructing any new facades with windows and doors will encourage improvement of the quality of space within alleys (Mary Fialko and Jennifer Hampton, 2010, 11).

“Transparency and access between inside and out will mean that more people are aware of what is happening in alleys, creating greater safety. With improved safety, more pedestrians and cyclists will use alleys as secondary entrances, and businesses will be able to open within alleys, providing yet more ‘eyes on the alley’” (Mary Fialko and Jennifer Hampton, 2010, 11).

Removing plywood or replacing windows could be one of the simplest processes, but other types of work will likely require an architect or engineer (Mary Fialko and Jennifer Hampton, 2010, 11).

Identity

Alleys with names, art, businesses, public landmarks, gates, or points of interest that can be designated on maps are much more accessible for use than alleys with no such characteristics. It is simply because of the recognition. Alleys with no characteristics such as these would be difficult to be even considered as parts of the city street grid. Giving alleys names and placing plants and furniture in them is an invitation to consider alleys as a part of our city (Mary Fialko and Jennifer Hampton, 2010, 12). The use of specific materials for an alley also helps identify areas or alleys such as Kagurazaka, Tokyo, Japan (Nishimura, 2006).

Furniture

Furniture will reclaim alleys for pedestrians and public space (Mary Fialko and Jennifer Hampton, 2010, 12). “Alleys are great places to locate bike racks off streets and sidewalks and can be sheltered from the elements” (Mary Fialko and Jennifer Hampton, 2010, 12), and they are also great places to locate recycling centers. To avoid the conflict of service trucks and retail services, cafés could open for lunch after trucks completed their deliveries, and movable tables and chairs for customers would help to solve this conflict. Other benches, chairs, and tables would make small urban resting areas. Furniture will help to improve quality of life by activating unused spaces while maintaining clear sidewalks (Mary Fialko and Jennifer Hampton, 2010, 12). Using same furniture on alleys may identify the area such as in Kagurazaka, Tokyo, Japan. According to Nishimura, the one of the strong characteristics of the planned alley in Kagurazaka (Appendix D-12, Appendix D-22) is the black fence (Nishimura, 2006, 30). The planned alley (Shiturae no roji) is a well-arranged space. Pavements of granite curbstones or slates are enclosed by black fences and mud walls, and there are Japanese-style restaurants and cuisines (Nishimura, 2006, 72). These places’ entrances are uniquely designed and the gardens are beautiful. The black fences hide these hidden beauties, but the trees are (of course) still visible above the fences. The hidden sections surprise the patrons of the restaurants. Black color gives a rigid image of the alley from the outside perspective, but there is much more to be seen if visitors are willing to explore.

Bollard

Bollards clearly tend to ban motor vehicles’ access, therefore, they will free more area for human activities. An alley with barrier may have as its purpose not delivery services or trash but some other activities such as outdoor dining, pedestrian ways, events,

and so forth.

Water runoff

If repaving an alley, it is better to consider water runoff to streets. Often, roofs drain into alleys or water in a bypass goes directly into the sewage system, overflowing in storms or taking polluted water to streams. It is necessary to deal with water on-site as much as possible to avoid sewer overflows and pollution (Mary Fialko and Jennifer Hampton, 2010, 12).

On-site water treatment

On-site filtration into the soil is one of the popular solutions in many cities to deal with water runoff. According to Fialko and Hampton (2010), whether or not this is a feasible solution for a particular alley would be decided by an engineer or landscape architect (Mary Fialko and Jennifer Hampton, 2010, 12). If alleys are less dense, such as residential alleys, permeable paving and bioswales could be used for filtering water through soil and plants. The Activating Alley for a Lively City project (Appendix D-18) recommends locating drainage channels on the side of the alley, rather than in the middle, and they can be open or closed and permeable or not depending on conditions. Permeable pavers and structured drainage channels can help by filtering water to soil below and collecting and treating water; it also helps by filtering water more slowly into the ground or temporarily holding water to reduce downstream flooding (Mary Fialko and Jennifer Hampton, 2010, 12). "This is not desirable when soil below alley is contaminated unless the swale or channel bottom is lined with an impermeable layer" (Mary Fialko and Jennifer Hampton, 2010, 12).

Steps

Steps can be used for giving more options for human activities. People will use the step unconsciously such as sitting on, stepping on and off, and so forth (Whyte, 1980). People also use steps to read, eat, and talk (Whyte, 1980). Steps also helps people to stay while avoiding the pedestrian flow (Whyte, 1980). Steps are sometimes used for separation from the main use and used to access specific places such as housing (Appendix B, Appendix D-1). A few alleys also intentionally provide steps to allow for more variety of human activity, such as 20 feet wide project (Appendix B). The projects create the steps to increase the number of places to sit, and places to step up and see higher. According to William Whyte (1980), the use of open space and the presence of sittable places have a strong relationship (Whyte, 1980). Whyte says “people tend to sit where there are places to sit” (Whyte, 1980). As mentioned above, the steps could be a place which is sittable. Giving a lot of choice for how people sit down is important to consider when it is used for the public, and any steps could give people choices (Whyte, 1980).

Colors

Color has huge effect on the area. For example, Kaguraza, Japan, has an alley is that is traditionally black in its color scheme (Appendix D-12, Appendix D-22). The black color in Japan represents style and solemnness (Nishimura, 2006), unlike Western culture (where black suggests depression or death). The black color alley creates the place very silent and mysterious. Some European cities also have tried to keep their traditional colors. The color may even change people’s mood and the town image, which means that color will change an alley’s atmosphere easily.

Setback

Setback will effect on a huge change of alley potential. However, it requires the huge change with expensive costs. When it comes to the renovation of buildings, this criterion could either be used when a building is reconstructed or when it is first being built. Japan has lost alleys due to fire prevention, and these alleys have lost certain characteristics such as a sense of strong community and wider views similar to actual streets.

Building Height

Building height should be one of the considerations in alleys. Japan has low architecture which conforms to restricted building heights. Some historical areas in the U.S. also have limitations on building height, usually in an attempt to preserve historical areas. Alleys' atmosphere and criteria of revitalization of alleys would be changed by the building height.

Lines

The use of lines is applied to identify use in alleys. Some would use for biking, parking, driving or walking.

Lines help the separation of functions in alleys. If the revitalization project has a certain number of purposes and needs to separate activities there, the lines are basic criteria to make this separation. This criterion is not expensive, therefore, it is feasible.

Trash removal/ enclosure

Trash removal or enclosure is a criterion for beautification and comfort. Since the

U.S. has a custom of putting trash cans in alleys, they may smell or they may destroy the site view. If a site looks unattractive, people will not care about keeping the site beautiful. If the trash cans cause such behavior, it will be a contradiction. In some alleys, there is trash on the ground even though there are trash cans. Trash removal or enclosures will bring about beautification, or it will clearly show at least the consideration of beautification, therefore, it will change not only the site but also the pedestrians' attitude.

Trees or Plants

Planting is one of the most feasible, fastest, and the most effective way to cause significant change in alleys. Plants will bring many benefits into alleys such as improvement of the air quality and atmosphere, increase of the inviting feel of an alley, water filtration, and pollutant absorption. It is important to pick proper plants based on existing sun, shade levels, wind, and weather patterns to make sure that plants will survive. Plants also bring new bird and insect habitats into alleys by use of native plants. Edible alley gardens can also be planted, incorporating herbs and vegetables. The simplest solutions are potted plant gardens and window boxes.

Banning motor vehicles

This criterion brings about specific purposes. Some alleys such as Luzerne-Glover alley (Appendix B, Appendix D-2) and an alley at the Sniffen Court, Manhattan, New York (Appendix B, Appendix D-23-15), have gates at the entrance to limit access and enhance communities or neighborhoods. Some alleys have bollards to ban motor vehicles for retail, art, and communities, therefore, these alleys usually have human activities. This criterion will enhance community or comfort in retail area because pedestrians or bikers are able to move freely without concerning vehicle access. It could be used for

retail area as well, and it allows retail owners to set outside dining and pedestrians and bikes to move freely and eat outside comfortably.

Cultural Involvement

Alleys are closely related to residents, tourists, and workers since they have existed as part of the area, therefore, alleys are sometimes culturally influenced. Alleys have been a part of the area, so their histories need to be considered. It also occasionally shows some cultural aspects if an alley in an ethnic area or some communities' area is revitalized. If an area is strongly related to a community or a neighbor, the community should never be ignored because of its longstanding existing condition and idiosyncratic characteristics. However, the revitalization may help communities' enhancement.

Vendor

Vendors are feasible because they could be temporary and movable, therefore, vendors locate at places that are available, and it gives more activity choices to people there. The benefit for vendor owners will be less tax and that they may have more selections of location. Vendors provide not only foods but also social functions because they gather people, and make them talk and stay. People would talk with strangers more easily, as well, if they were around vendors.

Recycling

Recycling is one of the criteria for the environment rather than an attraction. This strategy is about recycling cans, holding recycle events, recycle art, and so forth. It provides environment education and notice to people.

Gathering places or centers

According to Nishimura, the street is designed for mobility by vehicles and its focus is not on pedestrians but automobiles. As a result, street design lacks uniqueness and consideration of communities. Therefore, the sub-system of pedestrian walkways such as alleys is important to enhance characteristic of communities, (Nishimura, 2006, 12). There are some projects used specifically for communities such as Luzerne-Glover alley (Appendix B, Appendix D-2) and have used for a specific community such as I kai alley (Appendix B). It could be a part of the center of gathering spaces if an alley is located near the community center.

Network for pedestrians and bicyclists

The presence of networks for pedestrians and bicyclists is the one of criteria for evaluating walkability. Some alley projects clearly mention it as their purpose and some show it as their primary form of alley, such as restricting vehicle access except retail or community purposes, or connection to a specific destination. Alleys in Japan are often connected to a specific place as a destination. Some alleys are connected to a center of central business district, therefore, these alleys are used as a connection to them. If implementing this criterion, the grid pattern should be gridiron, fragmented parallel, or warped parallel because even though an alley is revitalized, the alley with grid pattern with loops and lollipops and lollipops on a stick will not be connected to other streets or alleys.

Noise control

Noise is controlled by paving materials such as rubber asphalt and restricting automobile access, and some projects have detected noise levels before starting a project.

Especially, alley projects in residential areas have higher consideration of noise.

Recycling Materials

The use of recycled materials criterion is one of the newest criteria. It is for environmental purposes rather than for people. Recycled materials, such as recycled rubber from tires, are usually used for paving in alley redevelopment projects.

Section 2.1: Analysis of case study and conclusion

Analysis

To conduct the case study, this paper created questions and a hypothesis. The question was: what caused the differences between successful alleys and what could general alley revitalization strategies be? The hypotheses are generally where, when, and how big they are. There are different numbers of cases for each district, year, country, and size of the projects. This may be because of the availability of information, however, this also may represent where, what year, and what size of projects are likely planned. Many projects are individual alleys found in residential and commercial districts. These districts are more likely to plan for revitalization projects for alleys. Individual alleys including existing alleys are most likely to be found in commercial districts. The commercial district is one of the most common districts which has concerns about alley quality.

There are five major types of revitalization strategies that were found by case studies and were analyzed using Excel (Appendix B). These types are often found in case study, therefore, those will be the general type of alley revitalization strategy. There are clear differences shown by the graphs. The green infrastructure strategy is one of the most common revitalization types, and more than forty percent of revitalization projects adopted or will adopt this type of strategy. This type of revitalization is implementable in

any place. This paper has sought the most common way to revitalize the alley, therefore, this type of strategy has been analyzed by district, year, country, and the size of the project. If the green infrastructure type is analyzed by district type, it will show what districts most commonly used this type of strategy. This type is likely used for residential districts and mixed use districts (Appendix B, Appendix C-1). However, the number of cases for mixed-use is too low, therefore, the result will not be creditable. According to Yin (2012), the multiple-case study is usually six to ten cases, therefore, this paper considers the cases which has more than six cases creditable. If there are cases more than three, it could be accepted as information. If there are cases less than two, it would be just example, which is single case study, therefore, it cannot compare to others. Since mixed-use districts have similar potential to both residential and commercial districts, alley revitalization projects in mixed-use districts have the potential to house both residential and commercial areas. The number of cases for residential districts is high enough that it could be said that the green infrastructure type is commonly used for residential districts. The green infrastructure type strategy for commercial districts is used in only twenty one percent. This might be because the quality of existing pavement is good enough, it is difficult to implement construct in front of retails, and the project in commercial district focuses on economic development. However, it is important to pave in residential district because there is usually low quality of pavement and the projects in the residential district focuses on beautification, walkability, and sustainability; in addition, alleys are proper place to have water treatment due to its location, occupation, and use. The most common type of the revitalization strategy in the residential district is green infrastructure. The second most common strategy is maintenance, and these strategies match to their purposes. In residential districts, there is no retail type of strategy, and residential districts are less likely to have event or art types of strategy due to resulting noise and necessary density and land use for such events. These types should be implemented in the commercial, art/cultural, or historic districts.

Green infrastructure strategies have been getting attention in the U.S. Projects after 2010 mostly include this type as one of the strategies; there are a few cases of green infrastructure projects found in other countries, but nowhere near as many found in the U.S. Therefore, the result of the green infrastructure after 2010 has become even higher than the result of green infrastructure in the U.S., so it implies that other countries such as Australia and Japan are less likely to have this type of strategy after 2010. The projects in other countries have different focuses due to their purposes. Other countries are more focused on economic development, and they are likely to implement the projects in commercial areas. One of the reasons why they focus on commercial area is because many alleys in other countries are already of good quality already have characteristics and histories such as tourism, neighborhoods, communities, and a lived-in feel. The green infrastructure type of revitalization strategy sometimes improves the maintenance by controlling water runoff. The water runoff sometimes carries trash or waste.

The retail type of revitalization strategy is the least common type for projects and the most common type for individual alleys (Appendix B, Appendix C-3, Appendix C-4). This type tends to occur in certain types of districts. Therefore, there are none of this type of project or individual in the residential districts. If there is no retail in a project area, it is difficult to implement this type of revitalization strategy. In Australia and Japan, this type of revitalization strategy is common because Australia focuses on the commercial district to revitalize alleys. In Asia, there are many alleys used for small retail, therefore, there are less projects for this type. Difference by year could be because the many revitalization alley projects are found in residential districts after 2010. This result may imply that the alley projects have started to focus on not only commercial districts but also on other districts. The year difference for individual alleys implies the result. When the events type of revitalization strategy and this retail type of revitalization strategy work together, events are likely to involve retail there, or retail there organizes some events. Retail and art also work well together, and help to attract people to an alley.

The art type of revitalization strategy is the second least common type of revitalization strategy for projects (Appendix B, Appendix C-5, Appendix C-6), and third most common strategy in individual alleys. This type is usually of a reasonable cost to implement in the alleys, therefore, it is likely implemented. However, this type is less likely to become the main purpose of the alley, unlike retail for economic development and green infrastructure for sustainability. This type could be the main strategy, however, it is more likely collaborate with other strategies. The art strategy is mainly used in the commercial districts, and the districts always have retail revitalization strategies, which means that retail and art revitalization strategies are collaborated. This type of revitalization strategy is less likely to be used in residential districts, and this may be because of land use. The residential district considers residents rather than attraction of people. This type of strategy is suitable to the single alley project because it chooses location, and it is hard to implement this type in many places at the same time. Alley projects in Australia have focused on attracting pedestrians in commercial districts, therefore, this type is often used to revitalize alleys. This type is useful to attract people and give some characteristics to an alley, therefore, some alleys which already have some character, such as alleys in Chinatown, need to consider its existing character. Art, cultural, or historic districts also have intermediary percentage of use of this type, and this is because of its land use.

The events type of revitalization strategy is also used in commercial districts (Appendix C-7, Appendix C-8), and it is likely to collaborate with the retail type of revitalization strategy. It also sometimes collaborates with the art type of revitalization because art and events easily work together. This is also usually done for single alley revitalization projects. The multiple-alley revitalization projects have this strategy, however, these projects pick one or two alleys out of multiple alleys to implement this type of revitalization strategy. This type is usually used in commercial, art, cultural, or historic districts, therefore, the percentage of this type after 2010 is relatively low due to the high percentage of alley revitalization projects in residential districts after 2010. The individual alley is

likely to have this type because this type suits single alleys, and it more easily attracts people's attention. Australia is likely have this strategy because Australia's concern is to attract people to its revitalized alleys.

The maintenance type of revitalization strategy is independent. There is no collaboration with any other types; therefore, some cities have sometimes implemented only this type, such as Fresno, CA and Lincoln, NE (Appendix B). Implementation depends upon whether the local government, project staff, and retail owners (who have shops set up in the alley) care about alley maintenance. Laying the responsibility of maintenance on retail owners seems to be successful because there is less budget pressure on the cities. Some of the alley revitalization projects consider this type as part of their projects even though it was not mentioned in documents or online. This type might be less-mentioned due to the fact that it leaves less of an impression on people or that the change is more subtle than extravagant. Therefore, some projects could not show the maintenance type on Appendix B, even though they have this type. It is caused by the limitation of information. Appendix B shows this type only when projects specifically mentioned that they have this type. The frequency of the maintenance type for projects or for individual alleys is around forty percent, so it is considered for less than half of alleys. This type is relatively high for residential districts because maintenance is one of the main focuses for alley revitalization in residential districts; therefore, it is often clearly mentioned. This type is more likely used for bigger projects that take care of multiple alleys because this type of revitalization strategy needs a set of systems to implement. Smaller projects such as those for single alleys or projects for fewer alleys could experience difficulty in implementing this type of revitalization strategy. The individual alley percentage shows how infrequently this type of revitalization strategy occurs in such alleys.

Paving criterion is the third most-used criterion for alley revitalization projects (Appendix C-11). This criterion could be used for any district, and would be one of the most notable improvements. The criterion has become a main focus of alley revitalization

in residential districts in the U.S. recently, therefore, there is a higher percentage of use of this criterion after 2010 even though projects after 2010 in other countries do not often use this criterion, and it almost always includes permeable paving in the U.S. after 2010. If the paving after 2010 excludes projects in other countries, it will be one hundred percent of use of this criterion. The bigger projects may have some difficulty conducting this criterion, however, the bigger projects on the table (Appendix B) include a pavement project and projects replacing pavement with permeable pavement. Therefore, it is still over fifty percent. The problem of this strategy is the cost performance. The Green Alley project in Chicago (Appendix B) carefully calculated the cost for each scenario.

Lighting is another general criterion which is widely used (Appendix C-13, Appendix C-14). Lighting criterion is the most-used criterion for alley revitalization projects. It strongly affects the atmosphere and brings safety into the alley. This criterion is likely used for commercial districts. The mixed use, art, cultural, and historical districts do not have a trustable number of cases, however, all cases in these districts have this criterion. The percentage of use of this criterion before 2010 is higher than after 2010. This could be because there has been an increase of residential projects after 2010. The percentage of this criterion for individual alleys in commercial districts is 100%, and is the same for individual alleys in other categories such as mix-use districts, art and cultural/historical districts from 1990 to 1999. Most other categories of individual alleys have a high percentage. However, it is not 100% for all cases. This is because there are cases which do not have this criterion in residential districts. The projects for single alleys are more likely to have this criterion because they are easier to plan and complete than a set of multiple alleys.

Some projects are adding outdoor canopies (Appendix C-15, Appendix C-16), while in other alleys, canopies already exist. Alleys having canopies are located on commercial district in most cases. There are some projects on the table (Appendix B) which use temporary canopies. These could be the rolling canopies or umbrellas. Open façades

are concentrated in commercial districts. This type of façade has higher cost performance and it may not usually suit the purposes of revitalization in residential districts, therefore, there are no alleys with open facades, or ground floor spaces on buildings facing alleys in residential districts. A case in Japan, Kamakura Roji Festival (Appendix B), focuses wide areas and the project is about events, however, there are originally opening facade; therefore, the event is mainly about visiting existing retails (Appendix B). The art, cultural, or historical district could suit for alleys having opening facade because it would make a relationship between existing opening facades and art. The projects does not encourage to open facade, however, they pick alleys having opening facades. In facts, there are many alleys in many cities having existing opening facade. There are some cases, new retails or businesses are have been opened at an alley because of it has been revitalized, which represent; there are new business chances existing at alleys. This criterion is likely used in other countries much more than the U.S. because ratio of existing alleys having opening facades.

Identification of alleys using names has the most variety of feasibility for projects (Appendix C-19, Appendix C-20). Most of the cases, except big projects such as a paving, replacement of paving, and business development projects, have this criterion, especially, alleys in commercial districts have a higher percentage of adoption for this criterion. There are some cases where city governments name an alley after successful people in the city such as ACDC Lane (Appendix B, Appendix D-10) and Alexander Leidesdorff alley (Appendix B).

Single alley projects are more likely to have the furniture criterion because this criterion would be easier to implement if there were a fewer number of alleys (Appendix C-22). This criterion is usually used in commercial districts to expand small retail activities. There are a few alley revitalization projects using furniture criterion in residential districts, such as Luzerne-Glover alley (Appendix B, Appendix D-2), to make a more comfortable community area, however, it is not common to set furniture in residential

district alleys. This criterion in Baltimore was implemented due to having such a totally closed alley using gates. Bollard criterion is used for commercial district. The characteristics of the bollard is there are some alleys that have temporarily used this criterion (Appendix C-23, Appendix C-24). The residential district does not conduct this criterion and residential districts are more likely to have gates, therefore, few alleys in residential district on the table (Appendix B) have the banning motor vehicles criterion (Appendix B, Appendix C-43, Appendix C-44). Alleys in Japan are restricted or ban motor vehicle access due to having such a narrow space. In Japan, the alleys are narrower than 2.7 meters, or approximately 8.9 feet. There are many alleys narrower than the width, therefore, motor vehicles are basically not able to access these alleys. Gates at alleys in residential areas allows for controlling time schedules by opening and closing the gate, and it makes people in the community feel that they share the alley with other community people. It also limits the access of people from outside, therefore, it enhances the community. Unlike residential districts, commercial, art, cultural/historical, and mixed use districts need to attract people and make the alleys into gathering places. As the result, gathering places or centers are highly used in these districts (Appendix B, Appendix C-51, Appendix C-52), unlike alleys in residential districts. Bollard criterion has been used to keep motor vehicles out of alleys to enhance and expand human activities there. The alleys in the U.S. tend to make alleys gathering places or centers more so than Australia, Japan or some European cities. Some alleys in other cities have traditionally worked as gathering places or centers; however, it is unclear whether this was planned.

Water runoff and on-site water treatment criteria usually work together (Appendix C-25, Appendix C-26, Appendix C-27, Appendix C-28), and these criteria are likely to be used for green infrastructure types of alley revitalization projects. If an alley revitalization project decided to focus on green infrastructure, it would involve both the water runoff and on-site water treatment. The on-site water treatment criterion may need to be placed in the green infrastructure type. However, water runoff has more of a variety of

feasibility. For example, a downspout could be one of the provisions for the water runoff criterion. Therefore, the runoff could be used as a type of revitalization project. Still though, the water runoff criterion is mentioned only when it has on-site water treatment criterion. Water runoff and water treatment is usually conducted when the projects are going to pave or repave. Permeable materials are always used, such as in green alley projects in Los Angeles, CA (Appendix B, Appendix D-16) and Chicago, IL (Appendix B) and the blue alley project in Baltimore, MD (Appendix B, Appendix D-15), when the alley is repaved. These green or blue alley projects' target area is likely to focus on the residential district. It covers a huge area, or some projects accept orders from residents or building owners, therefore, the district is not applicable. This criterion is usually used in the U.S. because the trend of alley revitalization in the U.S. is sustainability, especially for water treatment. Another reason why alley revitalization projects in the U.S. have such a higher percentage of use of these criteria than other alley revitalization projects in other countries is because the alley revitalization projects in the U.S. are relatively newer than the other.

Steps and building height are relatively minor criteria (Appendix B, Appendix C-29, Appendix C-30, Appendix C-35, Appendix C-36). Both require huge changes of hard aspects and their effect is less recognizable, but it is important to consider because steps give some ramifications such as sit-able space, invisible lines, and place to step, they could function as a makeshift table, and so forth, therefore, this criterion gives other choices to have more activities.

Color is also a less-considered criterion (Appendix B, Appendix C-31, Appendix C-32), however, some projects used this criteria. Color has huge effect on the atmosphere. Colors are even able to change people's mood. There have been some art projects that speak to the effect of colors in alleys, such as the Umbrella Sky Project (Appendix B). Some older cities have focused on keeping their own colors and identities due to the mesmerizing effects of color. European cities are likely to consider this criterion (Appendix

D-23).

Alleys in Japan are likely to have the setback criterion due to the Building Standards Act and the fact that alleys are usually planned in Japan (Appendix B, Appendix C-33, Appendix C-34), therefore, the setback was originally considered. The setback criteria are usually used in cities out of the U.S. because cities cannot afford to change it or cities have originally planned it, therefore, it could be difficult to implement this criterion in the U.S. due to limited budget, property ownership, and periods of construction. Instead of having considered changing the setback, revitalization projects in the U.S. have sought to implement other ideas that that will work within the decided scale.

The lines criterion is not often used (Appendix B, Appendix C-37, Appendix C-38). There are some projects showing invisible lines by change of pavement materials, pavement designs, lighting, tables and chairs, trees and plants, or steps. There are not many projects having actual lines, however, the line could separate functions by area. As mentioned above, the separation functioning as a line has some alternatives, therefore, it does not have to be an actual line. This criterion has been found on smaller projects because it is hard to have actual lines on all alleys in the multiple-alley projects, and single projects as well as those with fewer alleys are able to show the invisible lines. Some projects plan the separation of activities at the alleys with such invisible lines. For example, Eaca Alley (Appendix B, Appendix D-6) delineates retail areas which people sit down, relax, and eat, from pedestrian areas through which people walk. These two activities are separated by plants, tables and chairs, and lighting.

Trash removal or enclosure in Japan has the highest percentage because it is not customary to put trash in an alley there is no custom, and alleys in urban areas are usually used for retails, therefore, each retail outlet has their own trash cans, and if pedestrians has trash, they may ask the retail owner to throw out their trash or they may just throw out their trash themselves (Appendix B, Appendix C-39, Appendix C-40).

Trees or Plants criterion is often used for residential districts. There is a wide

range of feasibility, such as planting trees or arranging flower pots. If this criterion goes with the green infrastructure type of alley revitalization, this criterion could be bioswales--which is used for stormwater treatment (Appendix D-15, Appendix D-16). This criterion is usually not used for commercial districts due to the fact that spaces are occupied by retail equipment such as furniture, canopies, etc.

Cultural involvement criterion is likely to be used for commercial districts rather than residential districts because alleys used by so many people over a long period of time involves some cultural background due to their long history--such as some alleys in Japan (Appendix B, Appendix D-11, Appendix D-12, Appendix D-21, Appendix D-22). And, some alleys named after famous people related to the area are usually located in commercial districts (and this also influences the naming of retail venues in the area as well). Alleys in Japan are always related to cultural background because alleys themselves have history. However, some have been disappearing due to disaster prevention. Some art types of alley revitalization also sometimes involves this criterion.

The Gathering Places or Centers criterion has some variety. Some alleys have community centers, such as McNeel Alley (Appendix B, Appendix D-1). Some places tend to use alleys as neighborhood gathering places such as Luzerne-Glover Alley (Appendix B, Appendix D-2), and some tend to attract people with outdoor extensions to retail venues (tables and chairs, relaxing places) such as Eaca Alley (Appendix B, Appendix D-6) and Belden Place (Appendix B, Appendix D-4). This criterion is often used with the banning of motor vehicle criterion due to the providing of safety and assurance that people are comfortable. There is a temporary status for this criterion, and it is also likely to mean that the project is temporary.

Vendor criterion is often used with the Event type of alley revitalization. This could be because vendors are used for events. More interestingly, this criterion is more likely to be used for residential districts--which could be because there are no retail venues originally located there. Therefore, a vendor could set up there temporarily. Another

characteristic of Vendor criterion is that it is used for both wide and small scales of projects. This does not mean all alleys in a wide range project have adopted Vendor criterion--more likely just a few.

Recycling criterion and recycled materials are used only in the U.S. One of the reasons would be that sustainability is the major trend of alley revitalization in the U.S. Therefore, the U.S. was likely to adopt the Green Infrastructure type of alley revitalization. The other reason why this criterion is exclusive to the U.S. could be that other countries such as Japan have already adopted systems of garbage sorting (garbage must be sorted in Japan). Recycled materials criterion is the least common criterion in Appendix B. The other reason why the Recycling criterion is only used in the U.S. could be because alley revitalization projects in the U.S. are comparatively newer than these projects in other countries.

Networks for pedestrians and bicycling are more likely to be used in commercial districts rather than residential districts due to easement of setting the destination. The alley projects themselves are likely to be implemented (or likely to be found) with grid patterns made of fragmented parallels and gridiron. Therefore, it could enhance walkability because these grid patterns are always composed by four streets. There are projects in Japan where this criterion was used, but the grid patterns are warped parallels--and this happened because they were planned alleys and they were originally created to connect different destinations. This criterion was often mentioned or shown in many projects--which means the revitalization of alleys will help to improve walkability.

Noise control is one of the least common criterions. However, there would be many projects unconsciously implemented with this criterion because it has a variety of strategies, such as using materials for pavement which is impervious to sounds (Appendix D-16) or restricting motor vehicle access (Appendix D-2). This criterion is likely to be used in residential districts due to its demand.

Alleys in Japan usually have a long history (Appendix B). Many of them have

served as small retail or entertainment areas, including tea shops, Geishas, and small restaurants, therefore, it has an effect on the results of the case studies. Most of the alley projects before 1989 are alleys in Japan. Therefore, it seems to be the case that alley projects from a long time ago used to have retail and have more equipment commonly seen in retail areas such as furniture, lighting, and so forth. Due to alleys' long history in Japan and Japanese cultural background, these alleys have more equipment than other, however, it does not mean alleys from past times are suitable for retail venues. It is more about how alleys used to be used, and how they used to work as part of an urban environment. The alleys in residential districts of Japan have these characteristics. The alleys are narrow (some of them so narrow that motor vehicles cannot access them. The alleys exist for pedestrians and those who live amongst them. They create a feeling of safety and invite children to play and people to sit around and chat and hang their clothes out to dry and so on. The cultural background has an effect on alleys. There are a certain number of alleys in Japan that used some criteria which other countries do not usually use, such as setbacks and building heights. These are always used in Japan due to the Building Standards Act. The planned alley has long history, so the act has preserved the site. In Japan, the definition of alleys is decided by the width. Alleys in Japan are given more consideration than others.

Conclusion

The green infrastructure and maintenance types are individually distinct; however, retail, events, and art are sometimes collaborated. These collaborations make an alley several times more attractive. There are some differences between countries. The U.S. has started to focus on variety of districts and has different types of strategies; however, Australia has focused on economic development and characterizes alleys to attract more people.

Most alley projects in the U.S. such as Greening America's Capitol (Appendix B, Appendix D-7, Appendix D-8) and Green Alley projects in some cities in the U.S. (Appendix B, Appendix D-10, Appendix D-12, Appendix D-13) have been seeking the possibility of more sustainable alleys; however, some alley projects in other countries or some cities in the U.S. have different focuses such as marketing, art, and tradition. There are many retail types of projects in other countries due to focus on economic development and the utilization of spaces due to population (Appendix B, Appendix C-3, Appendix C-4). However, this type is least common in the U.S. In the U.S., green infrastructure with water management is the most popular trend. Therefore, many of the alley revitalization projects in the U.S. are likely to be bigger in scale than projects in other countries because green infrastructure types of projects do not choose districts since they are paving criteria (Appendix B, Appendix C-1, Appendix C-2, Appendix C-11, Appendix C-12). The alley revitalization projects after 2010 are likely to include this type of revitalization because most of the projects are in the U.S.

Alleys in Japan usually have a long history, and many alleys in commercial districts already have small retail. Because of the history, these alleys are enveloped in their inimitable atmosphere. Since the alleys in Japan have had small retail and their own history, there are often event projects there and with the purpose of encouraging people to walk around these alleys. This stroll may cause people to further appreciate the culture of a place through that experience and let them discover unique characteristics of the area.

Maintaining long-standing characteristics is important for alleys in historical districts, such as old castle towns where paving styles, townscapes, houses, and stores all represent past times with subtle profundity. .

Grid patterns also influence types of alley revitalization. If a grid pattern is simple, the city is more likely to have more of a variety of revitalization projects. However, a city with a complicated grid pattern is more likely to have Temporary Idea types (Section 4.7), which is like Pop Up cities type (Section 7.3). The planned alleys in Japan (Appendix B,

Appendix D-11, Appendix D-12, Appendix D-21, Appendix D-22) also have complicated grid patterns. However, the alleys function as part of the cities as they grow with them over time.

Chapter Three - Successful Alley

Section 3.1: Alley Potential Benefits

Walkable

If alleys are revitalized and used by pedestrians, it will enhance walkability because it makes shortcuts and connections throughout the city. According to Jane Jacobs (1961), smaller blocks make more choices to get destinations (Jacobs, 1961). Alleys have potential to provide pedestrians “quieter, safer, and more interesting routes” (Jenny Kempson, Mary Fialko, Nancy Rottle, 2012) to walk through.

Accessibility

The more choices of how to get to a destination will increase accessibility. Especially if there are some amenities on each way, it will be much more walkable, reachable, and accessible. If buildings face alleys, it will increase accessibility in any kinds of district because of the increase of choices. Clay (1978) also mentions the alley used to provide access to the rear and it is used to “form a sub-network which offers queerly distorted mirror images of the main street systems of the city” (Clay, 1978).

Additional Store Frontages

If there are buildings of which ground floor spaces face both alleys and streets, there will be much higher densities of retail. It may increase the economic activity due to more accessible retail and a denser retail district (Jenny Kempson, Mary Fialko, Nancy Rottle, 2012). Having retail at alleys also enhances maintenance because it will be

facades of retails. Mizusawa (2006) mentions alleys in Germany and how an alley has become very beautiful and well organized with a maintenance system since opening facade and starting business at the alley (Mizusawa, 2006). It also gives additional opportunities to entrepreneurs (Jenny Kempson, Mary Fialko, Nancy Rottle, 2012). Alleys could be a good place to start their businesses because alleys are more likely to be occupied by pedestrians and bikers. Their pace of flow and light of foot make them glance over and stop in retails they have an interest in.

Places for Children, Elderly, and Community

Successfully revitalized alleys are dominated by pedestrians and bikers rather than automobiles, and it provides safety to children and elderly people. Alleys in Japan are narrow and automobiles are not able to access most of them, therefore, they have been used for neighborhoods, communities, and retail. There are many human activities and they are full of life. They give the feel of places that can be used for stand chatting, playground for kids, drinking, and so forth. People have relaxed and enjoyable activities in alleys because of the atmosphere alleys provide due to their scale, history, communities residing there and their safety. Jenny Kempson, Mary Fialko, and Nancy Rottle also have noted that elderly people and children are an important part of city life and they “often move at a slower pace and need shade, places to rest, places to play safely, and places for people watching” (Jenny Kempson, Mary Fialko, Nancy Rottle, 2012). One of the strong characteristics of alleys is definitely its scale. It is human scale that helps to enhance communities. Nishimura (2006) says if the width of streets is wider than 10 meters (about 32.8 feet) in Japan, the street would work as the factor of community segmentation. But, if the street is narrow than 10 meters, the street functions as the base of the community (Nishimura, 2006, 13). The alleys are places people feel safe and closer to each other. Alleys function as a connection between all different kinds of people. A street is used for

a passing from building to building, street to street, so of course it works as a segmentation of local space and community. However, an alley is more than a street in that it not only functions as a path but also as a place for people to congregate (Nishimura, 2006, 26).

Events and Cultural Activities

Alleys are located outside and enclosed by buildings, so they have stronger connections to adjacent buildings than streets, they are off-street paths. This uniqueness will give opportunities to have outdoor events and cultural activities.

Protection of Sun, Rain, and Snow

Sidewalks are usually more congested than alleys and they are located next to streets. They are sometimes partially covered by canopies, but it is hard to avoid sunshine, rain, and snow. If it is rainy or snowy, pedestrians are likely to walk near buildings rather than near street because there are buildings and canopies. Alleys are usually enclosed by buildings and if there are canopies, they have the more potential than sidewalks to protect pedestrians from sunshine, rain, and snow.

Escape from City

Whyte (1980) mentions that people in the city escape to quiet open spaces from their city or specifically busy sidewalk (Whyte, 1980). Silent open spaces in New York are usually near water because water sounds have some relaxation effects. Even without water, quieter public spaces have relaxation effects on people; therefore, people go to such kinds of places. Alleys could have the potential to be a relaxation space because it

has easy access from sidewalks, and it is relatively quiet; at least, there is little to no motor vehicle sound. Population near alleys could be another reason why alleys are relatively quiet. To escape from city, enclosed public spaces with human scale could be a more appropriate size and condition than very large open spaces. This is because the size makes people feel like they are taking a short rest; therefore, it is easier to access. The enclosure makes people feel isolation from city. The alley has these characteristics, therefore, if the alley is revitalized, it could be a place to escape from city.

Green Infrastructure

Alleys could be places for addressing storm water management. Utilizing water runoff and water treatment techniques, alleys could reduce the water flow to the streets. Waste is also not flowing to streets therefore allowing water management to also function as a way to improve city beautification. It is a good place to put storm water drainage since it is located behind and surrounded by buildings. Alleys could be the places to stimulate greener infrastructure to the city as initiatives and catalysts of a healthier more eco-friendly city (Jenny Kempson, Mary Fialko, Nancy Rottle, 2012).

Unique Experience

Alleys have the potential to provide unique experiences because of characteristics such as off-street paths, human scales, and closed surroundings by buildings. Each alley will strongly be affected by each building's unique characteristics due to its intimate proximity to them. Alleys in some regions such as Europe and Asia are even narrower and longer than alleys in the United States. Sometimes it is unclear where the alleys connect to and sometimes these alleys are invisible. This can arouse people's adventure and spirit. Alleys also are unique due to what are in them, such as small retail or some other

businesses, paving materials, public art, vegetation, furniture, and so forth.

Section 3.2: Successful Alley

The attractions of alleys

Though buildings have often been renovated or completely rebuilt due to change of property owners, deterioration of buildings, fires, and so forth, streets and alleys are usually left and stay the same (Nishimura, 2006). Alleys provide possibilities for providing activities to people and maintaining their culture. Therefore, alleys in some cities such as cities in Europe and Asia have become a part of the urban spaces and neighborhoods and have grown as attractive spaces. Since alleys in the U.S. usually have occupied such a huge space, they need to be utilized and they should be made a part of life.

One of the attractions of alleys is their scale. The scale of alleys is a human scale, therefore, they could be places where people linger and start talking (Nishimura, 2006). If alleys function as a part of urban space, unlike alleys that are used only for trash and delivery, alleys would also have unplanned or planned attractions. Places used by people usually have attractions and also history. So, a utilized alley in cities all around the world built their history by consequence of buildings, pavement, green space, furniture, light, fence, graffiti, etc. . These existing factors sometimes could be the unique attraction of alleys. However, many alleys in the U.S. do not have a history of attracting people and are never used for human activities. After revitalizing alleys, it may start building its history and it may become a unique historical place. The leading role in this are people living there, or people who know the area well (Nishimura, 2006). Alleys in Japan are even narrower than alleys in the U.S., therefore, the main character of alleys are definitely these people. Alleys in European countries and Asian countries often used for a part of their life or a place that pique people's adventure spirits because its narrowness. However, alleys in

the U.S. are wider than alleys in Japan. The fact makes them potentially open to more people, as open space would be. So, alleys' characteristics in the U.S. will be heavily tinged with open space rather than an adventurous space. However, the main character of alleys will not be changed since alleys are still narrower than streets and enclosed by buildings. The scale is still the human scale and there are less automobiles in alleys than in the streets because they are not built for traffic. There might be many people visiting a city, however, because of its scale and locality such as small retail in commercial areas or housing in residential areas, the main character will never be changed, therefore, alleys could be a locally connected place in an urban area. Case studies also show that alley revitalization projects usually focus on providing local activities or relaxation. These strategies could be the most effective due to their scale and locality, and could build up the history of human activities there and create new attractions. One of the concerns regarding alleys in Japan is disaster protection and risk of fire because of its scale. As mentioned above, alley in Japan are even narrower than alleys in the U.S. Alleys in Japan are defined by their width; alleys are supposed to be narrower than 2.7 meters, or approximately 8.9 feet, and it is a fire hazard since many old buildings are constructed of wood. Japan has focused on widening alleys to 4 meters, or approximately 13 feet, so they have become wider than 2.7 meters and many alleys are no longer called alleys. However, according to case studies, most alleys in the U.S. are wider than 10 feet, and there are relatively fewer buildings constructed of wood. Therefore, the risk of fire would not be a major concern in the U.S.

Design and project purpose

To attract people into a revitalized alley, design will be the one of the factors that will attract people. However, the design processes need to include the concerns of time and use because revitalization of alleys may take time and it is sometimes hard to have a

big change in the area. People could be dazzled by the impressionistic, however, designs need to consider how useful the space could be (Inam, 2002). The alley revitalization projects are totally against large-scale redevelopment projects, therefore, it needs to be for local purposes, where function takes greater precedence over the impressiveness of the design. Design should work for solving local problems and creating local activities. According to Inam (2002), if there is no clear purpose and direction for urban design, urban design will not be useful (Inam, 2002). Based on case studies, alley projects always have purposes such as sustainability, enhancement of communities, and economic development by small retails, and these should be priorities. At least, the alley revitalization will not work for superficial aesthetics or only with morphology, and projects with superficial aesthetics have a lack of revitalization purpose. The importance is in the project purpose, therefore, Alley revitalization projects could be realized only by installing furniture gates and plants; such was the case with Luzerne-Glover alley (Appendix D-2). According to case studies, many projects have involved communities using public hearing and workshops because the projects should represent the people who will use them. Alleys are public space, therefore, it needs to be for citizens. Understanding the communities' needs or the areas' needs could be significant for a successful revitalization. To achieve meaningful urban design, Inam (2002) says, design should "consist of being teleological, being catalytic, and being relevant" (Inam, 2002). These are all related to these purposes and these needs. And most importantly, the alley revitalization projects should be stimulus to other revitalization. Since the biggest issues of alleys are that alleys are under-utilized and considered as dangerous areas, if an alley revitalization project ended up only revitalizing the alley, it would not solve these problems. Inam (2002) mentions there are problems urban design is facing such as urban sprawl and its attendant problems such as cost, resources and social fragmentation, so urban design should involve "not only design but also economic efficiency, public policy, social behavior, cultural understanding and political processes" (Inam, 2002), and the alley revitalization projects could also be a solution

for sprawl since one of the purposes of alley revitalization projects is utilization of the urban area. Therefore, alley revitalization projects are related to fundamental quality of life which matches with urban primary goals mentioned by Inam (2002). To achieve these goals, the revitalization projects should be a stimulus. Inam (2002) also mentions that “the purpose of urban design is to be a stimulus to other goals which are critical to society and to the substantive challenges facing contemporary cities” (Inam, 2002). Therefore, an initiative alley project in an city should demonstrate the possibility of alleys, such as was done with the Cass Farms Green Alley, in Detroit, MI (Appendix B, Appendix D-5). Urban design’s goals and purposes should “include economic development, international development, environmental sustainability, and fecund urban environment” (Inam, 2002). These goals and purposes are mentioned by Inam (2002) and alley revitalization projects’ purposes in case studies (Appendix B) Alleys are a part of urban life, however, they are on a small scale, therefore, it is difficult to achieve all purposes. Each project may have some of these purposes Inam (2002) mentions, and is clearly focused on these purposes.

Conclusion

The alley revitalization project should have purposes such as sustainability, community enhancement, economic development, and so forth, and every single alley project should be a stimulus to achieve their goals, so the main primary purpose of revitalization would be the improvement of fundamental quality of life. To achieve these goals, the partnerships are significant. So, community involvement and other sponsorships could be the one the City needs to work on.

To revitalize successful alleys, it needs sets of purposes and goals. The architects, urban designers, landscape architects, planners, and engineers should focus on these goals and restrict the temptation to over-design alleys--because it is not necessary and likely to lose its purpose of sustainability, enhancement of communities, economic development,

and so forth. It is also important to keep its scale on the human scale.

Chapter Four - Type of Alley

Section 4.1: Residential District

The main focuses of residential districts are sustainability, community, and beautification. Alleys in residential districts are less likely to have retail stores, events, or art. Therefore, they do not usually have some criteria that enhances economic developments or other businesses such as canopies, furniture, vendor, etc. However, it has criteria that enhances beautification, safety, sustainability, and community, such as: trees, plants, water management, and permeable pavement. The projects in residential districts may have lower budgets, so of course there needs to be a clear purpose.

It does not usually restrict the access of motor vehicles. However, in the case focusing on community and neighbors, it sometimes bans the access of motor vehicles by gates instead of bollards. It will hide a community from their surroundings. The point is to be aware of existing communities or neighborhoods and to help them unify. So, it restricts the access not only motor vehicles, but also pedestrians or bikers. The gate also allows the control of time by opening and closing. Alley in Japan has a long history, and there is a strong community life. And each neighbor who lives there has a specific designated role. Thus, the alley in residential areas have been considered as community places.

Section 4.2: Commercial District

Melbourne consider the importance of the range of industry and services such as restaurants, boutiques, cafes, clubs, bars, residences, and art installations, to attract different people. Commercial districts have usually focused on economic development, and there are some changes (both sweet and bitter). To improve economic development, it is important to attract people to retail stores. So, it is less likely to have trees or plants.

These criteria may not be the priority for the projects. However, this type often has lighting, canopies, opening facade, and furniture (which would make it more comfortable for the visitors of the retail stores). This time also focuses on getting people to stay in the alley--making it a true gathering place. This type is also likely to have Art and Events types of revitalization strategy. These types would attract more people, and it will be beneficial for retail stores. As mentioned in Section 2.2.1., it is difficult to evaluate the benefit of art, but many projects have collaborations of retail and art--so art is considered as one of the ways to attract people into an alley.

Section 4.3: Art, Cultural/Historical District

Art, cultural/historical districts sometimes have a strict role, such as building height. So, it needs to make sure that the change follows the ordinance and design standard. Most importantly, the revitalization projects should not change the atmosphere. The alley revitalization projects in the area have variety. The focus is on the utilization of its culture or history--so, there is mainly Art and Event types of projects or Retail types of projects if there are already existing retails. These would not have green infrastructure type project because it may cause a change of atmosphere--and it might also cost a lot. There would be less physical changes, and there might be more 'sweet' changes to do with activities or business.

Section 4.4: Mixed Use District

What type of revitalization a mixed district alley would have depends on its focus. The Mixed have two faces, such as residential and commercial, so the focus could be for the residential or economic development. It should consider both. Since areas include retails, chances are several or even many of them could be local businesses, and this could

enhance the community.

Section 4.5: Multiple Alleys

Multiple alleys does not choose a specific because it is widely covered. So, this type has a diversity of focus and feasibility. Feasible projects such as maintenance projects are often this type. Some focus on sustainability such as green alley projects, some focus on maintenance such as repavement or pavement projects, and others focus on art. Its purpose is demonstration of the possibility of alleys rather than some specified project. Therefore, it often has some alternatives or some art projects.

Section 4.6: Parking Alley

There are many alleys with parking lots, and parking alleys are usually located in residential districts. Some blocks are mainly used for parking lots. There are separated from residential district type of alley due to its function and characteristics. Since the alley functions only as a parking lot or driveway, it will be hard to revitalize the alley. The permeable pavement would not work for this type since automobiles damage pavement over time. However, there is still something that could be changed, such as lines criterion. Bike lanes are always appreciated. Since there is a parking lot, the block is usually bright, and it is visible because of a lack of buildings. These factors would bring safety. The location of the parking lot could be another consideration. If the parking lot is located at the alley and connected to the street, it could increase walkability. Therefore, this type of alley may function as the path which is used for automobiles, bikes, and pedestrians.

Section 4.7: Temporary Idea

There are temporary ideas for revitalizing alleys. This type does not choose the district. It depends on where their ideas can be installed. So, it may happen in many places at the same time, such as Kamakura Roji Festival or Umbrella Sky Project (Appendix B). Some times with these types, these events become an annual occurrence. This type is a relatively old idea. Some cities started this type in the 1990s. Now this type is more likely a collaboration with another project such as Forgotten Songs (Appendix B) which was implemented as a part of the Laneway Revitalization Project.

Section 4.8: Originally Arranged Alley

It was found in alleys in Japan. These alleys are built as part of their plan and developed with the area in which the alleys are. Since these alleys have history and developed as part of a plan, they are used for a certain purpose. In Japan, it is usually used for retails. These alleys in Japan are located along paths that connect shrines and temples, so they have consequently worked as entrance paths that lead people into them (Appendix D-11, Appendix XD-12, Appendix D-21, Appendix D-22). In some European countries, alleys have some traditional arranged events or decorations, such as Taormina Alley of Masks (Appendix D-23), and these alleys will belong to this type as well.

Chapter Five - Revitalization of Alley in Lincoln: Alley Selection (Project Overview)

Section 5.1: Existing Conditions in City of Lincoln

Section 5.1.1: Demographics

There are some graphs and tables (Appendix A) showing demographics for the City of Lincoln and the Lancaster County, Nebraska. As Appendix A-1 and Appendix A-4 show, the population of the City of Lincoln has increased, especially in the population of the older age group and younger age group. These two particular age groups have increased more rapidly than all the others. Appendix A-4 clearly shows the generation such as baby boomer, generation X, and generation Y. According to Appendix A-3, the housing occupancy and the number of housing in 2010 have been higher than in 2000 due to such rapid population growth (Appendix A-1).

The Appendix A-6 and the Figure 71 show the percent change of race distribution. The Appendix A-2 and Appendix A-5 show the race distribution in the Lancaster County and the City of Lincoln has been more diverse than in the past. Especially Hispanic or Latino population has increased relatively quickly. Those graphs and tables imply the urban area more populated and diverse, so it is necessary to use land more effectively.

The age distribution of the White population is nearly the same as the total population because it is the majority race. The peak of age cohort is 20 to 24. 87% of the total population is White. This would be largely due to the college population, but also coincides with the Generation Y boom which in general is more pronounced among the White population. (Appendix A-8)

The African American population has more younger people than older people than the age distribution of the total population (Appendix A-9).

The peak of age distribution is 20 to 29 because there are many Asian college

students, many of which are studying abroad. It seems like there are not only undergraduate Asian students, but also graduate students and young professionals (Appendix A-11).

Native Hawaiian and Other Pacific Islander (Appendix A-12), Some Other Race (Appendix A-13), Two or More Race (Appendix A-14) have unique curves. This Native Hawaiian and Other Pacific Islander age distribution is interesting because this is a really sporadic distribution with very little pattern. Other races were similar to the age distribution of total population, but this is totally different. This is largely due to the extremely small Native Hawaiian and Other Pacific Islander population; just a few people or families can make a very large impact when they come or go. The population of Some Other Race has a unique population curve with two waves. The population of Two Or More Races is very young and follows a natural curve, which means there will be many of them in the future.

Population and contribution of age will be important to consider because as Clark (2003) asserts, “College graduates are more numerous where there are fewer natural but more constructed amenities. The elderly are the opposite: they increase more with natural amenities, but less with constructed amenities” (Clark, 2003). Thus, there are some different uses by the various age groups. It is important to consider who the project target to.

The diversity and the makeup of a community should be considered when alleys are being transformed because many alley projects involve communities and alleys are public spaces.

Figure 5: Population in the City of Lincoln in 2010 Based on Block Group

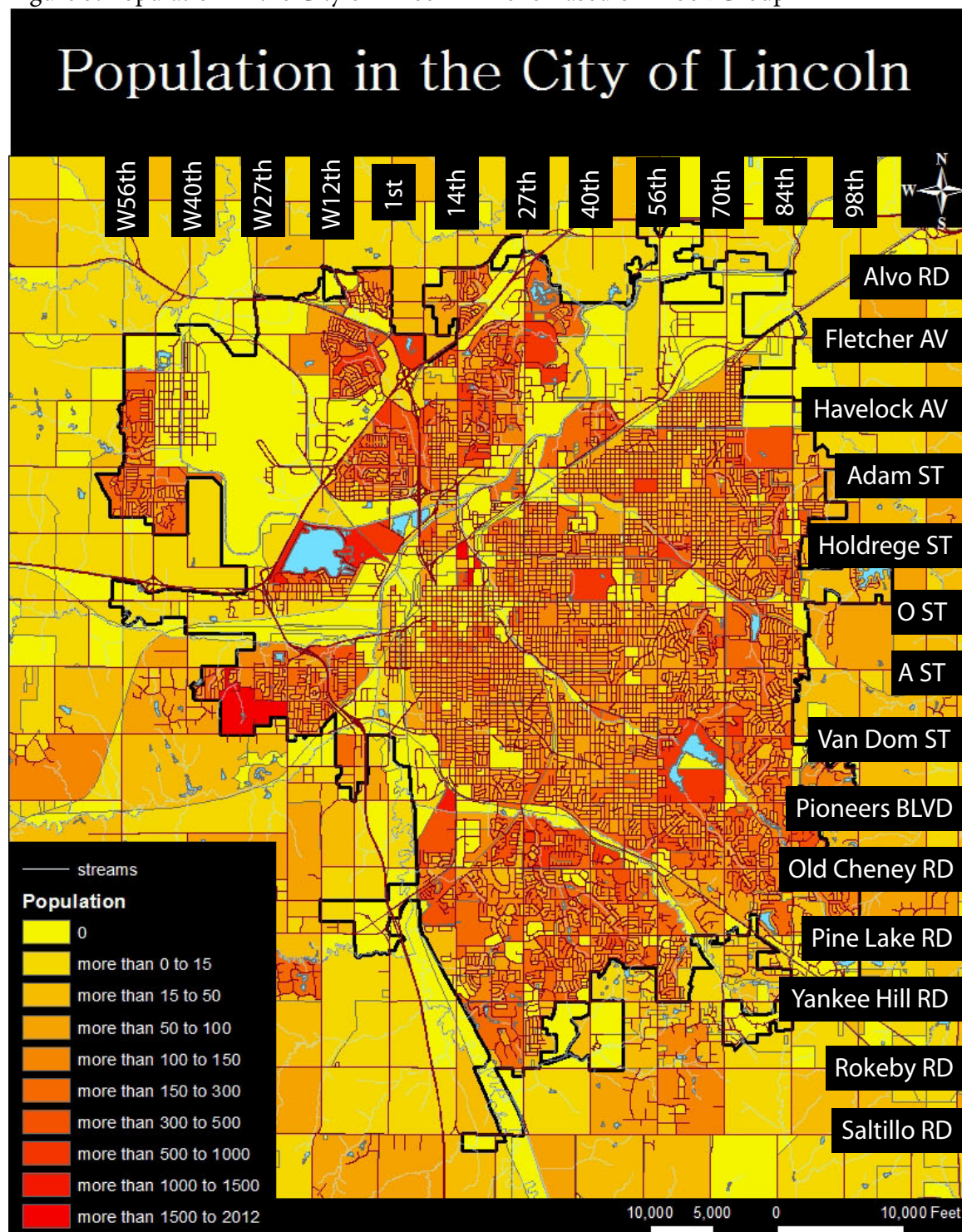


Figure 6: Population Density in the City of Lincoln in 2010 based on Block Group

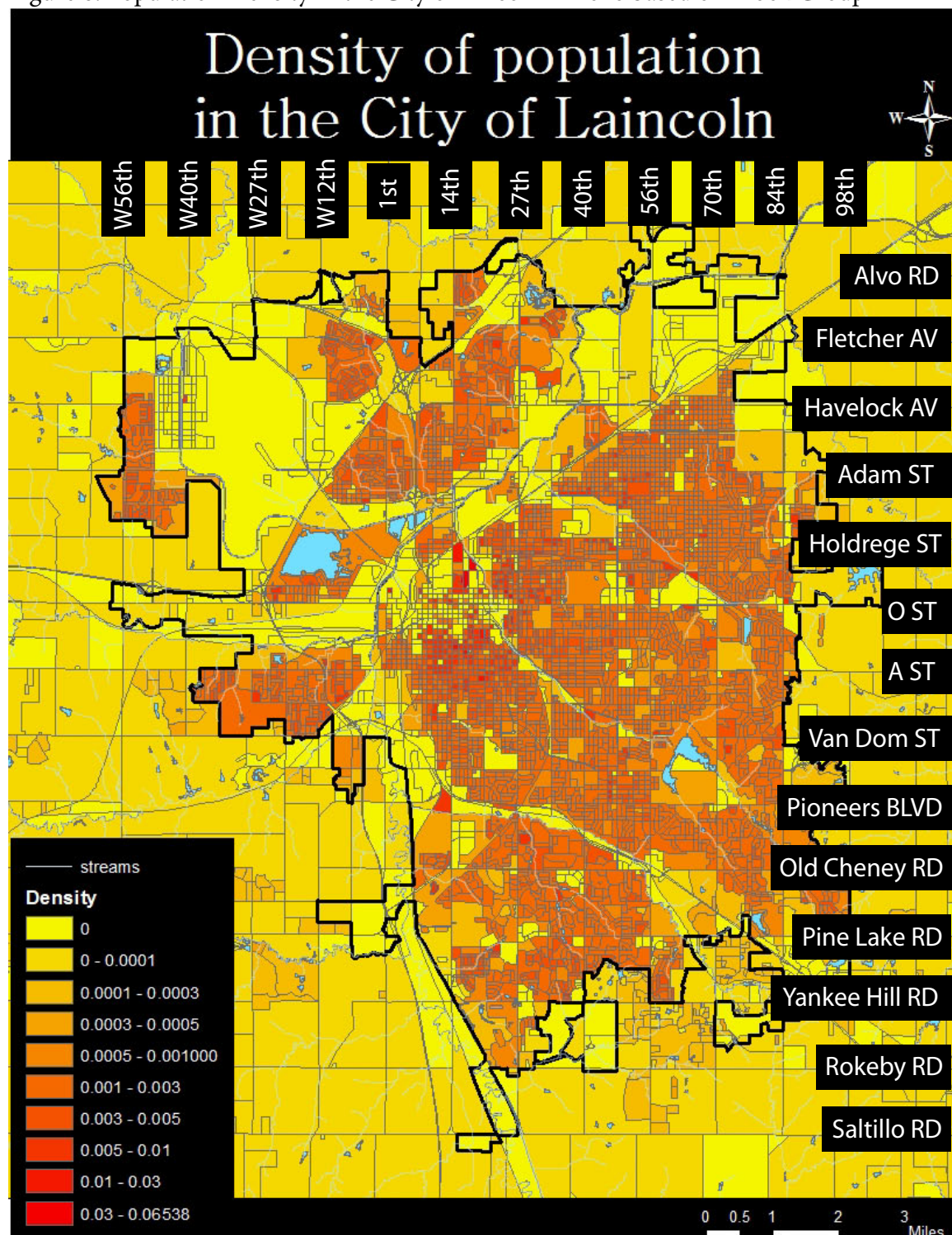


Figure 7: Comparison of Population Density between Younger Generation and Older Generation in Lincoln

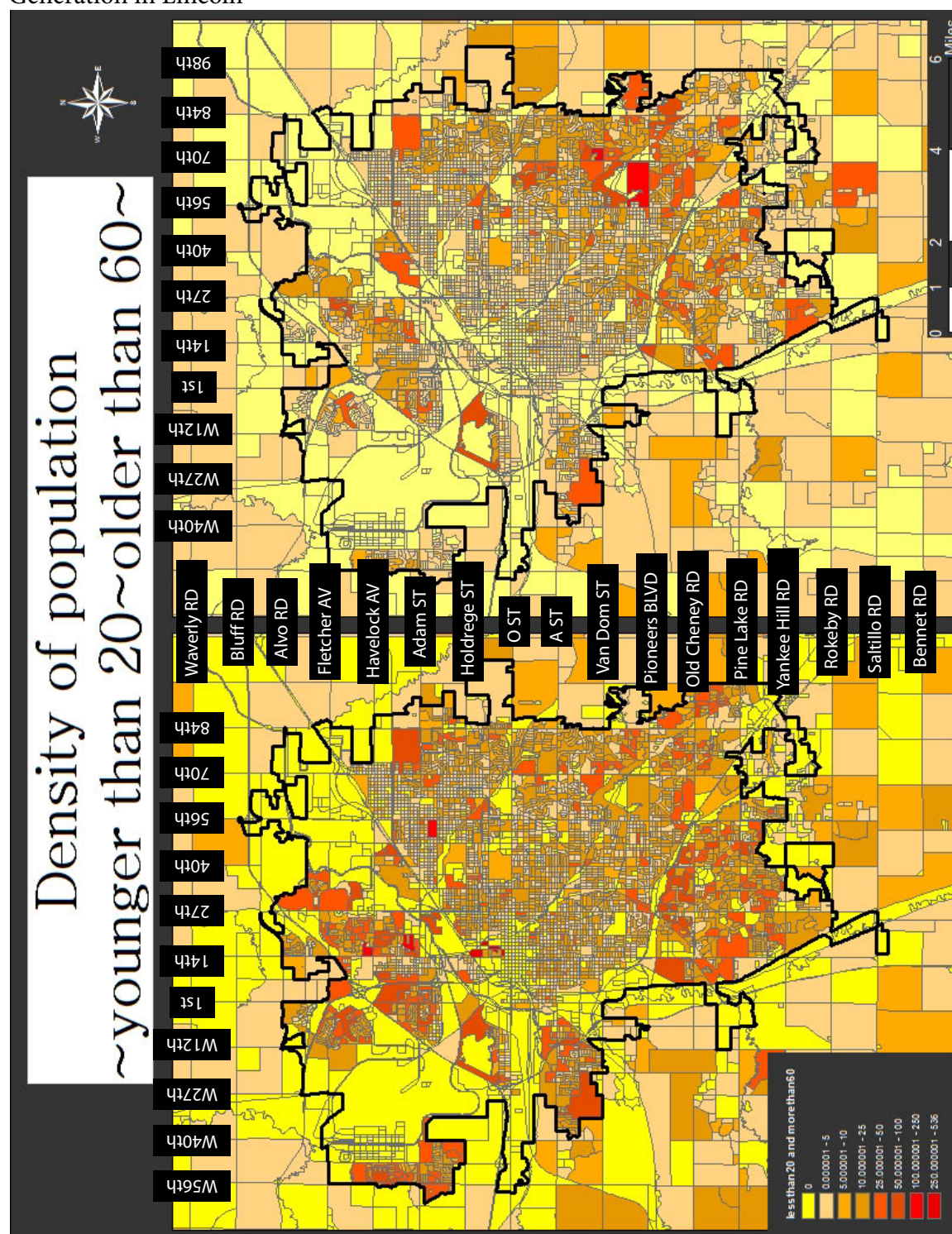


Figure 8: Housing Density in Lincoln

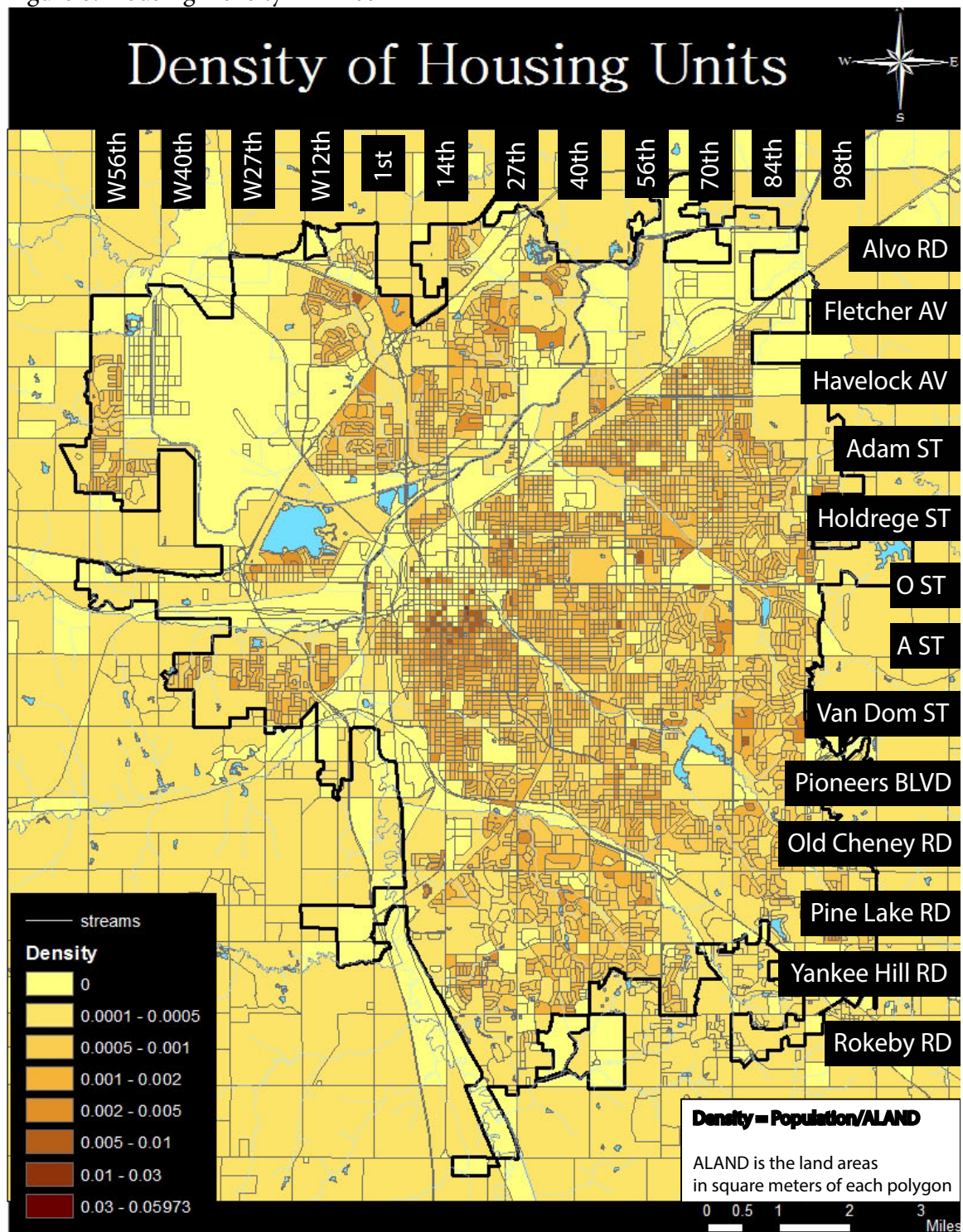
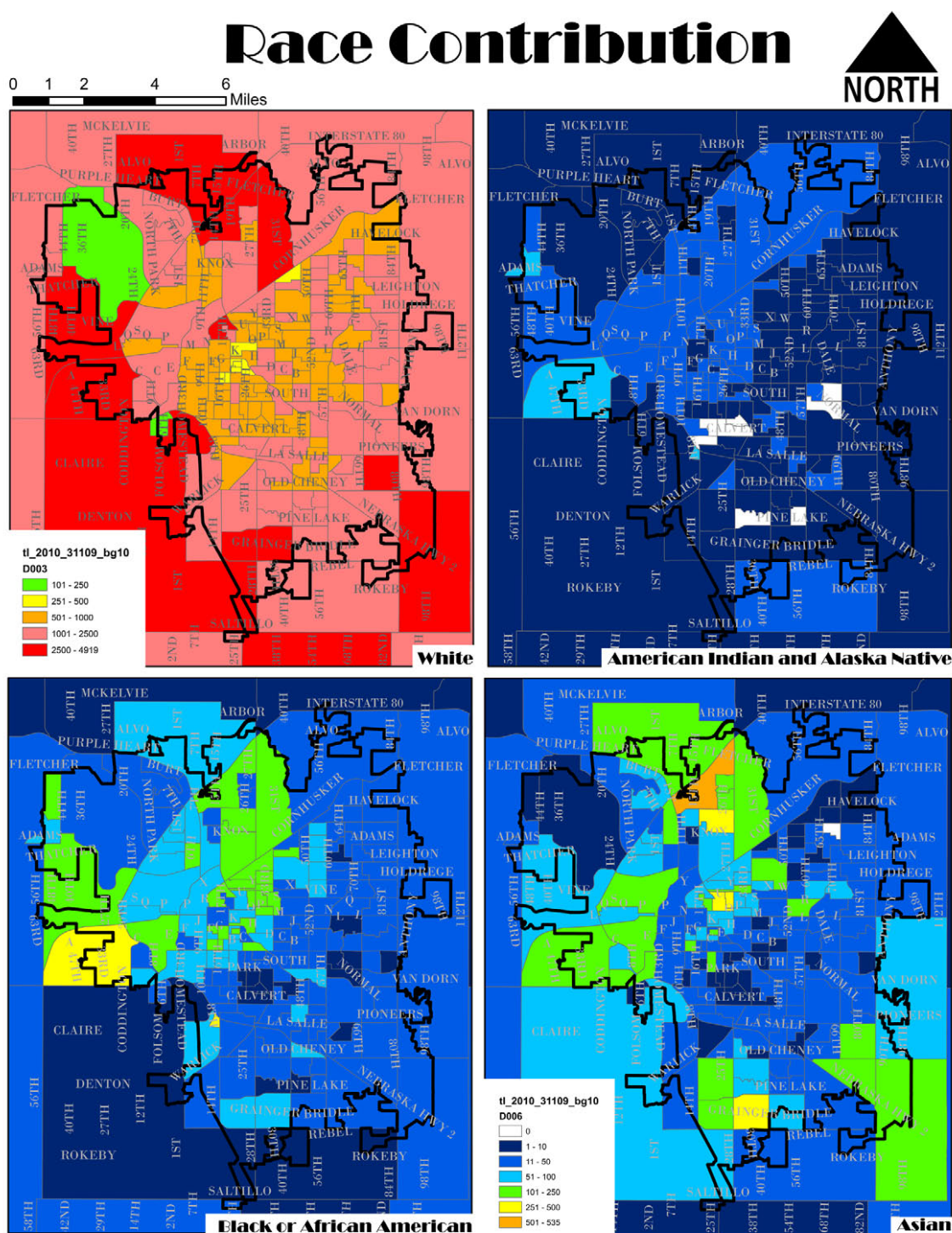


Figure 9: Four Races Contribution in Lincoln



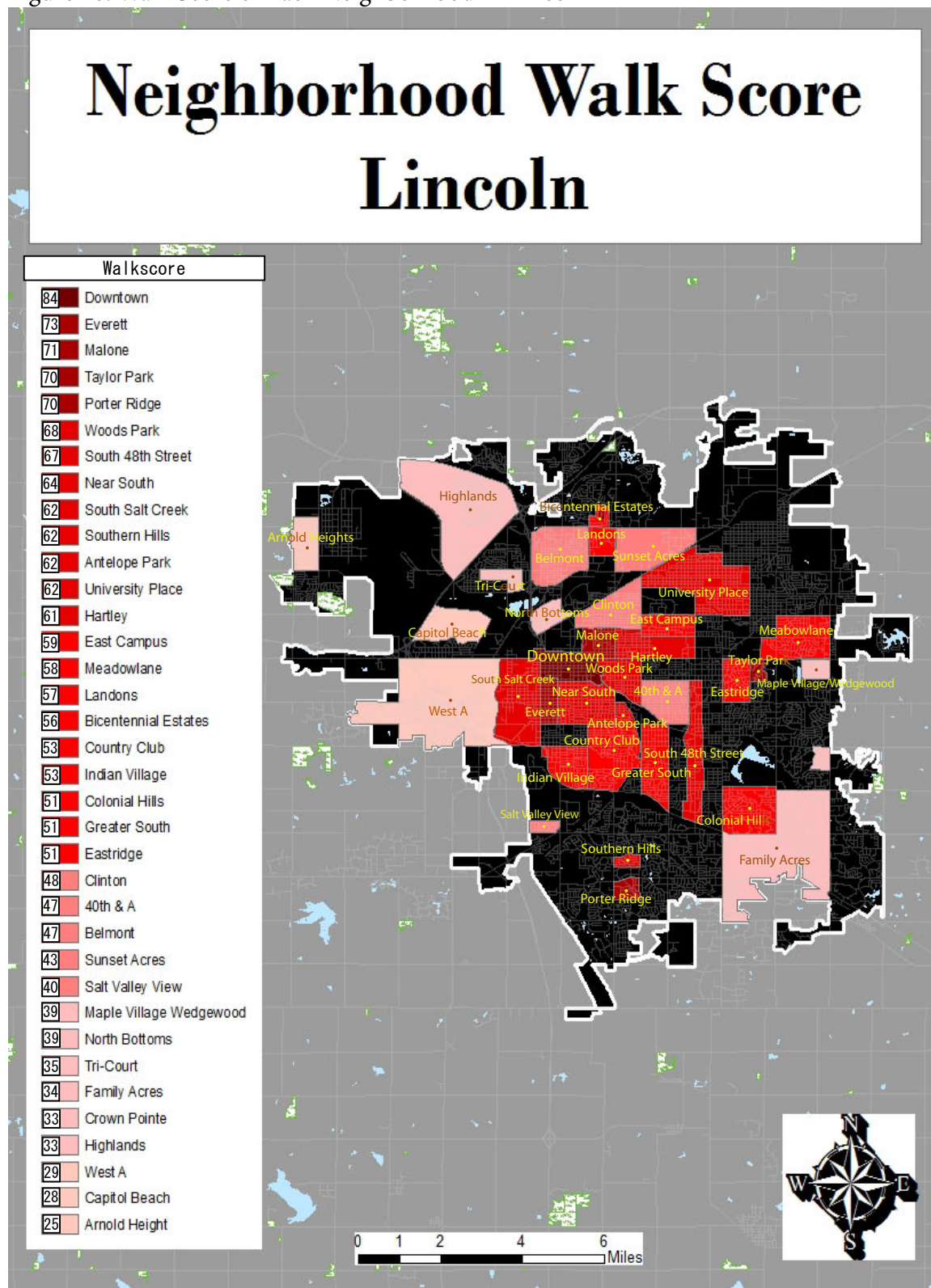
Section 5.1.2: Walkscore

“Walk Score data is used by analysts and researchers in the fields of real estate, urban planning, government, public health, and finance” (Walkscore). Walkscore is a service, flagship product, which provides a numerical score through internet and mobile application. Walk Score uses a patent-pending system. “For each address, Walk Score analyzes hundreds of walking routes to nearby amenities” (Walkscore). It measures the distance to amenities in each category. Maximum points are given amenities within a 5 minute walk (.25 miles) (Walkscore). “A decay function is used to give points to more distant amenities, with no points given after a 30 minute walk (Walkscore). Walk Score also analyze population density and road metrics such as block length and intersection density to measure pedestrian friendliness (Walkscore). “Data sources include Google, Education.com, Open Street Map, the U.S. Census, Localeze, and places added by the Walk Score user community” (Walkscore).

To enhance walkability, Walkscore has become one of considerations because it shows walkability by analyzing relationship between location and amenities. An area closer to amenities would already have more variety of activity and the area getting a higher walkscore might be one of the considerations to be a target area because it will be initiative revitalization projects, therefore it should be notable and successful. If there are many amenities, it means the area already has some pedestrian activities and people may be in distance they can get there on foot. Since the project will provide more choices to pedestrians, the area should be the places many pedestrians are accessing on foot. Moreover, when alleys are revitalized, there should be some other amenities, otherwise it will be difficult to partake part in human activities in the city. To enhance local economic growth, amenities should be included as one of considerations because “amenities are now considered the new drivers of local urban dynamics and economic growth” (Steinmann, 2009, 17). The Figure 10 shows that highest walkable area according to Walkscore

is.

Figure 10: Walk Score of Each Neighborhood in Lincoln

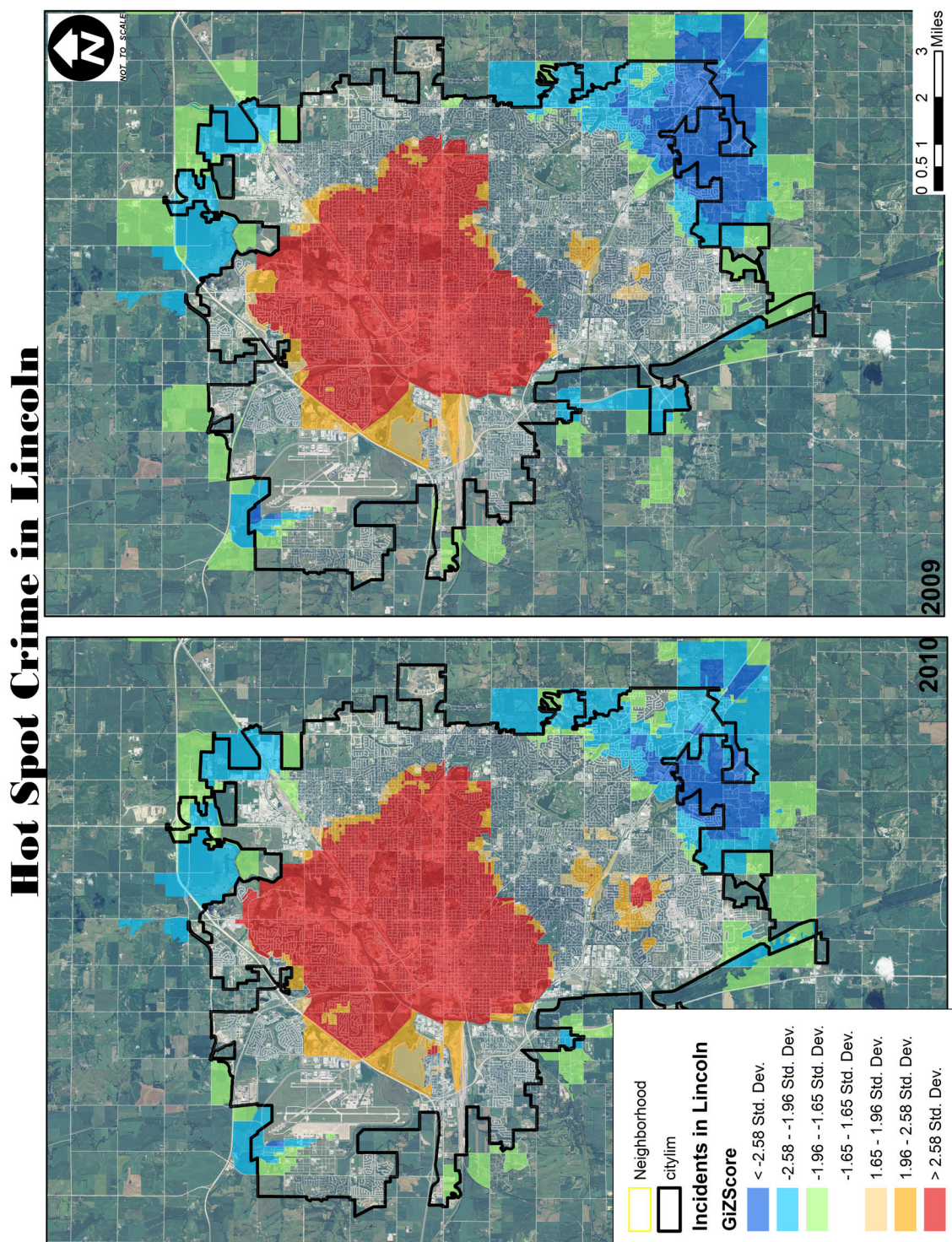


Section 5.1.3: Hot spot of Crime in Lincoln

Reduction of Crime is one of the many benefits of urban beautification. Downtown areas are notorious for crime. The area is much more densely populated, and there are more retail areas--so of course the probability for crime is much higher than suburbs.

Alleys are usually thought of as dangerous area. The City of Melbourne considers that the revitalization of alleys increase use of neglected or unsafe areas. According to Jane Jacob (1961), if there are human activities and pedestrian activities are increased, it will make it safer by putting eyes on the street. The Baltimore alley gating and greening program (Appendix B) was oriented from the purpose of reducing crime and illegal dumping. The Luzerne-Glover alley (Appendix B, Appendix D-2) was one of the alleys in the program and the program at the alley successfully has reduced the crime. According to Figure 11, the hotspot of crime was definitely located on around downtown Lincoln.

Figure 11: Hot Spot of Crime in Lincoln



Source: Lincoln Police Department

Section 5.1.2: Selection Results

The existing condition of Lincoln has dramatically changed. The population will be increased in the future so the utilization of unused area is significant. Since this thesis is an initiative alley project in Lincoln, the project area should be the area that is populated and diverse due to getting more attention from the people and it also should be the area which there is many pedestrians. If the project is highly attractive many people, it may eventually stimulate other alley projects in the future.

If there are more human activities on an alley or alleys, it will be related to reduction of crime, therefore, the higher crime place which congested are preferred..

The downtown will be the best place to have this project because it could be most stimulating area and diverse area since the university is located downtown and many amenities are in the area. People should have more variety of activities in downtown Lincoln.

Section 5.2: Existing Conditions in the Downtown and around Downtown area

Section 5.2.1: Projects around Downtown area

To achieve the project, it is important to consider how each project could be related and interact. The City of Reno also considered the commercial-retail development as part of other developments. “Commercial-retail development, as part of a local government’s revitalization strategy, encompasses a vast array of specific development schemes” (Steinmann, 2009, 21).

According to Figure 12, Figure 13, Figure 14, and Figure 15, many projects in Lincoln focuses on connecting the Haymarket and Antelope Valley because these two places have unique characteristics. Therefore, most projects focus on streets and few building projects at the commercial area located between the Haymarket and Antelope valley.

There are several projects going on in Lincoln. The entertainment district in the downtown is located between the between the Haymarket and Antelope Valley. In addition, there is rapid population growth in Lincoln. This means more people will have to be planned for in the future. Those projects are planned around O Street currently, as it is the main corridor in Lincoln. There are two street projects at P Street and N Street to connect the Haymarket and Antelope Valley, to bring more activities, to encourage bike activities, and those two streets are adjacent streets of O Street. The projects are evenly spread in downtown.

According to the Lincoln Comprehensive Plan 2040, the downtown area as the central business district is the largest mixed use center. There would be more residential resulting from redeveloping alleyways, which would most likely to bring new opportunities and have dynamic change of marketing in the downtown area. These changes imply that there should be more public spaces and more varieties of human activity if the future

population changes. The alley project should have strong connection to these projects planned.

Figure 12: Existing Projects around Downtown Lincoln 1

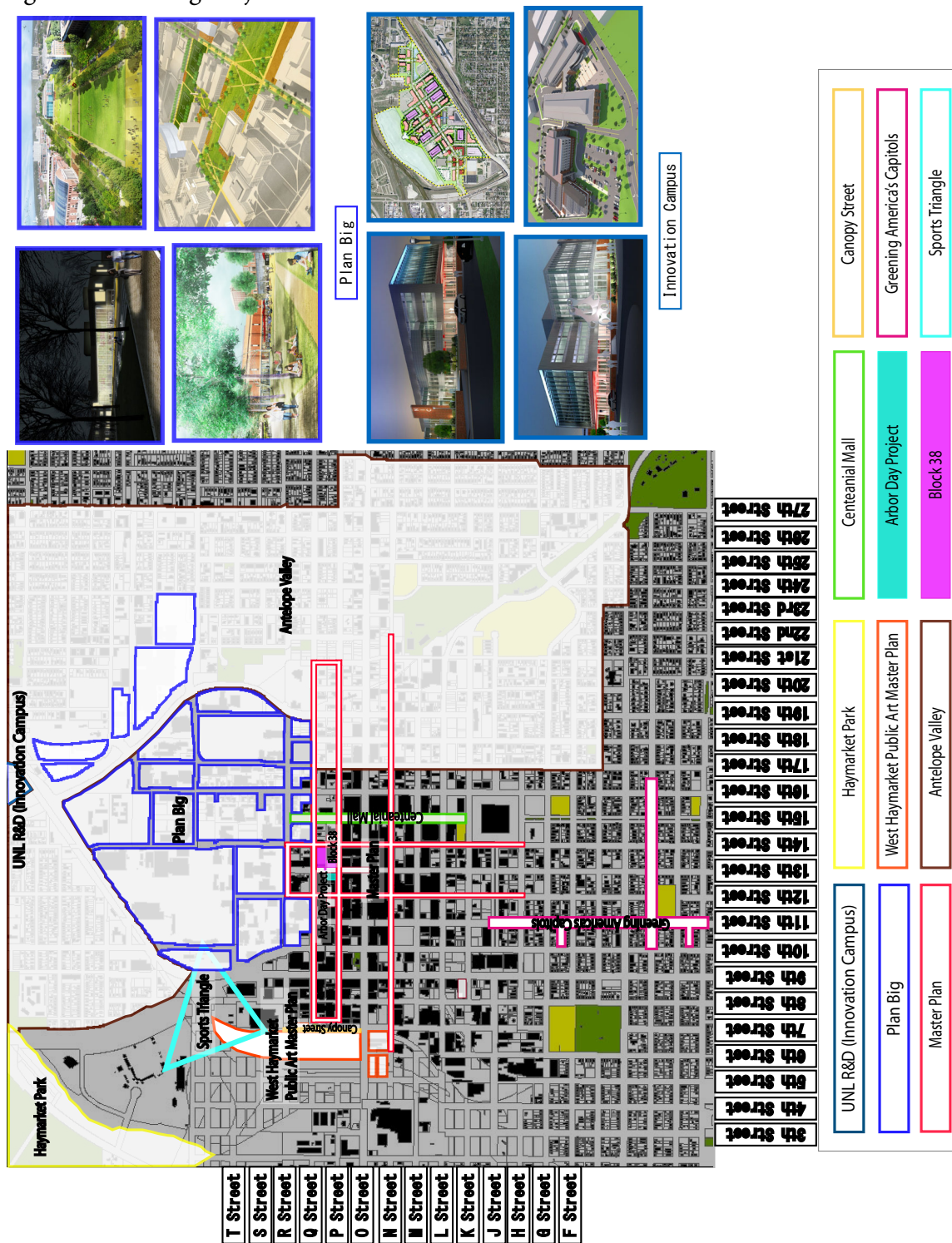


Figure 13: Existing Projects around Downtown Lincoln 2

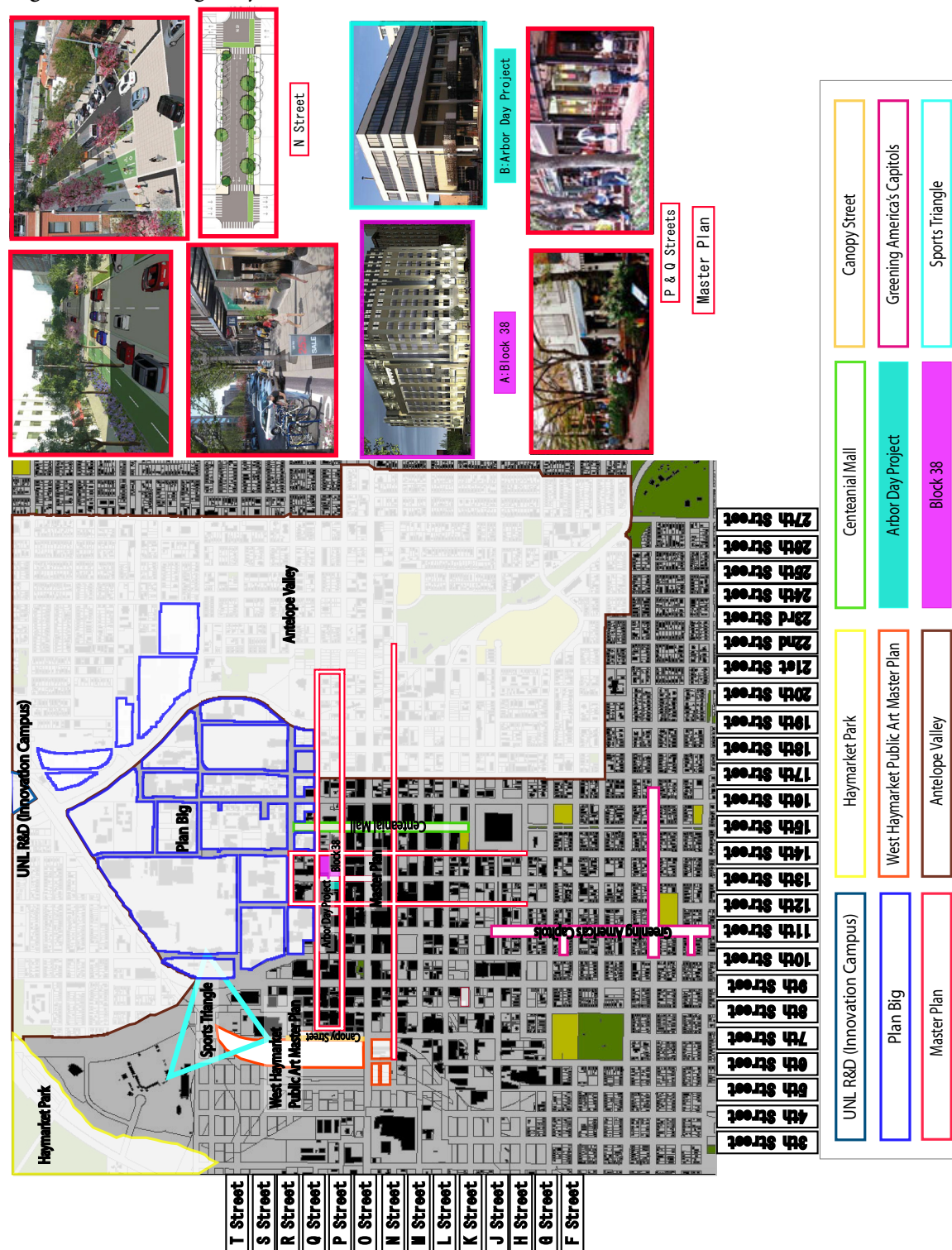


Figure 14: Existing Projects around Downtown Lincoln 3

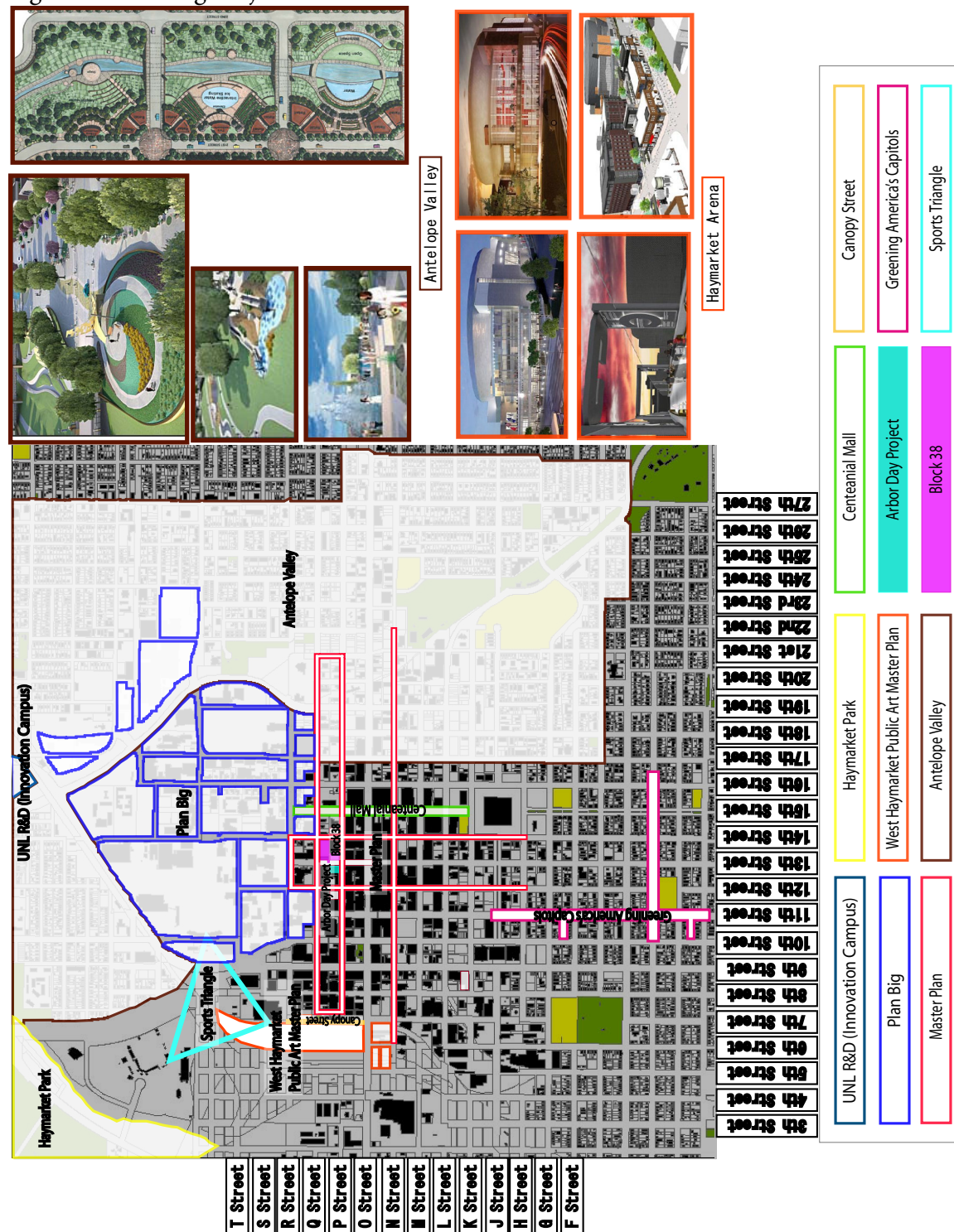
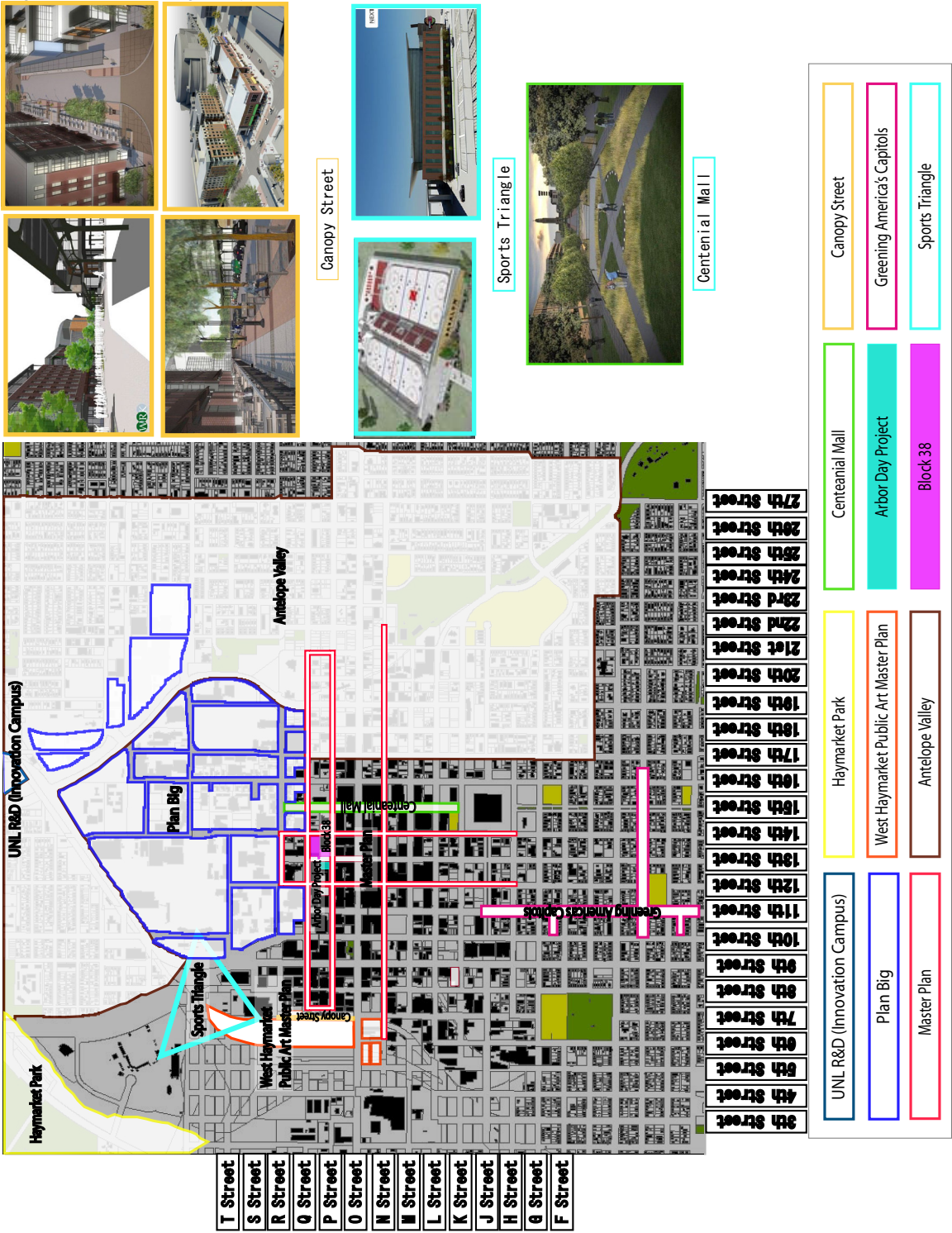


Figure 15: Existing Projects around Downtown Lincoln 4



Section 5.2.2: Grid Pattern

The grid pattern will be the one of important factors to consider in thinking about the neighborhood. The complicated grid pattern would strengthen the community because there are less people passing through. Therefore, it is likely to be used almost only for the community. And, some visitors may be fond of the complicated grid pattern and be coaxed into exploring the area. Closed alleys are likely to be used for the community such as Luzerne-Glover Alley (Appendix B, Appendix D-2) and I kai Alley (Appendix B); on the other hand, simple form of grid pattern would function as paths rather than community. According to the case studies, various strategies should be considered for the appropriate application of each grid pattern because there are different characteristics with each grid pattern (Section 2.3).

The grid is very simple in Lincoln (Figure 16). Lancaster was chosen as Capital City and Lancaster was renamed to Lincoln after President Abraham Lincoln, and the city was laid out on a gridiron plan planned by a state surveyor August F. Harvey in 1867. He also laid out the grid system of streets. Those streets were lettered from A to Z and O Street became the main corridor that divided the town. In the heart of the downtown were four square blocks for the state Capitol and a proposed university, which is similar system to Ancient Chinese and Japanese Grid Systems, such as Heijokyo. Most main streets in the grid run approximately north-south or east-west and are 100 feet wide. O Street and Centennial Mall, which are directly connected to the capitol building, are wider and their widths are 120 feet. Street blocks are typically 300 feet.

The grid pattern of the City of Lincoln is comprised completely of parallel squares. This pattern is rather predictable and it – might people to not explore the town. However, it is possible to make people feel excited to go walk around in the city by giving some options such as architectural attractions or by increasing human activities in certain areas. The grid pattern is very functional and basic, therefore, most grids might

have similar characteristics, which might make it easier to apply some strategies or ideas which are used for a grid in one place to a city with a grid layout in another place.

The city of Lincoln also has alternative of the center street and the governmental building, which could be the centennial streets and the capitol building. Heijokyo (Figure 17) is “planned as orthogonal compositions strong centralized authority to a territory” (Kostof, 1991), however, the power had been loosen up and eventually had had “a special arrangement of public buildings and other planning devices” that “could still be used to cast a grid unmistakably in a mode that celebrates centralized political structure” so The Lincoln should have same characteristics such as strong centralized authority (Kostof, 1991, 100). In Heijokyo, alleys are used to provide the function of giving the place distinction. The simple grid pattern increases accessibility and allows for easier navigation. “Rational destination was made between main streets and the alleys that separated the house” (Kostof, 1991, 34). Rectilinear is common pattern for “planned city in history” (Kostof, 1991, 95). It is considered as a “standard scheme for disparate sites” (Kostof, 1991, 95). It provides “equal distribution of land or the easy parceling and selling of real estate” (Kostof, 1991, 95). As described above, ancient Chinese and Japanese towns had such a strongly centralized political power that Lincoln does not have despite the similar city form. due to the different city structure. In the ancient Chinese and Japanese towns, the property owners who have stronger power could live closer to the center. American cities did not grow in this manner. However, the Capitol has a huge effect on the city form and the city has focused on the Capitol building, such as: Greening America Capitol (Appendix D-7, Appendix D-8, Figure 15, Figure 66) and the Centennial Mall project (Figure 14), These have the same grid pattern as some ancient Chinese and Japanese towns. The grid pattern shows equality as long as it does not have such strong political canalization, so that it is even closer to some ancient European cities such as cities Huguenots created after they settled in England, France, Holland, and Switzerland. “All the towns had the same form: a regular street grid on a square site, uniform houses of iden

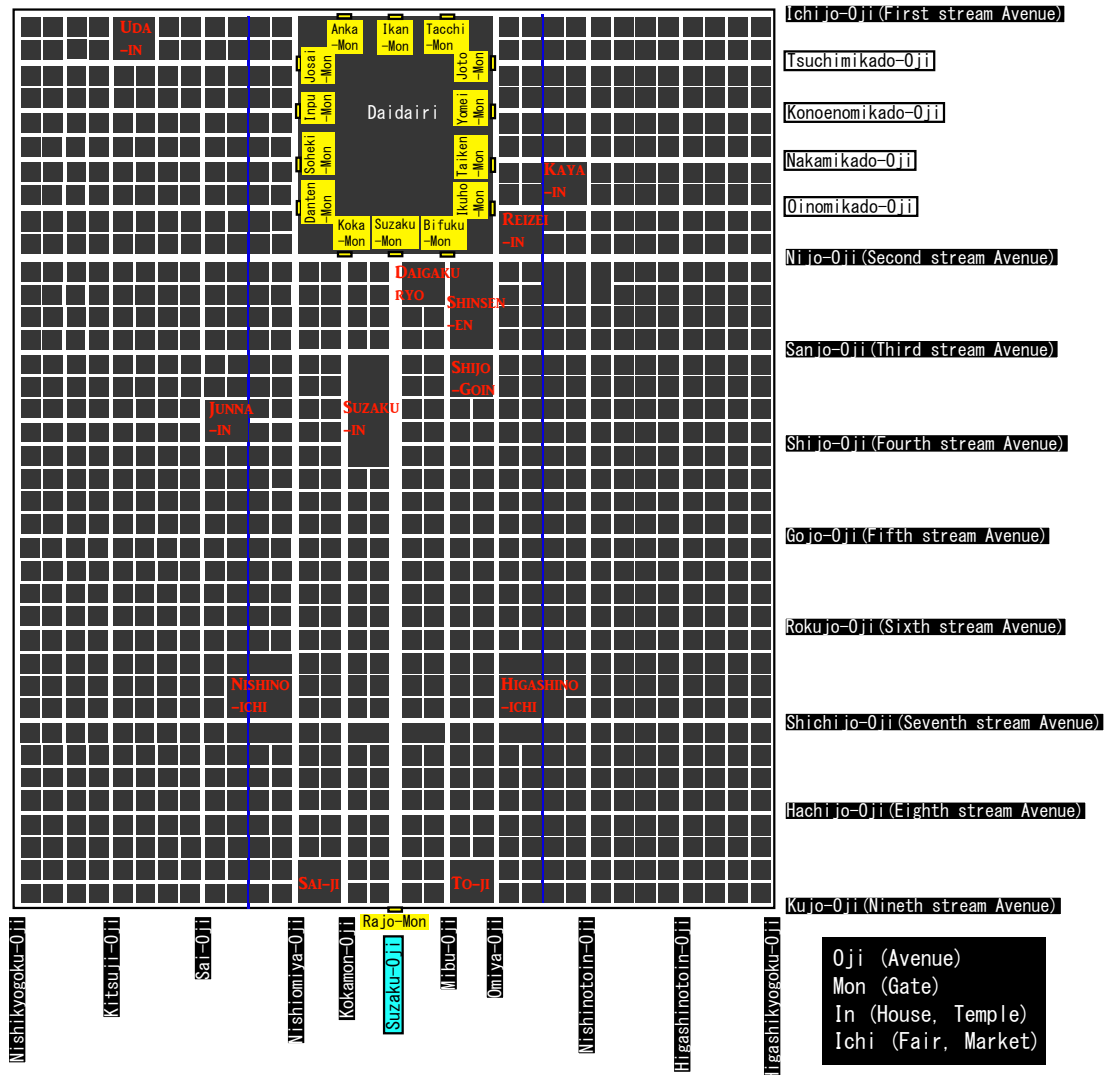
tical shape, size and color, a small church, and identical manufactories” (Kostof, 1991, 101). Those towns were identified as “the most genuinely egalitarian use of the grid” (Kostof, 1991, 100), which is totally opposed to the ancient Chinese and Japanese towns. There still has no universal planning theory no universal urban planning theory, however, at the time when ancient cities were created. There were of course no automobiles then, so obviously the grid pattern was created for human scales which means it was for human activities and pedestrians. Current cities would benefit from investigating ancient cities in that it would give (at least some) hints of revitalization for pedestrians and use of underused areas for human activities.

Figure 16: Grid Pattern, Lincoln, NE; Gridiron



Source: Google Map

Figure 17: Grid Pattern, Heijokyo; Gridiron



Source: Silk Road Oasis

There were nine main East and West streets and nine main North and South streets. The center of North and South Street was the widest street and it continued to the main entrance of the main governmental building. Those streets made the grid squares. This kind of urban planning is called Jobosei, which can be seen in some ancient king castle cities in China, Japan, and Korea. The city of Lincoln also has an alternative of the center street and the governmental, building, which could be the centennial streets and the Capitol building (Kostof, 1991).

Figure 18: Grid Pattern, New York, NY; Fragmented Parallel

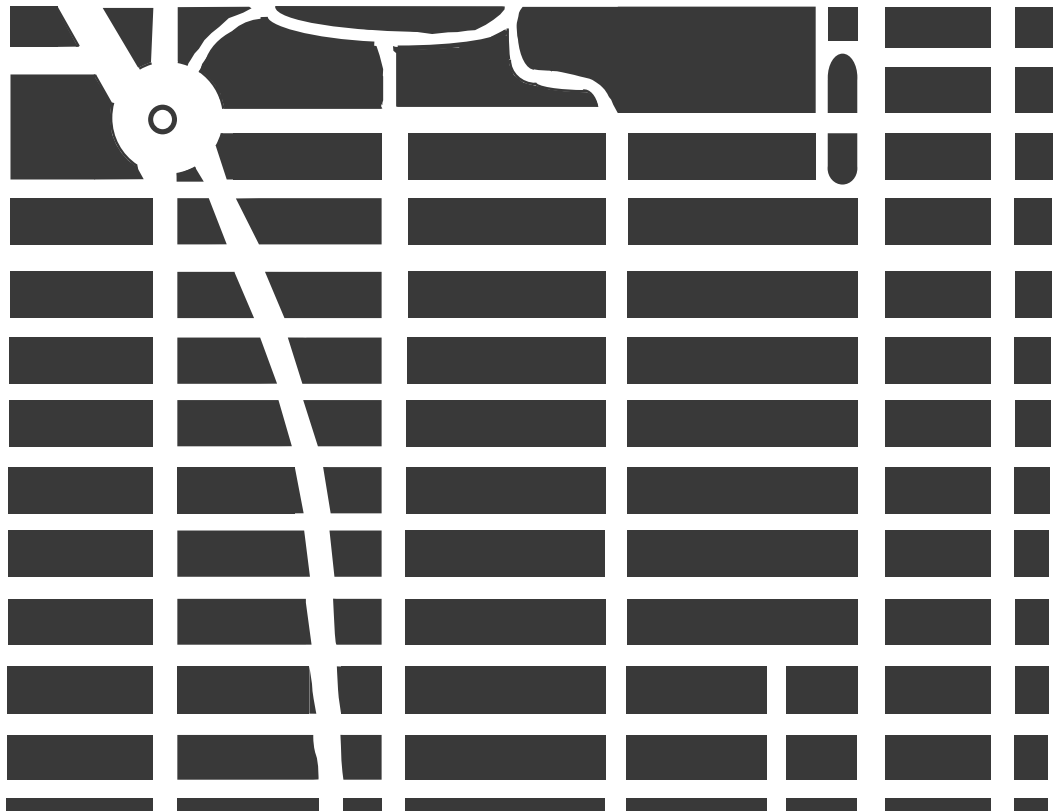


Figure 19: Grid Pattern, San Francisco, CA; Fragmented Parallel

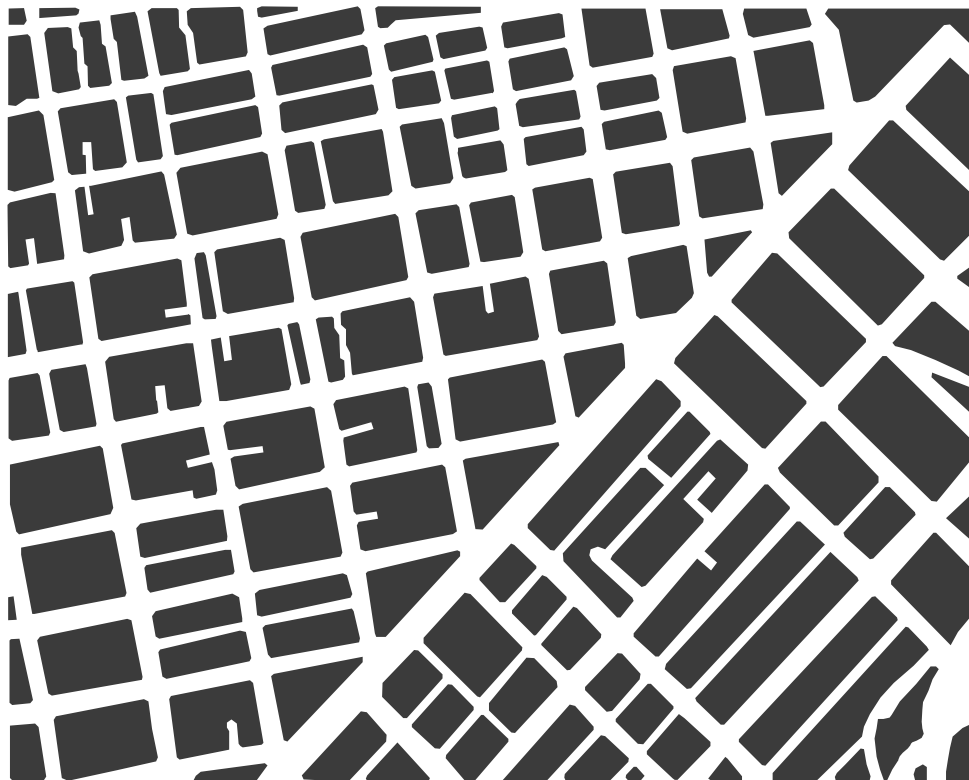


Figure 20: Grid Pattern, Paris, Italy; Warped Parallel



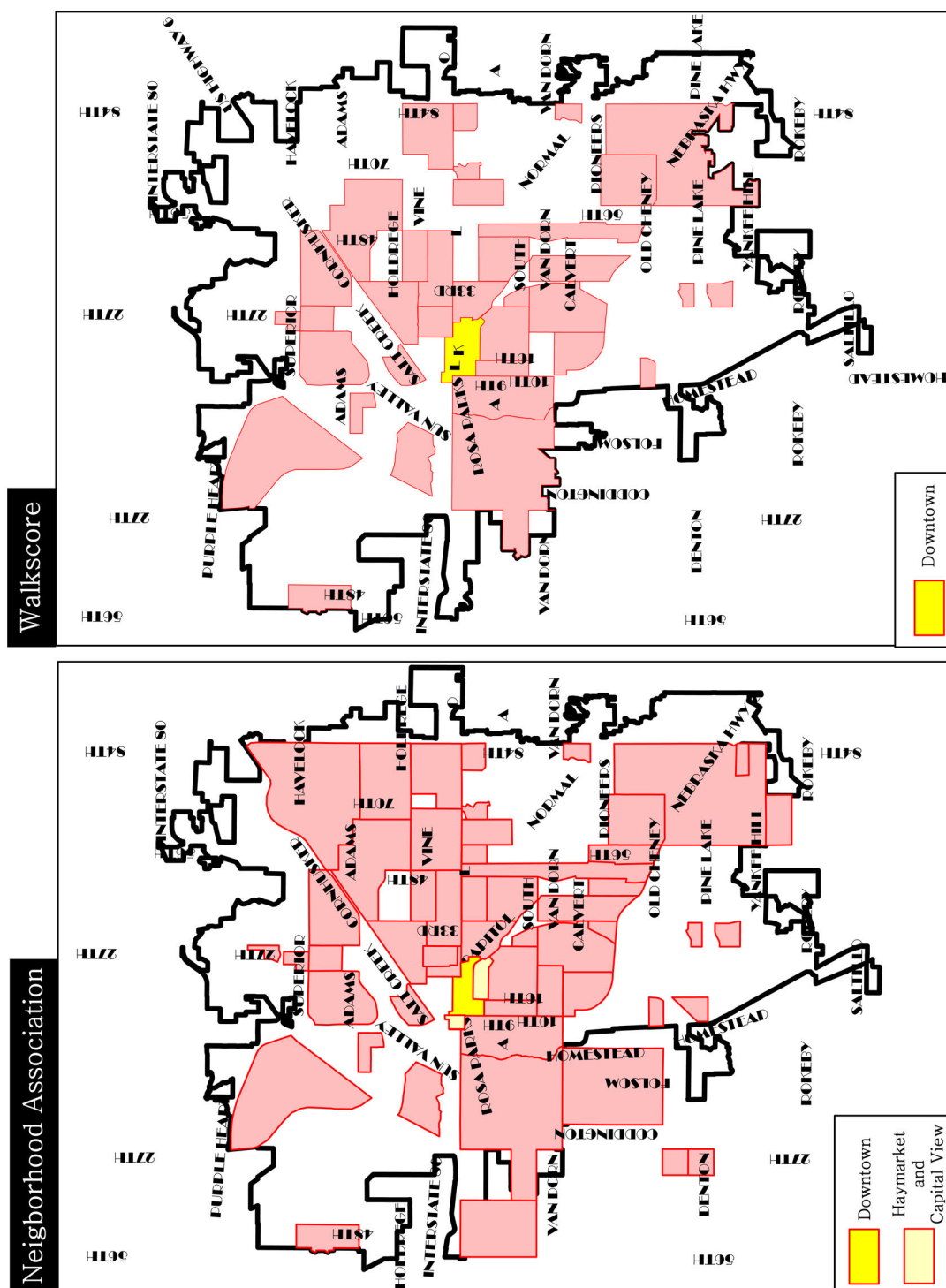
Figure 21: Grid Pattern, Sienna, Italy; Loops and Lollipop



Section 5.2.3: Borders of Downtown

The borders of downtown on the Walkscore website and the neighborhood association are different (Figure 22). The Walkscore website's border includes part of the Haymarket and part of the South residential area. This paper follows the border of downtown created by the Walkscore website since the border it includes is wider than neighborhood association's border, as it covers the neighborhood association's border. Since it is bigger, all downtown maps allow comparing conditions among actual the downtown area, the Haymarket, and the south residential area. The border also allows one to make the walkscore map.

Figure 22: Border of Downtown Lincoln



Source: City of Lincoln Urban Development Department, Walkscore

Section 5.2.4: Zoning/Land Use

Zoning should be considered because zoning will influence the revitalization projects. Zoning also represents what is around an alley and how alleys could harmonize to surrounded areas. Zoning needs to be diverse. If the revitalization plan considers Zoning and Land Use effectively, it will attract more people and make residence more comfortable.

“Writers in the field of urban development, like Ann Markusen, Greg Schrock, and Terry Clark, suggest that a diversity of land uses and development goals can help reposition historically declining, downtown city center urban cores, and help them become more attractive to a wider variety of tourists, area residents, and even new residents that may consider living within the city center urban core” (Steinmann, 2009, 14).

Therefore, zoning and land use has potential to control the area and give more variety of human activities.

According to Figure 23 and Figure 24, in downtown area is occupied by commercial use, and residential district is located south. Huge public spaces are located on North and south east due to the university of Nebraska Lincoln, Lincoln High School, and Antelope Valley automobile traffic.

Figure 23: Zoning in Downtown Lincoln

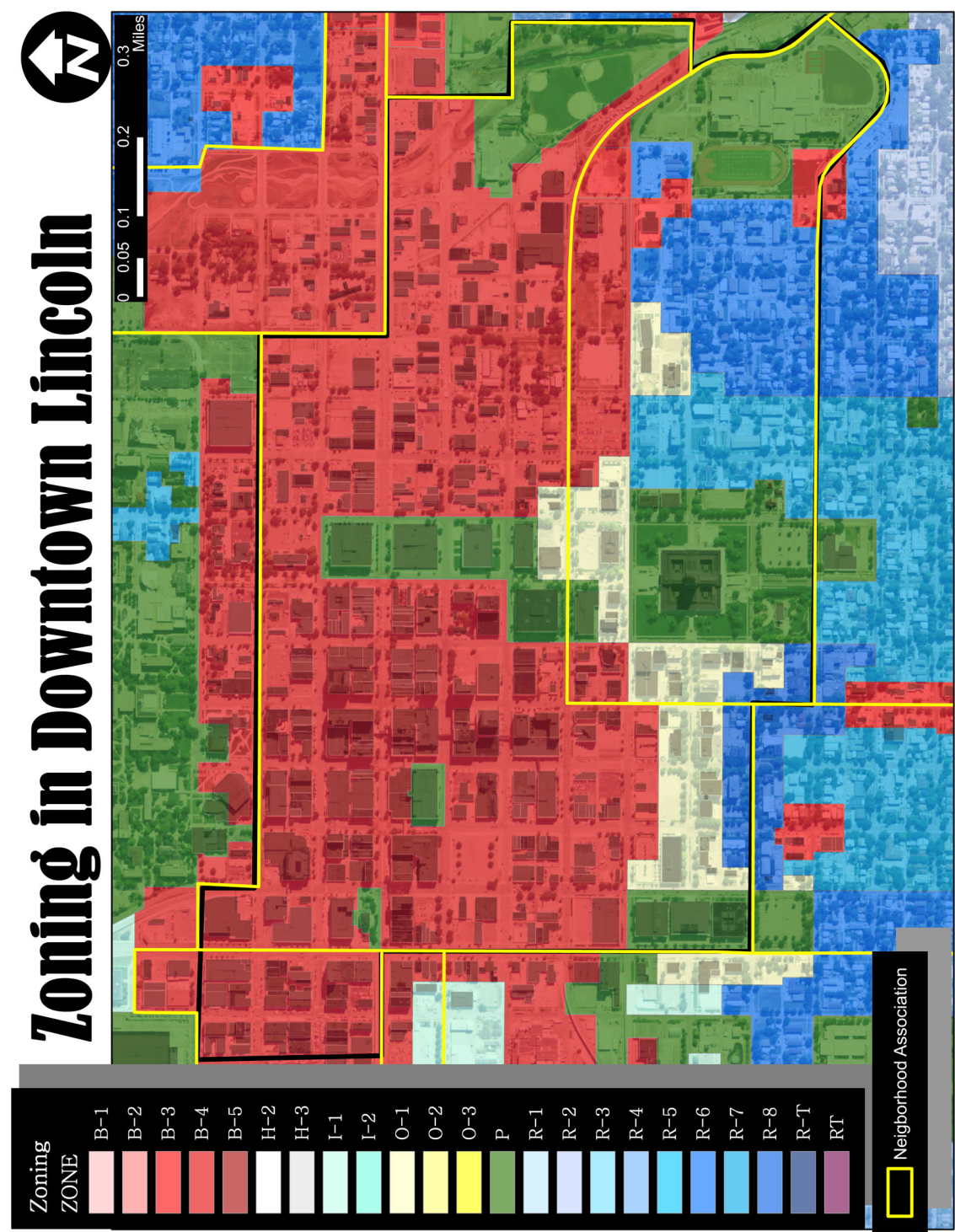


Figure 24: Land Use in Downton Lincoln

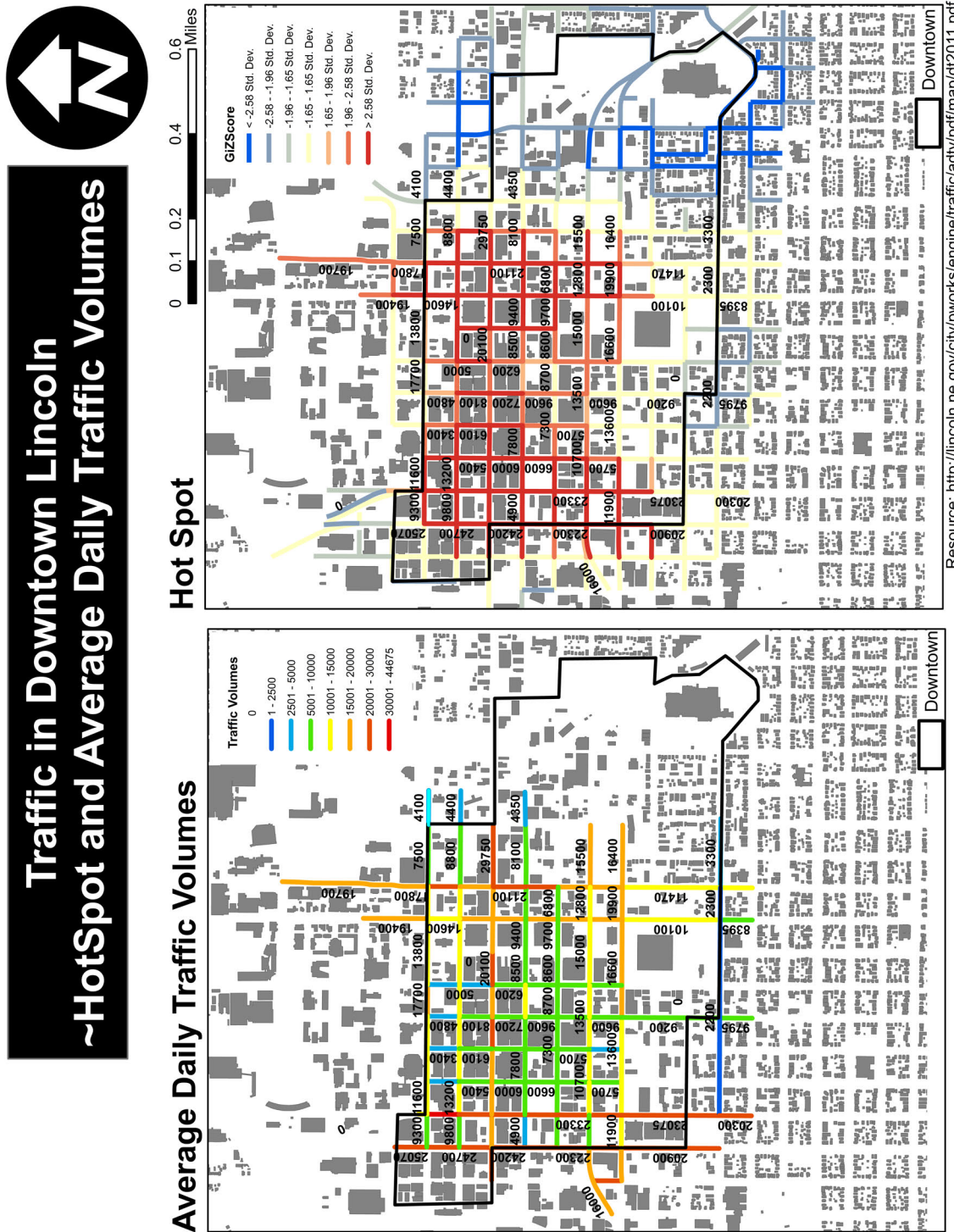


Section 5.2.5: Traffic Volume

Alleys will work as alternative path for pedestrian if it is successfully revitalized, and it will be a place that pedestrians escape from automobile traffic. It also provides pedestrians with other choices, including: passing through, sitting in chairs or benches or steps, and standing around chatting while enjoying various events. To find an alley that should be revitalized, it is important to know which street will have more traffic volume because it will tell one where pedestrians comfortably walk and how the number of pedestrian could be reduced. If the traffic volume is relatively higher, it is better to reduce pedestrians on a sidewalk due to safety. However, if an area has both high traffic volume and high speed of traffic such as an area near highways, it would be a dangerous area for pedestrians to come across the streets. Therefore, it might be better to not increase the number of pedestrian. It will also be the index of volume of pedestrians.

According to Figure 25, the highest traffic going through east and west is O Street. The streets located north of the O street are have a higher than south. In the meantime, the traffic going through North and South is higher at west end than at the east.

Figure 25: Traffic Volume in Downtown Lincoln

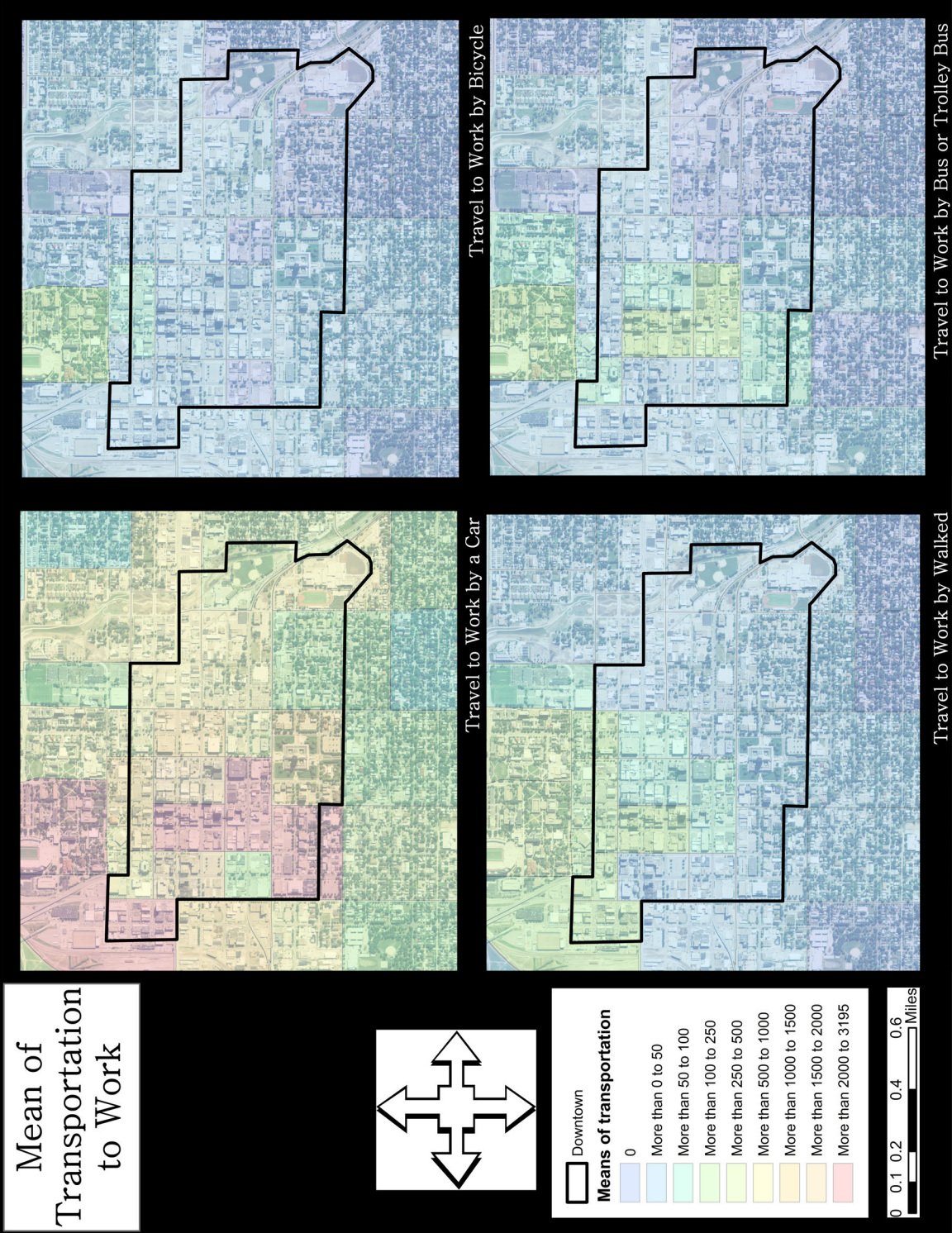


Section 5.2.6: Mean of Transportation

Figure 26 shows how people commute to work. This map is important to consider the main stream of mean of transportation in downtown. And where people likely to walk.

People at North-west are likely to drive to work. People commuting on foot, bus, or bike are around campus of University of Nebraska Lincoln and O Street.

Figure 26: Mean of Transportation in Downtown Lincoln



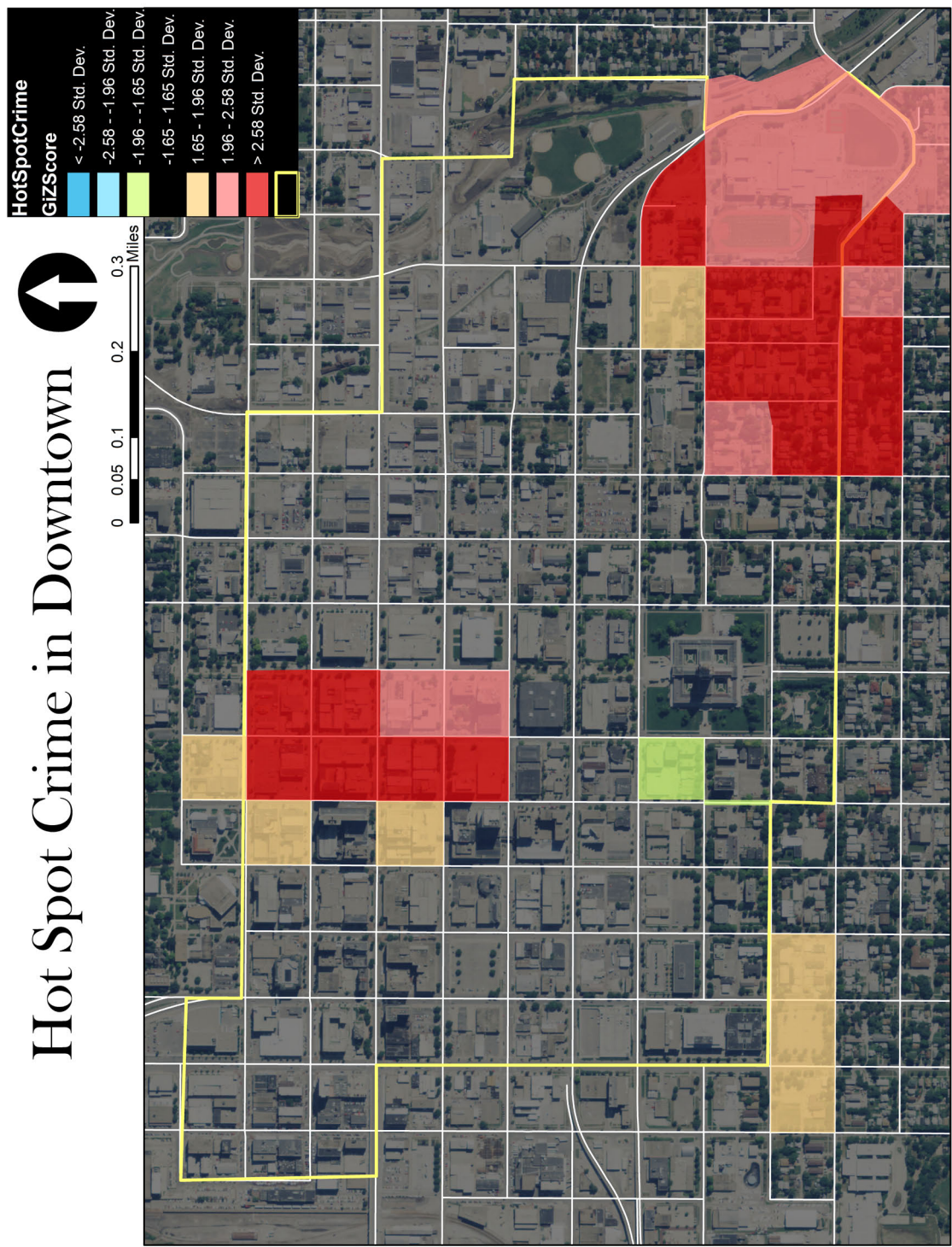
Section 5.2.7: Crime

Figure 27 shows the hot spot of crime in downtown and around downtown area from 2010 to 2011. The crimes are mostly located around O Street and 14th Street and south east which is near the high school. Figure 28 to Figure 33 show each crime location and hot spot. These crime categories are created by the Chicago Police Department and the Philadelphia Police Department. Figure 28 shows the hotspot and location of burglaries. Burglary was mainly located South-east residential area. Burglary of nonresident areas was mainly located North-west. According to Figure 29, many criminals who did criminal damage, fraud, and forgery are mostly in the central downtown, around O Street and 14th Street. According to Figure 30, narcotics spread. But it seems like they were highly located on the South-east residential area and the Central of downtown. People holding weapon were located the South-east residential area since residential district is located on south. According to Figure 31, the incident of robbery and larceny are mainly at South-east and the central downtown, however, incidents of larceny are mainly located on the South-east residential area. There is Figure 32 shows incident related to motor vehicle such as theft of a motor vehicle and larceny from a motor vehicle. The incident of larceny from a motor vehicle are gathered at the central downtown and the south east, but it is widely scattered, however, the incident of theft of motor vehicle are concentrated on the South-east residential area, and this could be because it is less safety area such as no eye on the street, less lighting, and so forth. Figure 33 show the location and hotspot of violence against the person and sexual offence. Incidents of assault were mostly concentrated on the central downtown and the South-east residential area, however, child abuse happened mainly in the South-east residential area. The incidents of race are often happened in the South-east residential area, and it may because many of them could be happening inside of houses and there are less people in the residential area outside.

It is necessary to reduce the criminal on the central downtown and the south-east

of downtown area. These two areas have incidences often happening in the residential area occurred in the South-east residential area and the incidences likely to be happen in commercial district has arisen in the central downtown. There are certain concentrated high crime areas, however, the type of crime is different (Figure 28, Figure 29, Figure 30, Figure 31, Figure 32, Figure 33). Since the alley project is about public spaces, the commercial area could be better choice than the South-east residential area because it might be difficult to make people gather in residential district. Therefore, there might be more sensitive issues in residential districts than in the commercial districts to solve the problem by the eye on the street as part of solution.

Figure 27: Hot Spot of Crime in Downtown Lincoln



Source: Lincoln Police Department



Figure 29: Hot Spot and Location of Criminal Damage, Fraud, and Forgery in Downtown Lincoln

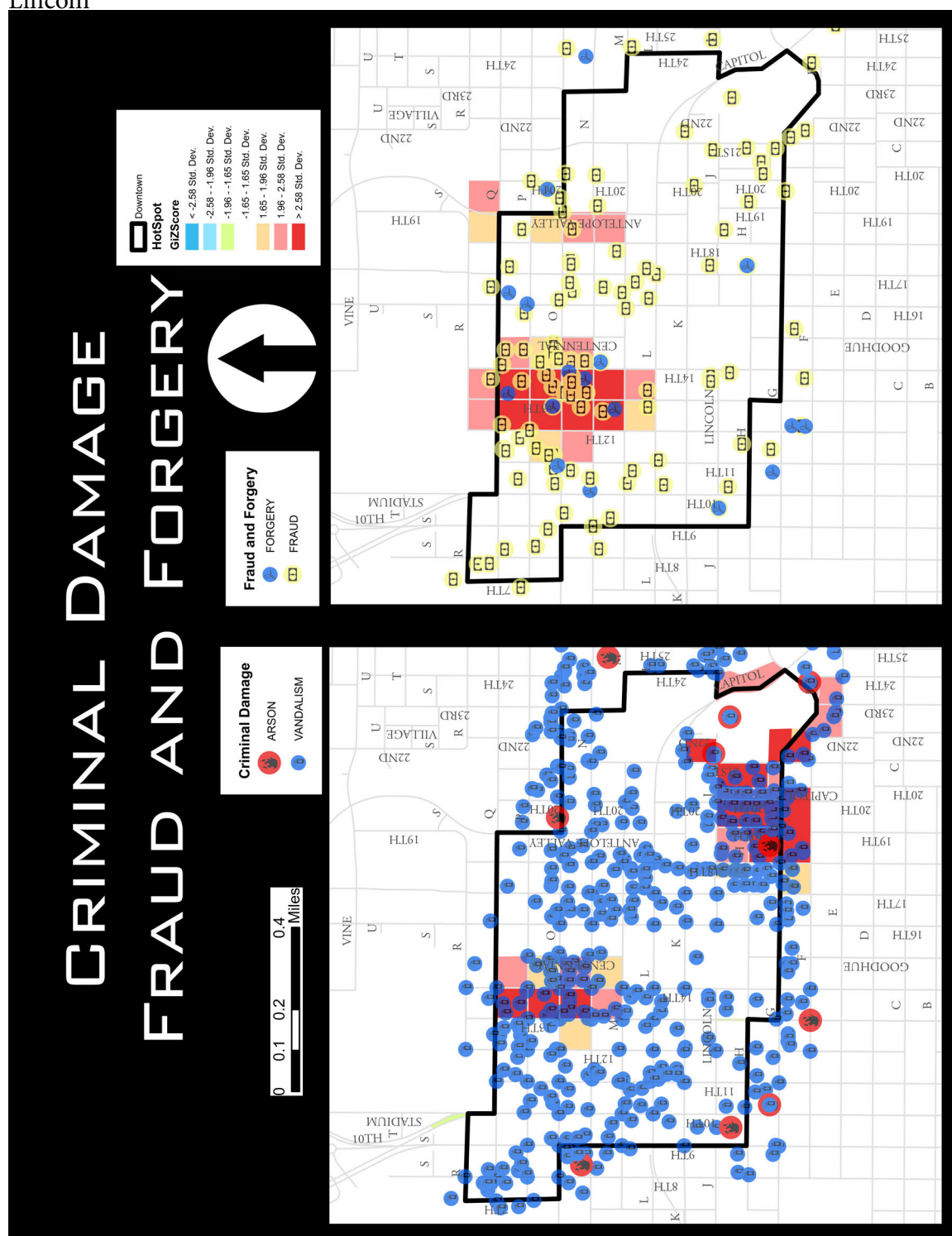
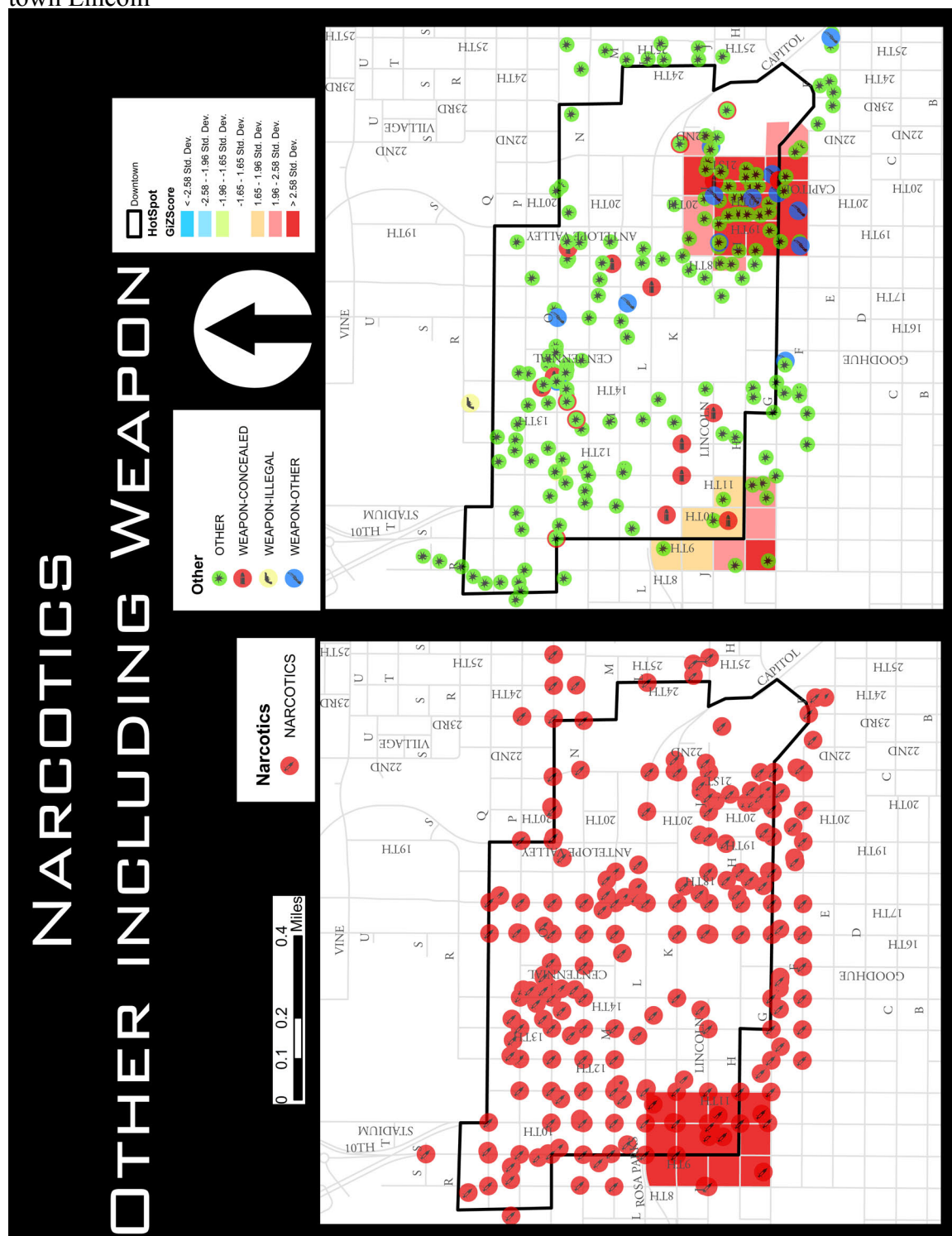
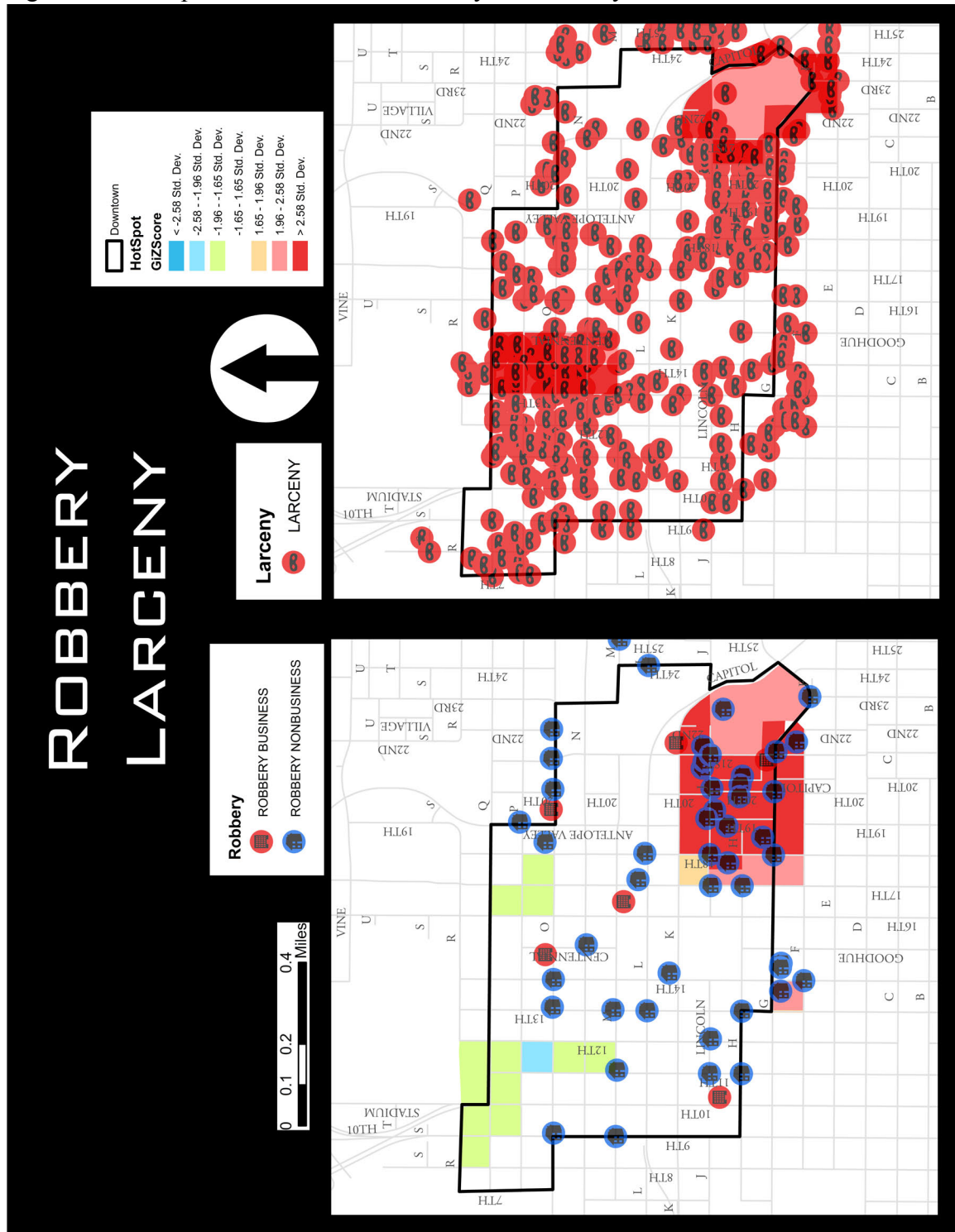


Figure 30: Hot Spot and Location of Narcotics and Other including Weapon in Downtown Lincoln



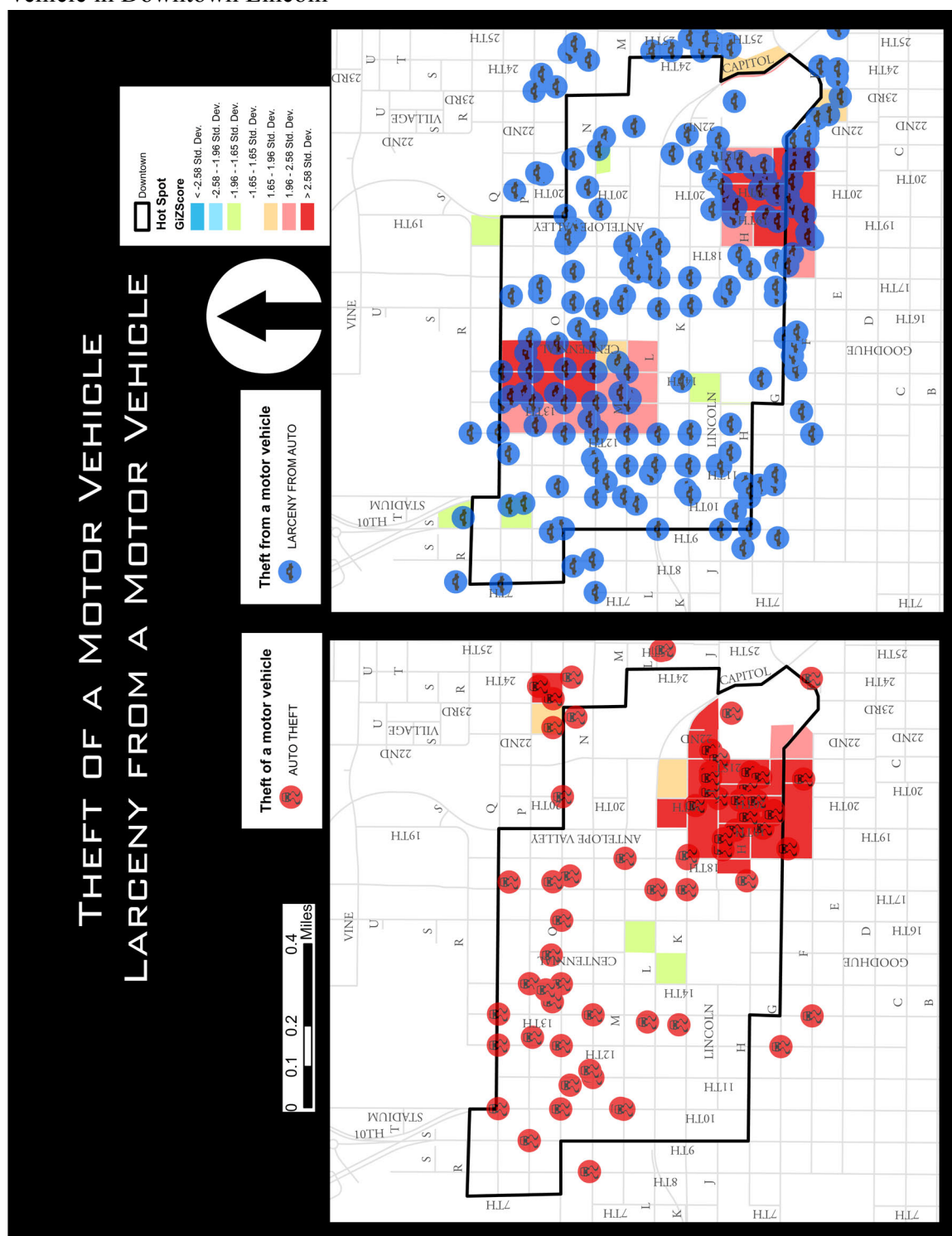
Source: Lincoln Police Department

Figure 31: Hot Spot and Location of Robbery and Larceny in Downtown Lincoln



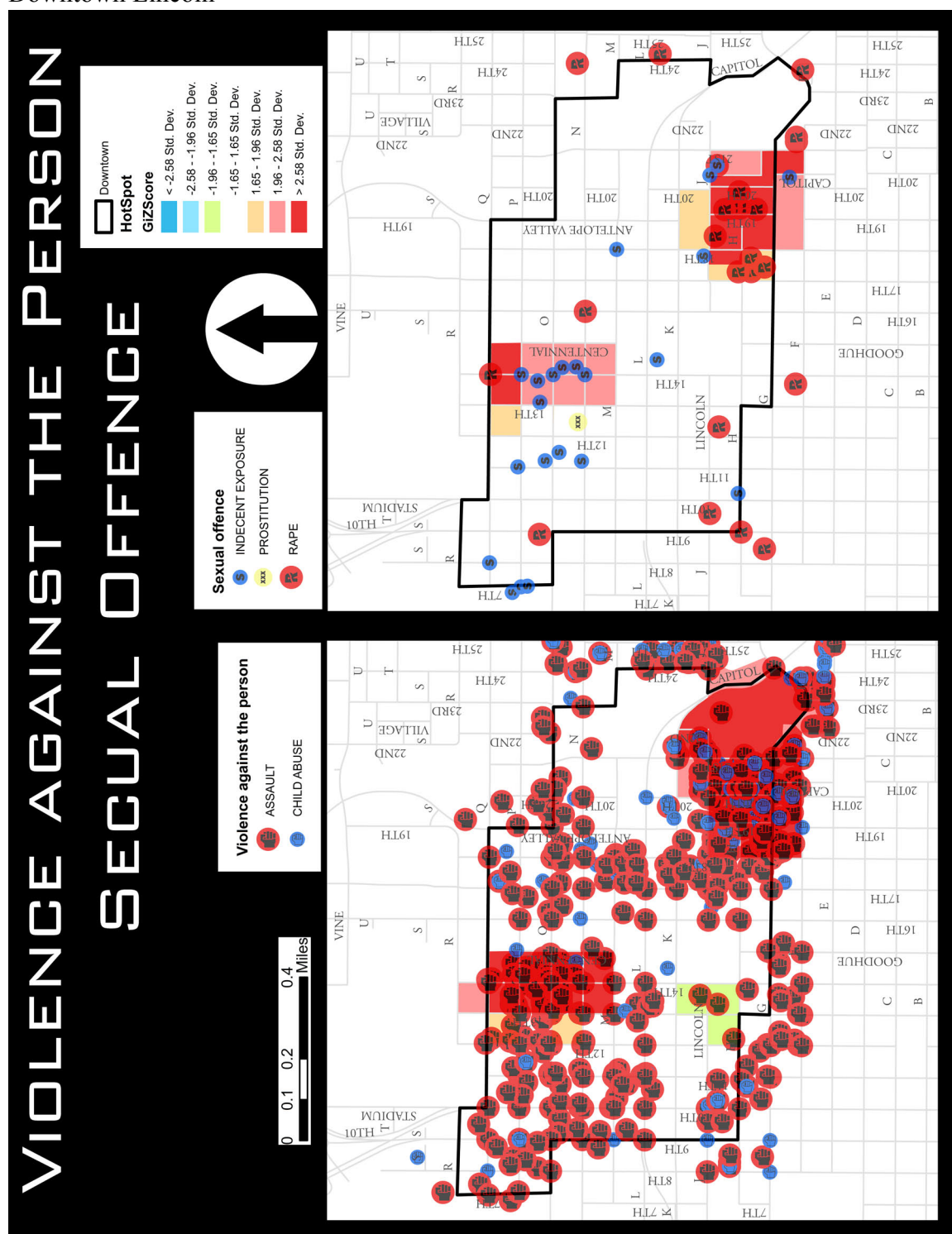
Source: Lincoln Police Department

Figure 32: Hot Spot and Location of Theft of A Motor Vehicle and Larceny from A Motor Vehicle in Downtown Lincoln



Source: Lincoln Police Department

Figure 33: Hot Spot and Location of Violence against the Person and Sexual Offence in Downtown Lincoln



Section 5.2.8: Building Use (hot spots of four land use categories as accessibility to the four types of use such as residential, office, retail, and service)

Use of buildings around alleys is strongly related to the walkability and possibility. This map considers the four kinds of building use such as office, retails, residents, and services (Figure 34, Figure 35). The central downtown, commercial district and Haymarket are concentrated by those uses.

The city of Melbourne considers the importance of the range of industry and services such as restaurants, boutiques, cafes, clubs, bars, residences, and art installations, to attract different people. The city of Reno also says mix of mix-use and single use creates attractive entertainment and vibrant night life (Steinmann, 2009).

Figure 34: Hot Spot of Each Building Use in Downtown Lincoln

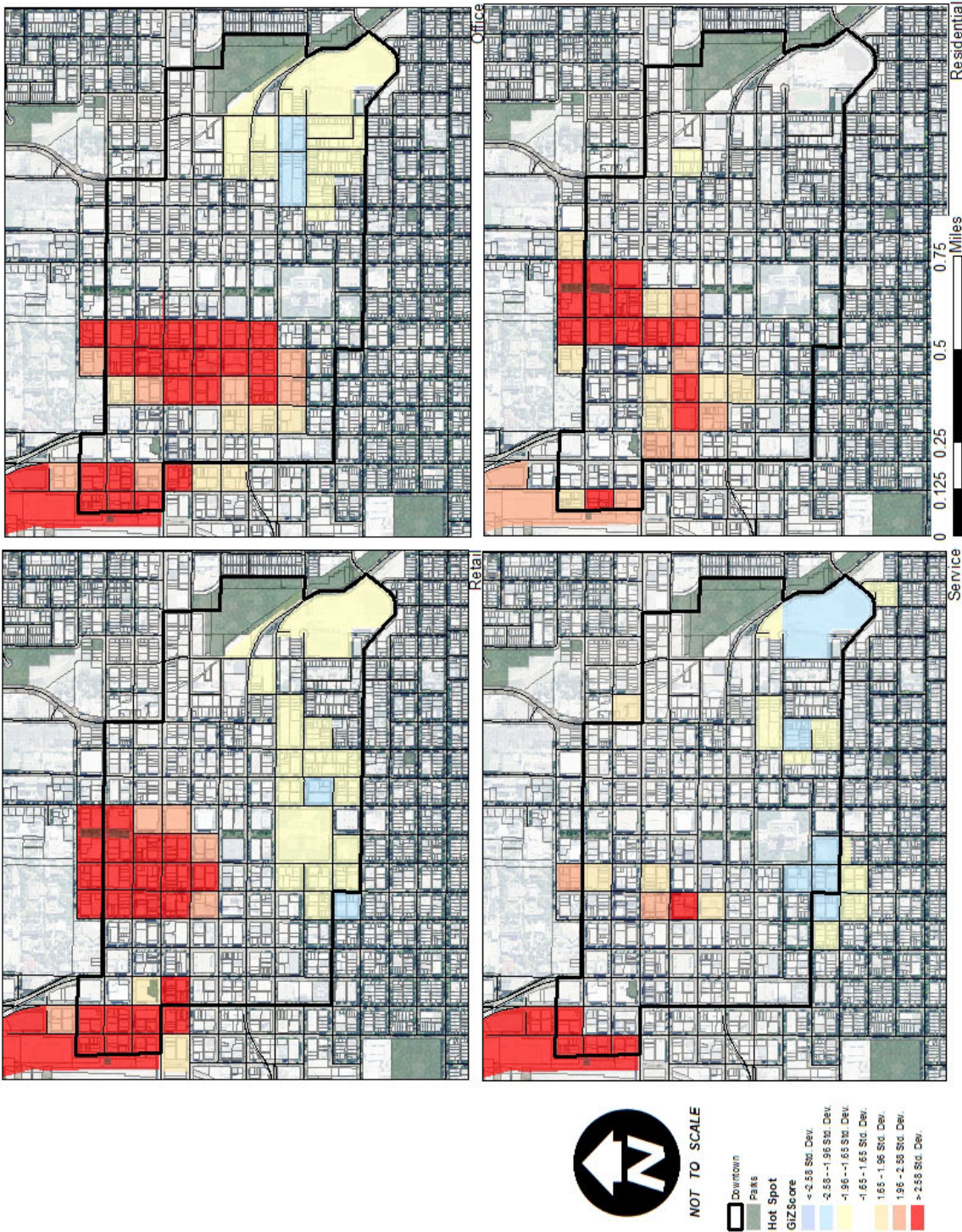
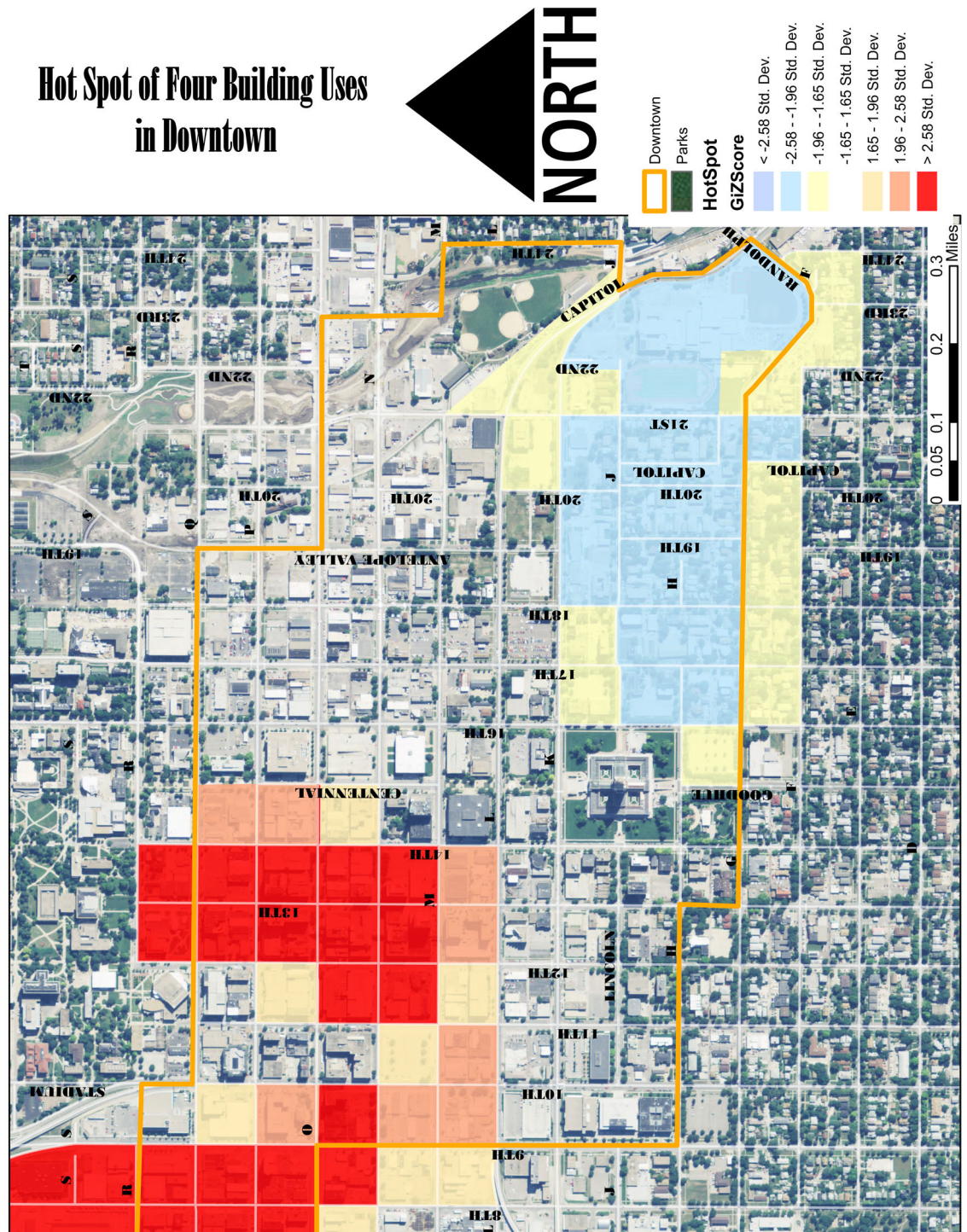


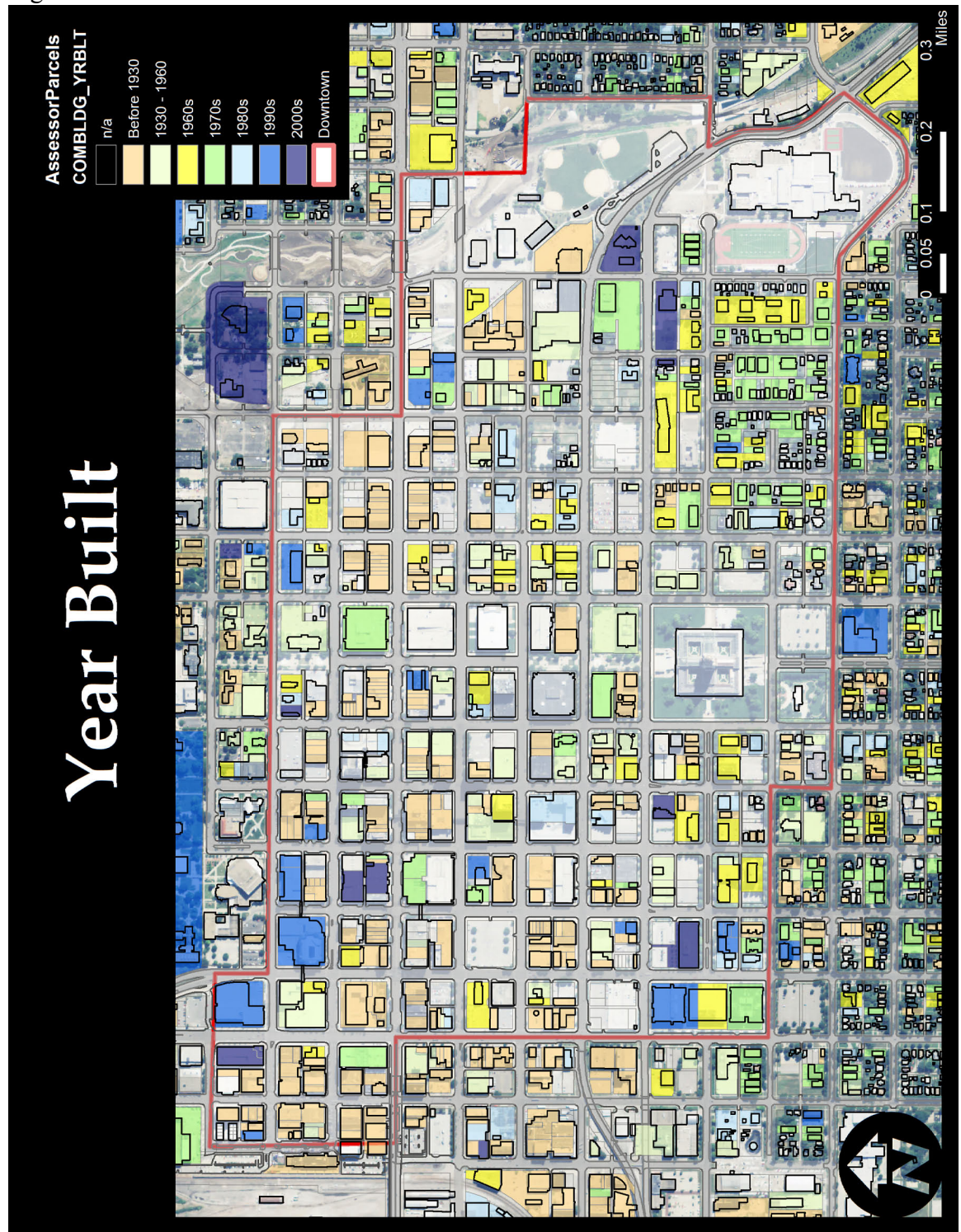
Figure 35: Hot Spot of Total Building Uses (Residential, Retails Offices, Services) in Downtown Lincoln



Section 5.2.9: Building Condition (Assessment and Building Age)

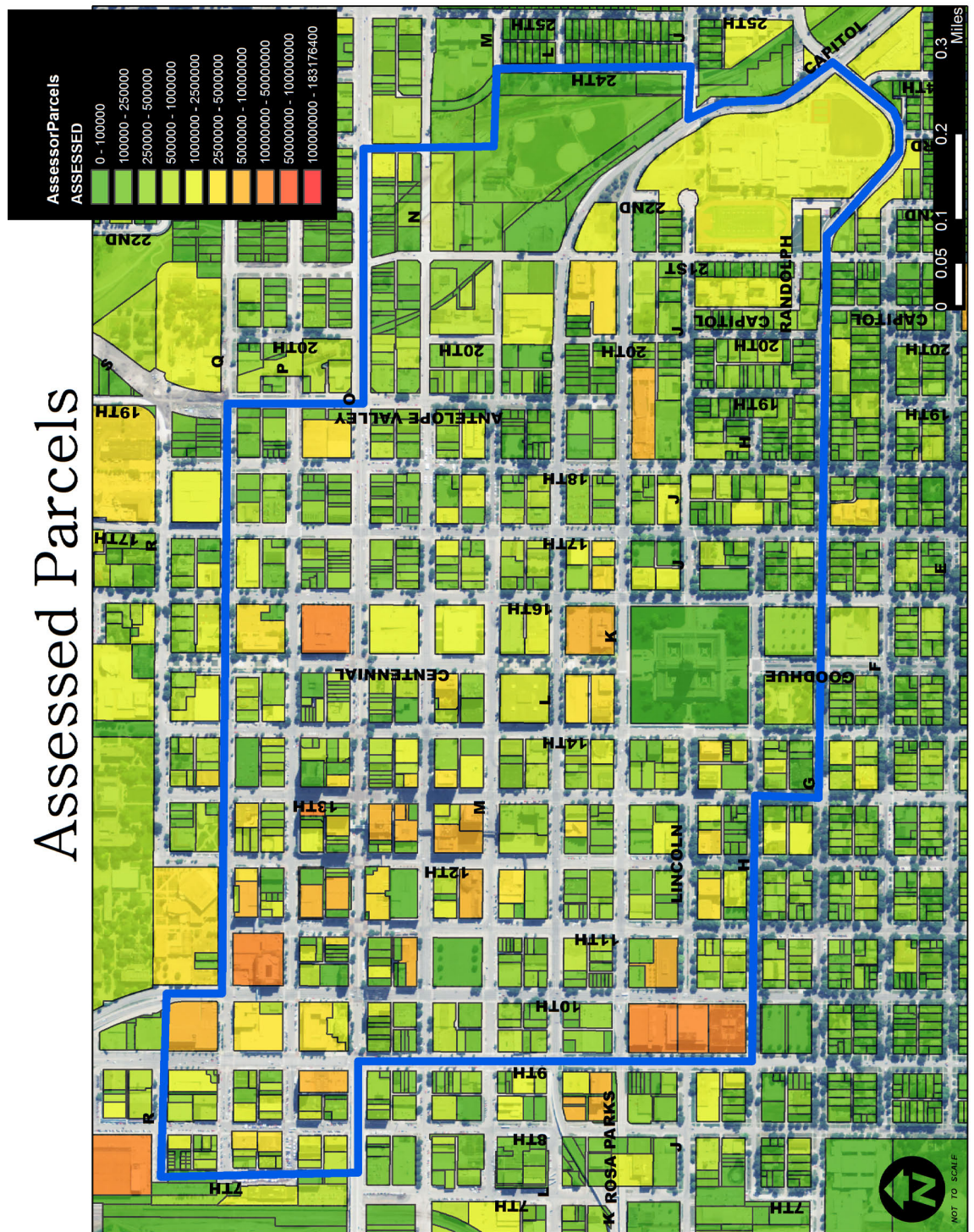
The age of building is one of the factors to be considered because the older buildings may need maintenance or there are possibilities of innovation. Figure 36 shows the year of building and Figure 37 shows the assessed parcel. Around edge of downtown, there are relatively newer buildings and more expensive parcels. However, around the central downtown is older buildings and the parcels are comparatively less expensive even though it is located on center of the downtown.

Figure 36: Year Built in Downtown Lincoln



Source: The City of Lincoln

Figure 37: Assessed Parcels in Downtown Lincoln

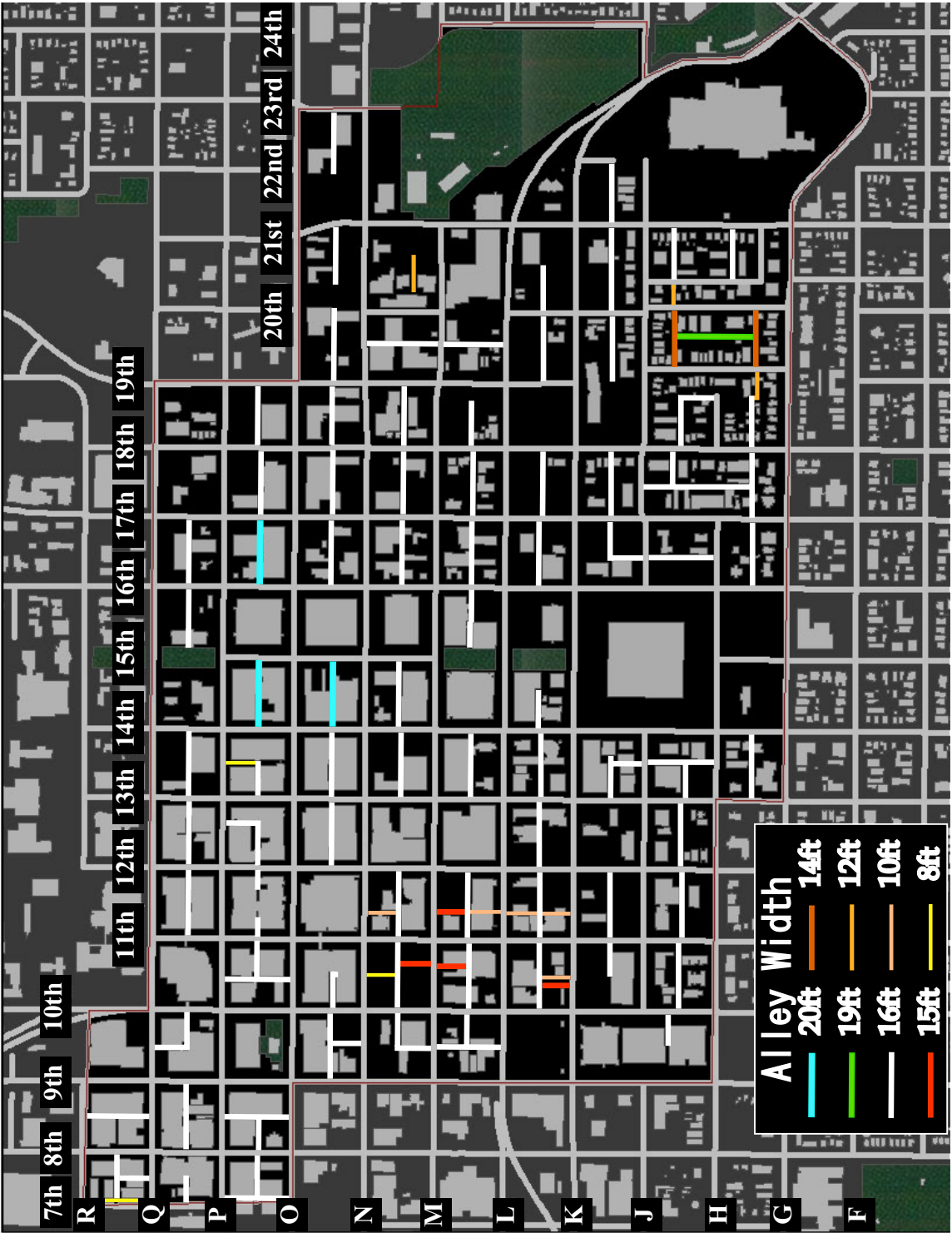


Source: The City of Lincoln

Section 5.2.10: Width of Alley

Figure 38 shows the width of alleys in downtown Lincoln. To revitalize alleys, the characteristics of alleys should be grasped. The width of alleys is one of the most important considerable factors when an alley project is planned. According to the Seattle Municipal code, the width of a new alley usually depends on zoning. Therefore, the zoning code and the widths of alleys have a strong relationship. The width of an alley change its possibilities and its effect on the new needs fits to an alley. For example, if it is wider alley, there could be a bike lane, patio space, playground, night events space, and so forth. The alleys' width in Downtown Lincoln has some variety from 8 feet to 20 feet. The difference of width is more than doubled and it could have totally different potential for revitalization. The widest alleys are located around O Street between 14th Street and 17 Street. T shape alleys are likely would be narrower. The regular width of alley in downtown Lincoln is 16 feet.

Figure 38: The Width of Alleys in Downtown Lincoln



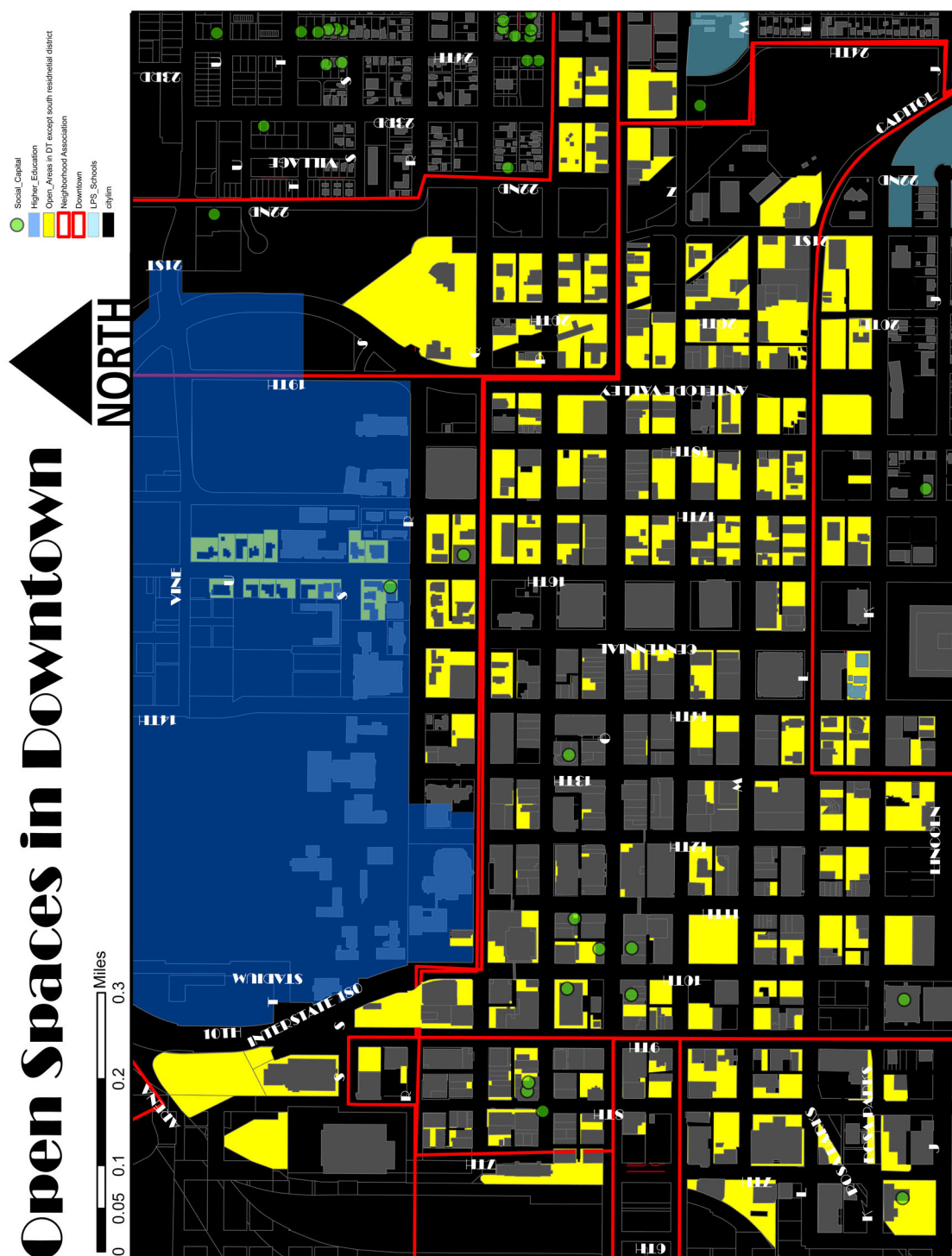
Source: The City of Lincoln

Section 5.2.11: Open Spaces

Since an alley is considered a public space as well as a path, the relationship between open spaces is e important. Figure 39 shows the open space in Downtown Lincoln Central downtown lacks open space compared to other areas of Downtown Lincoln.. However, around the edge of Downtown Lincoln there are relatively large open spaces that are seldom used, while others exist as parking. The main difference between these two areas is the density of buildings. Central downtown is much more congested with buildings of mixed use, therefore, more people frequent the area. It could benefit from more lively open spaces.

Figure 40 shows the open space except alleys. It implies the difference from Figure 39. There are huge differences of availability, accessibility, connectivity, and its size of open space. The utilization of alleys makes open space much larger by connecting other two span spaces separated by alleys.

Figure 40: Open Spces without Alleys in Downtown Lincoln



Section 5.2.12: Field Study

The field study shows the result of the field observation.

Section 5.2.12.1: Building Condition in the Downtown and around Downtown area

The building materials and height are observed (Figure 41, Figure 42, Figure 43). Building material has a huge influence on alleys. Since alleys are surrounded by buildings, the kind of building is a significant factor to take into account. Building materials have a strong influence on an alley's atmosphere. Most buildings in Downtown Lincoln are built with concrete or brick. However, the Southeast downtown area has housing built with wood (Figure 41). There are some buildings which are built with multiple materials. In those cases, it is appropriate to use the most predominant material to classify the building. However, it can be difficult to decide the predominant material, therefore some buildings are represented with more than one material. Building material can be one of the most important influences when discussing paving material and color. Appendix D-23 provides examples of how unifying color, furniture, pavement, lights, and buildings create a unique alley atmosphere.

While the façade of the first-floor directly influences an alley, it is important to address second-floor facades which also carry a strong relation to the ground level. While higher stories may not have as much influence in the function of an alley building height does have influence on factors such as atmosphere, use, and number of people accessing the building. Also, larger buildings may be more oppressive, they may decrease the amount of natural light seen at street-level, there may be more foot traffic, or they may allow to decorate at higher positions, (though this is less likely to be used according to the case study). The taller buildings are concentrated in the central downtown area (Figure 42, Figure 43).

Figure 42: Building Height in Downtown Lincoln

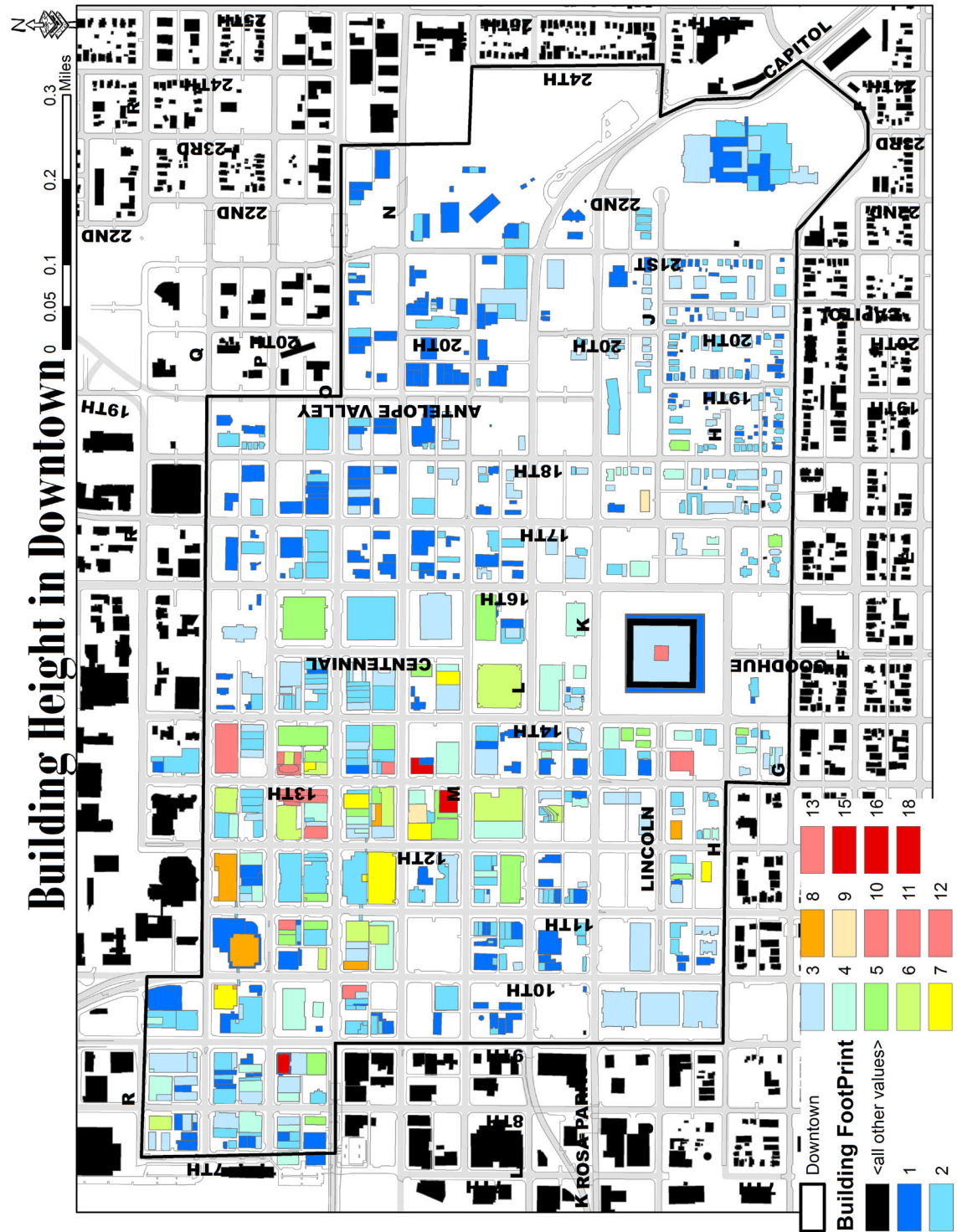
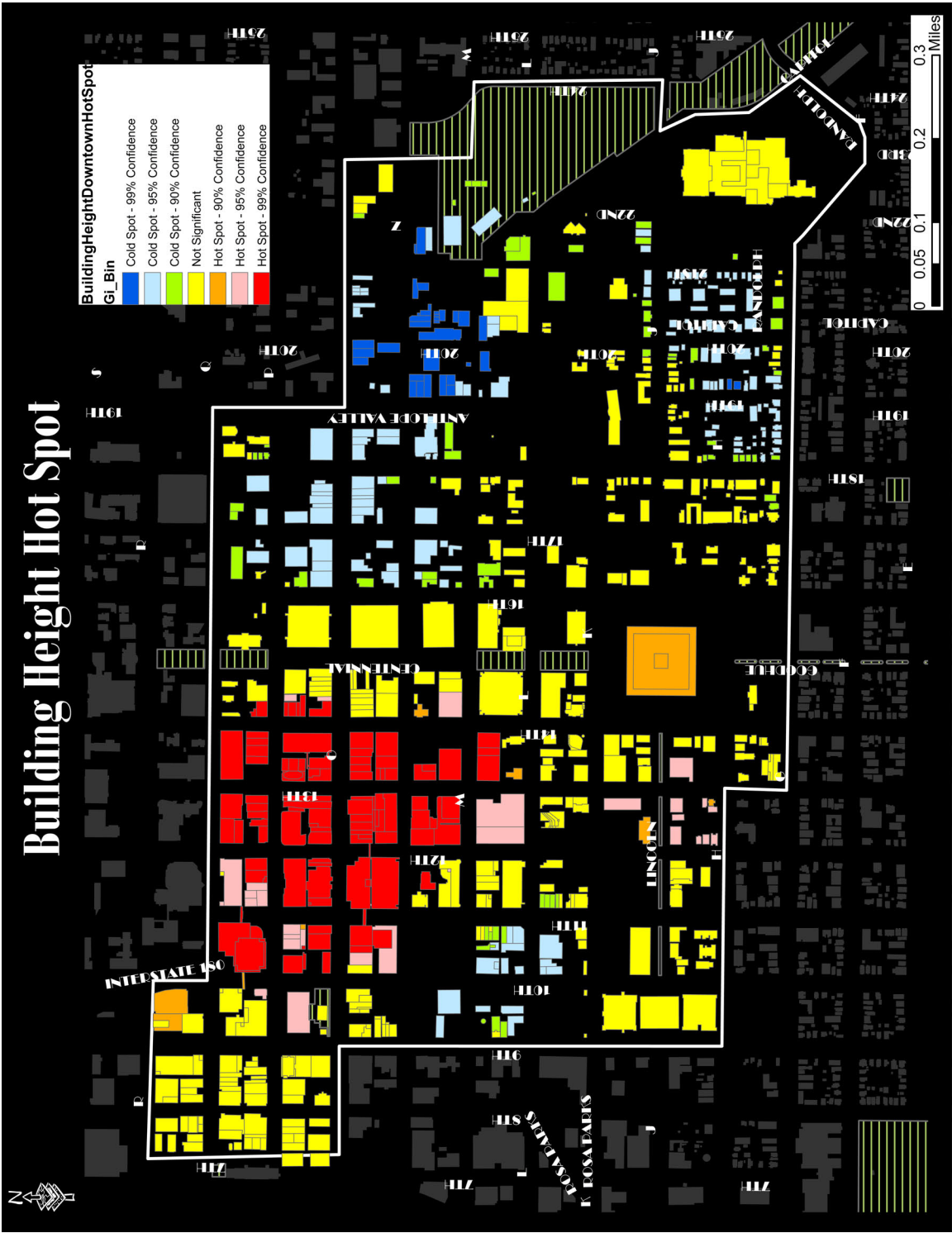


Figure 43: Building Height Hot Spot in Downtown Lincoln



Section 5.2.12.2: Alley Condition in the Downtown and around Downtown area

Each alley in Downtown Lincoln was investigated. Figure 44 designates if there is existing businesses at the alley. Having businesses at an alley is now common in Lincoln; however, there are few existing businesses at alleys in Downtown Lincoln. The few existing businesses are mostly located on the north side of Downtown Lincoln, which is a commercial district. There are also few business offices that have access to alleys in Downtown Lincoln. These business offices are mainly located on the West side of Downtown Lincoln, and buildings in the area are comparatively taller than other areas of Downtown Lincoln.

The Figure 45 shows existing parking at alleys in Downtown Lincoln. As shown on the map, alleys in Downtown Lincoln are often used for parking. However, the alleys in central downtown do not have much parking due to building occupancy and higher number of public parking in the area. The Haymarket area, in northwest downtown, is also less likely to have parking at alleys. This could be because of parking occupancy and there are specified parking spaces. Much of the public parking is located in the central downtown and Haymarket areas (Figure 46).

Figure 47 signifies the steepness of each alley in Downtown Lincoln. Alleys in Downtown Lincoln are relatively flat or slightly steep. The steepness of alleys gradually gets higher from the central downtown to the border of downtown. There are only three steep alleys in Downtown Lincoln.

There is not much graffiti in alleys of Downtown Lincoln (Figure 48). The alleys in Downtown Lincoln do not have major issues with graffiti. The locations of these graffiti are mostly in the Haymarket and some incidents also are in central downtown. One of the biggest graffiti is located in the alley between 14 Street and Centennial Mall, between O and P Streets. The next biggest graffiti is located in the alley between 9th and 10th Streets, between N and M Streets.

Figure 49 shows the number of drains located in alleys of Downtown Lincoln. The number was counted by each square and the Figure 49 also shows the actual number of drains in parenthesis. The maps illustrate how few alleys have drains in Downtown Lincoln. As mentioned in section 2.2.2, alleys could be a proper place for water management. Despite this, many alleys in Downtown Lincoln do not have drains, however, there are some alleys having drains at the central downtown area.

There are few existing canopies in the alleys of Downtown Lincoln (Figure 50), and they are mainly located in the Haymarket and central downtown areas. This is likely due to these areas being primarily commercial districts. However, there are better quality alleys between 11th and 12th Streets and between M and L Streets (Figure 60). There are small canopies and the furniture are few. In Downtown Lincoln, the set of canopies and furniture are relatively rare, and the alleys provide a relaxation space to workers there.

There are only three alleys that have furniture in Downtown Lincoln (Figure 51). This shows how there are a lack of relaxation spaces in Downtown Lincoln.

Figure 52 designates the existence of plant life in alleys of Downtown Lincoln. The East side of Downtown Lincoln, comparatively, has more plants, especially the southeast residential area.

The number of garage doors in alleys of Downtown Lincoln is shown in Figure 53. The numbers of garage doors are not concentrated. This is because garage doors could be used for both residential and commercial districts. The number of garage doors in Downtown Lincoln is low, in many cases zero or one.

The number of doors in the Northeast area is lower than the other areas because the density of the buildings in the area is relatively lower as well (Figure 54). And, the number of doors in the South residential area is different from alley to alley because the number depends on whether or not there are existing adjacent apartments in each alley. The number is high in the central downtown, and this may be because there are taller buildings in the area.

The number of containers is shown on Figure 55, and the commercial district obviously has higher numbers than residential area because of its necessity.

The utility poles are dense on the east side of Downtown Lincoln (Figure 56). The central district does not have many utility poles in alleys.

The number of lights in Downtown Lincoln is dense in central downtown (Figure 57). The east side does not have many lights; therefore, it will be darker in the evenings there. The lights were located by their locations and direction. If a light faces the alley and it is located in an adjacent half block from alley, the light was counted.

There are many windows visible from alleys in Downtown Lincoln (Figure 58). These are counted by the visibility. If the alleys could be visible from a window, it is counted. It is counted if it is visible from alleys because the visibility could be backwards. If a window is visible from an alley, the alley could be visible from the window.

Paving material and paving condition were observed, and they are shown on Figure 59 and Figure 60. The alleys in Downtown Lincoln are mostly paved with concrete. Some are paved with brick and some are paved with asphalt. Bricks are usually considered to look better than concrete or asphalt, however, They are difficult to maintain if there is no regular maintenance service. It also requires careful installation and maintenance to make sure it will not be bumpy. Currently, there is no regular maintenance service in Lincoln. However, if there is regular maintenance service in Lincoln, bricks will be cheaper to maintain since maintenance of bricks does not require re-pavement. These issues are likely why many brick pavements were currently in poor to fair condition. Concrete pavement was more likely to be good condition. There are not many areas of good condition of pavement in Lincoln, and even though the central downtown does not have good condition of pavement, the southeast residential area has less quality of pavement. The least quality of pavement is in this southeast area and it also has the most plant and incidences (Figure 52, Figure 27) and has many buildings built with wood (Figure 41). This area is relatively undeveloped.

Figure 44: Existence of Business at Alleys in Downtown Lincoln

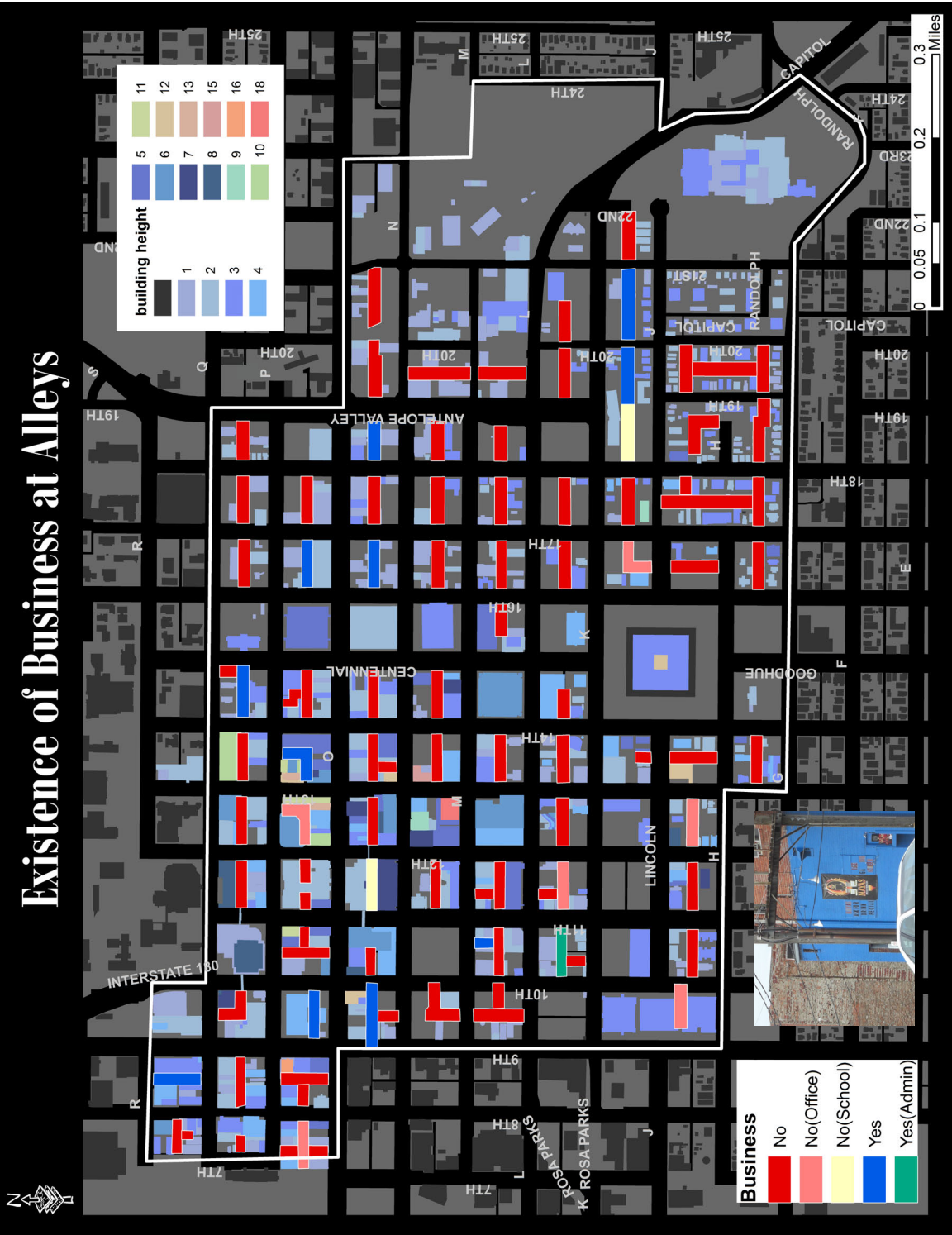


Figure 45: Existence of Parking at Alleys in Downtown Lincoln

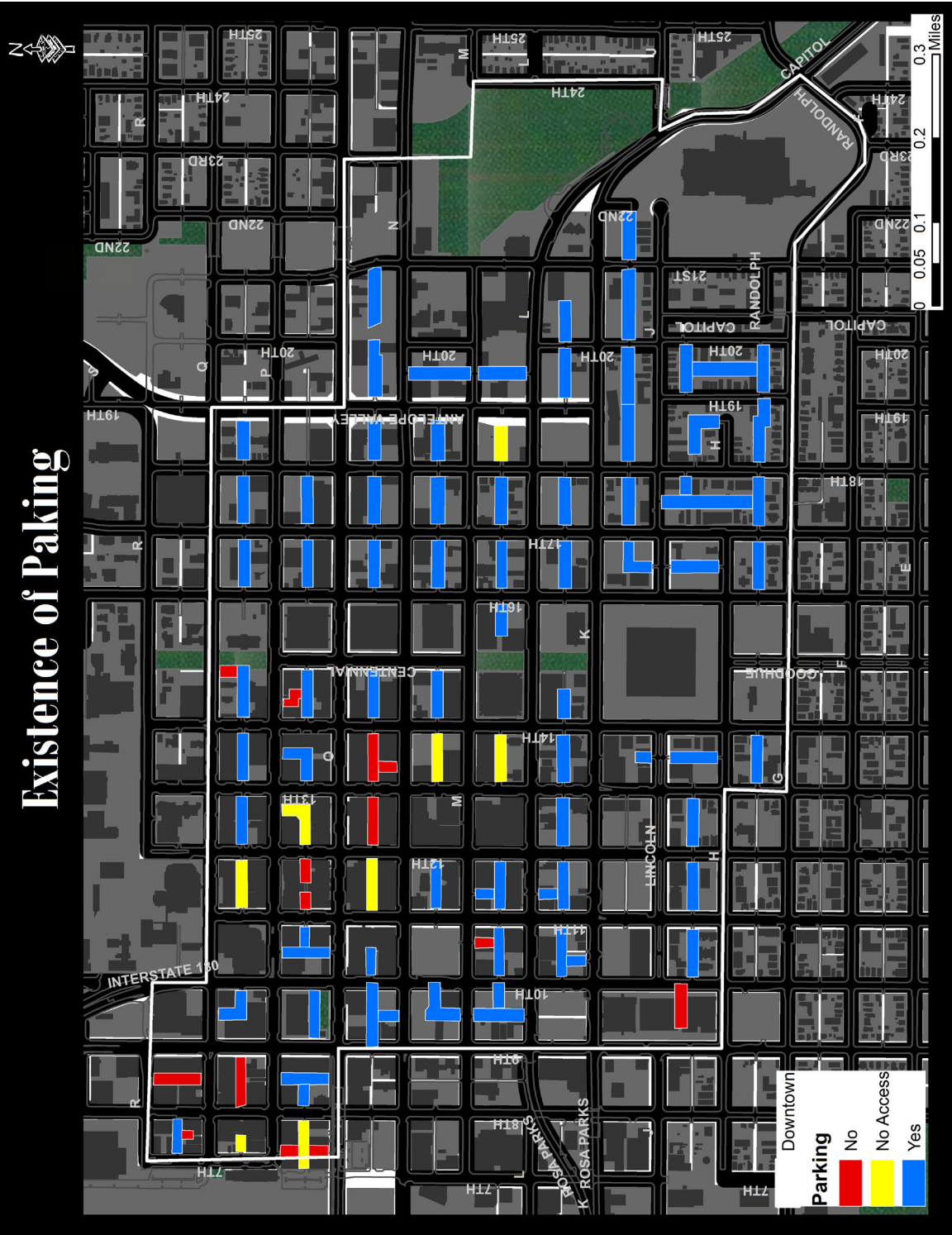
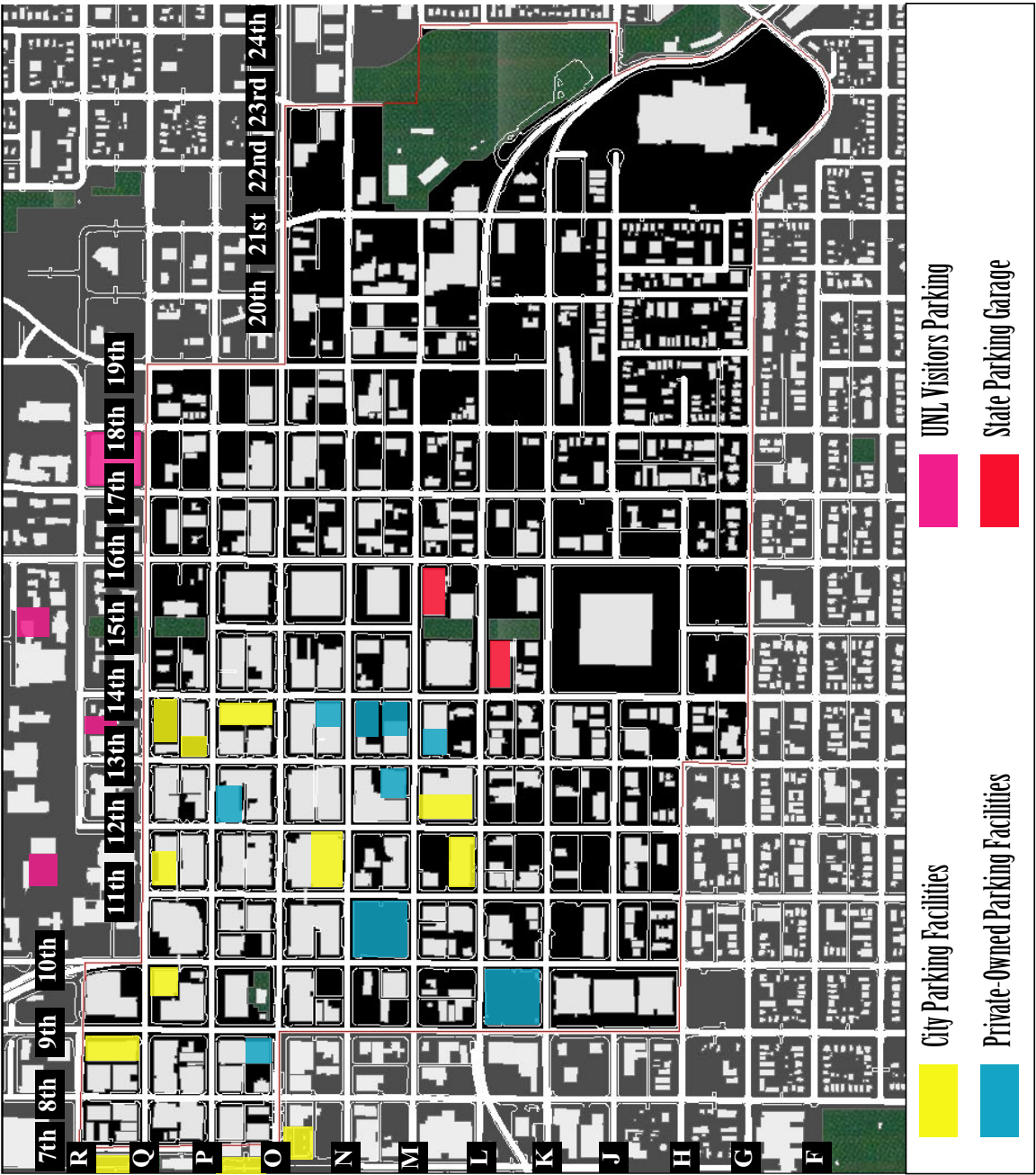


Figure 46: Parking Facilities Locations in Downtown Lincoln



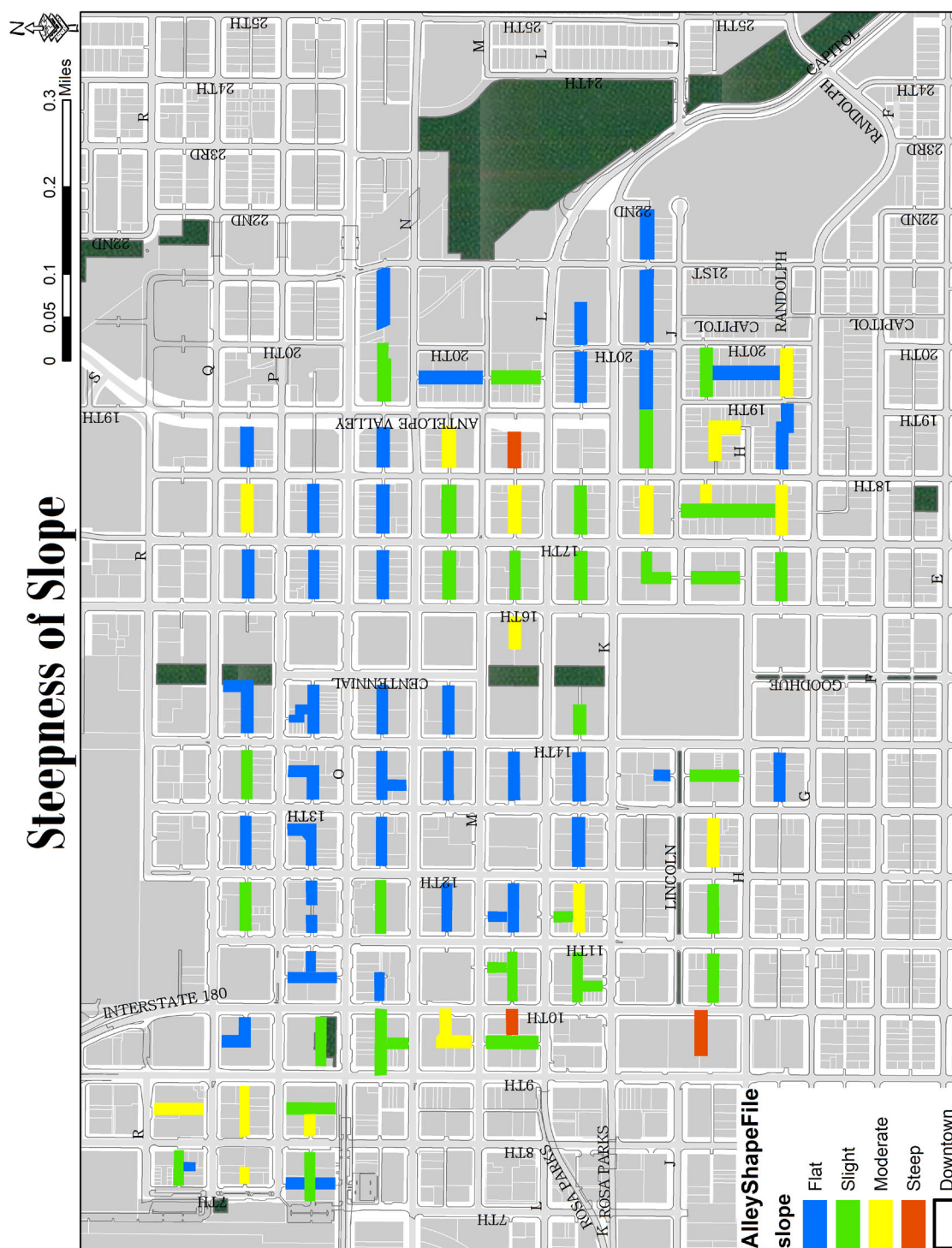
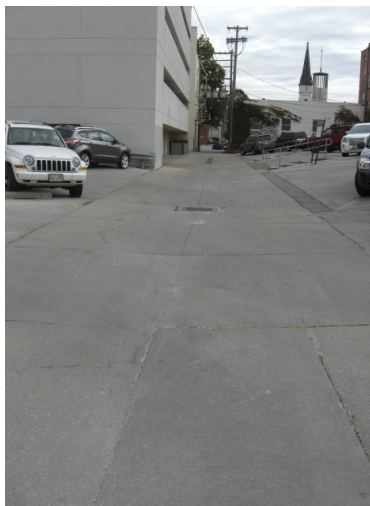


Figure 47: Steepness of Slope at Alleys in Dwontown Lincoln

Slight



Moderate



Steep

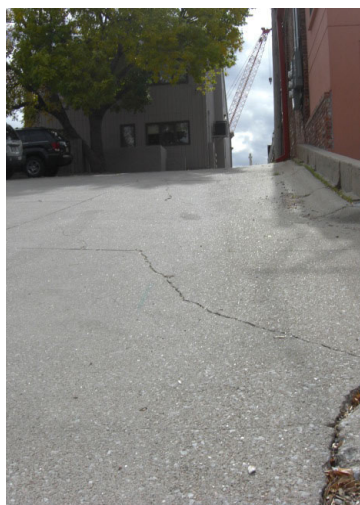


Figure 48: Existence of Graphics at Alleys in Downtown Lincoln

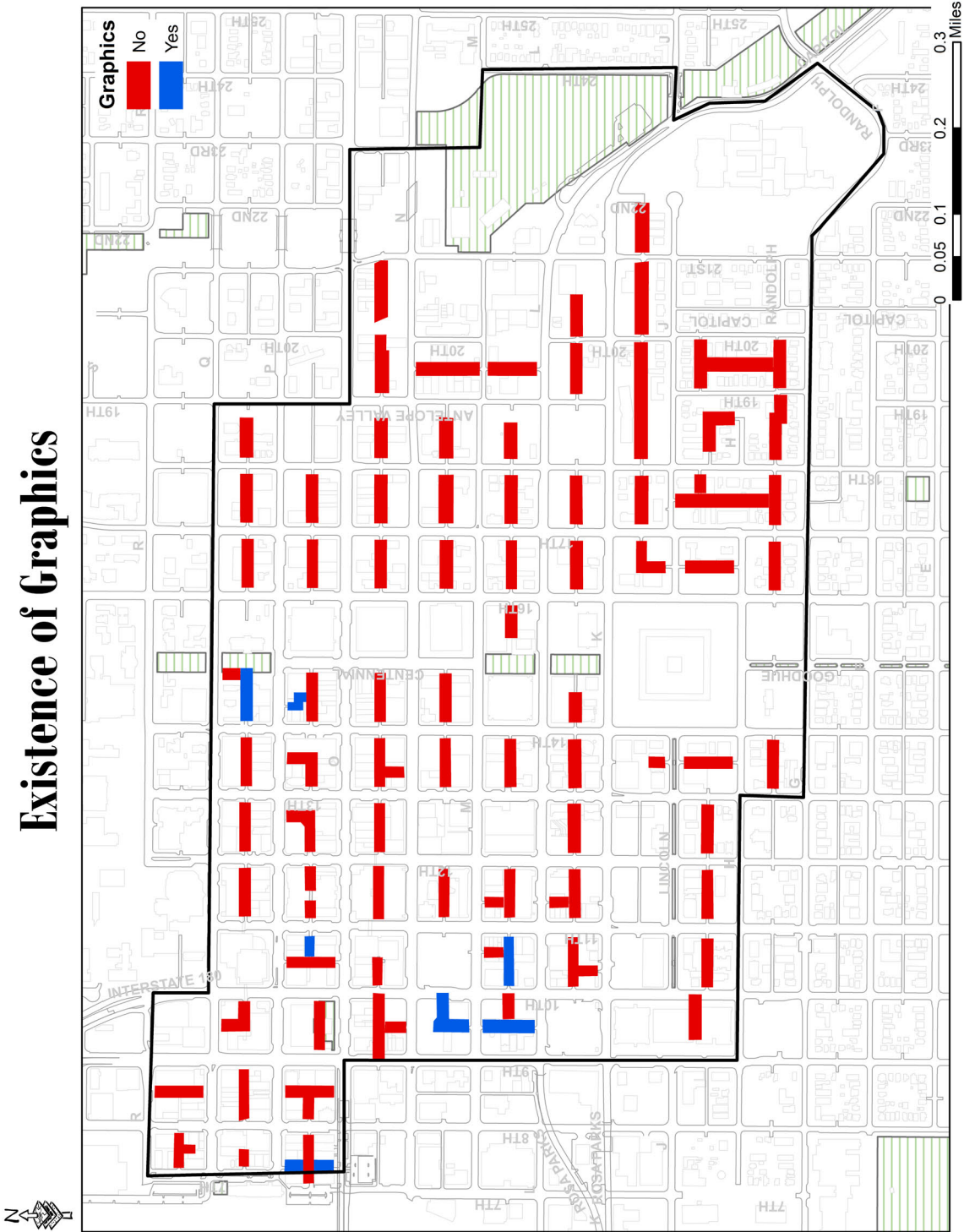


Figure 48: Existence of Graphics at Alleys in Downtown Lincoln



Figure :49: Existence of Drains at Alleys in Downtown Lincoln



Figure 50: Existence of Canopies at Alleys in Downtown Lincoln

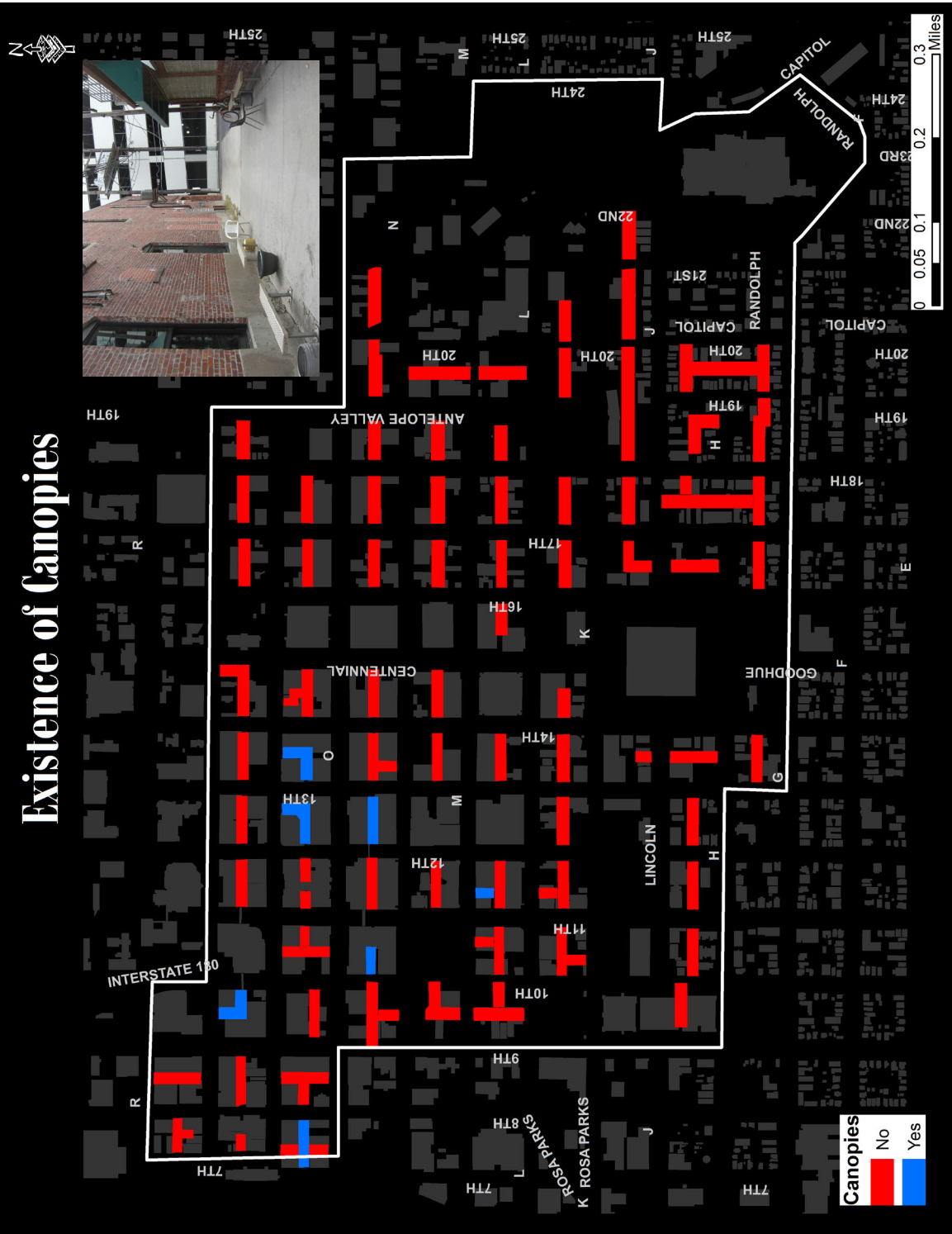


Figure 51: Existence of Furniture at Alleys in Downtown Lincoln



Figure 52: Existence of Plant Life at Alleys in Downtown Lincoln

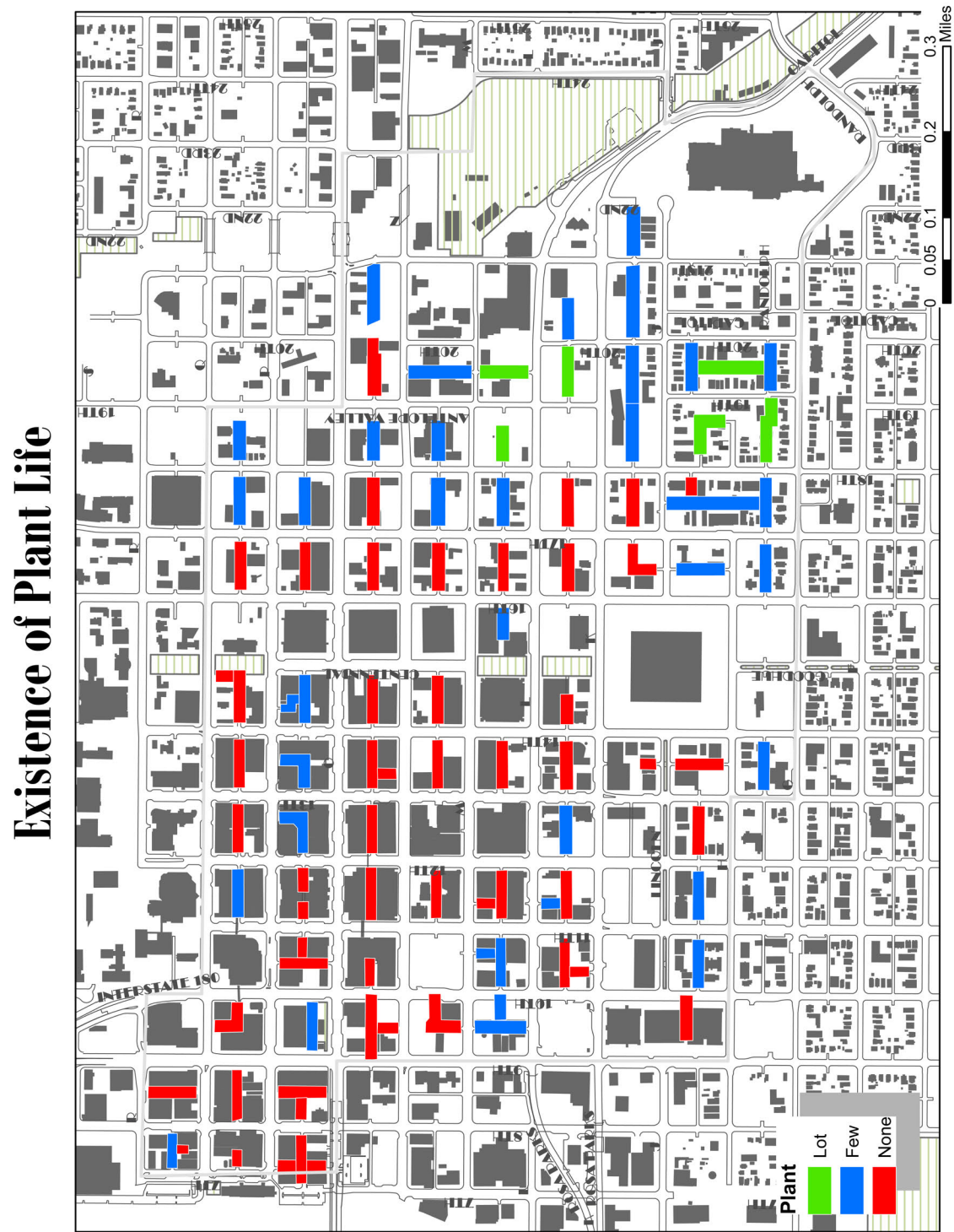


Figure 52: Existence of Plant Life at Alleys in Downtown Lincoln

Lot



Few



Figure 53: Number of Garage Doors at Alleys in Downtown Lincoln



Figure 54: Number of Doors at Alleys in Downtown Lincoln

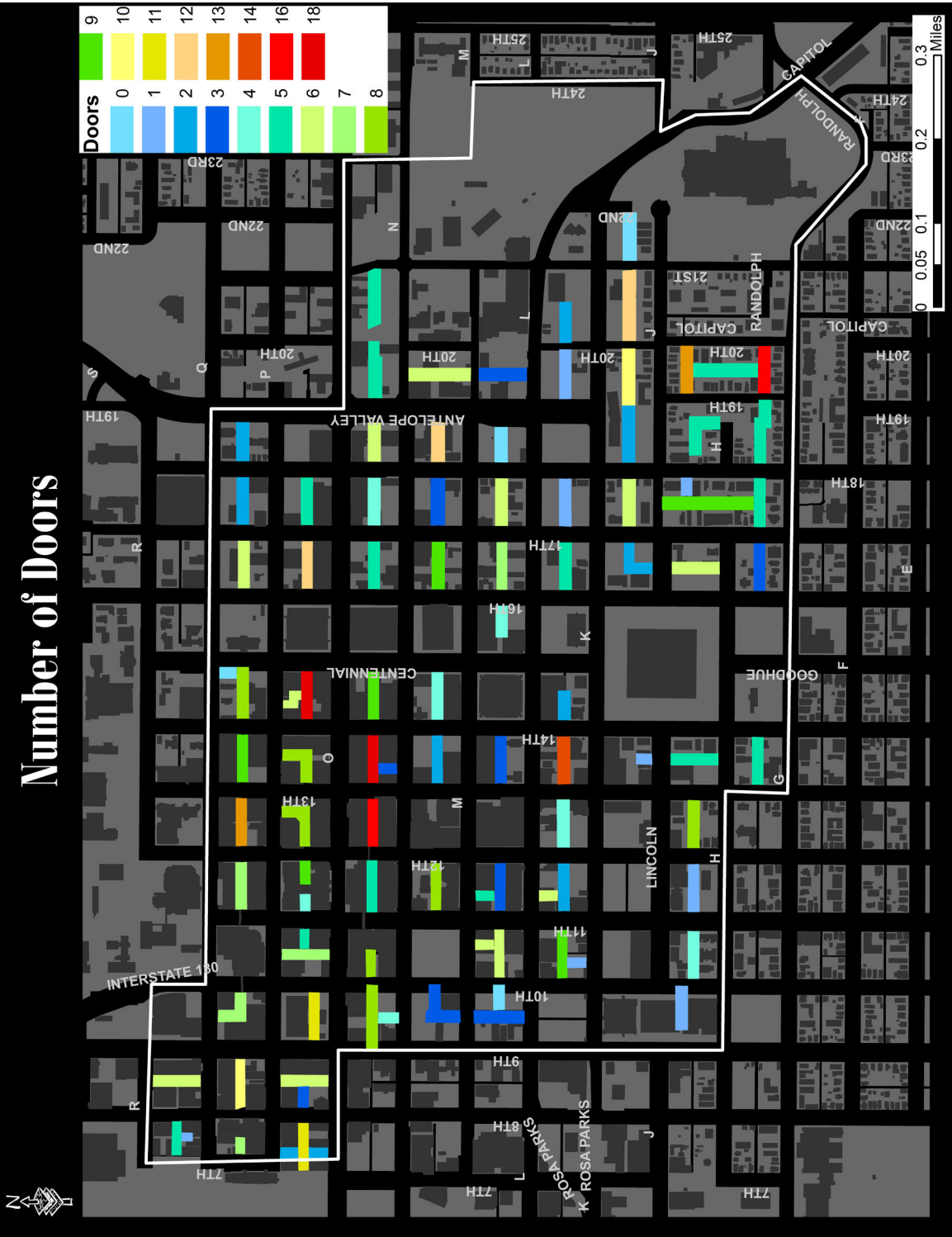


Figure 55: Existence of Trash Countainers at Alleys in Downtown Lincoln

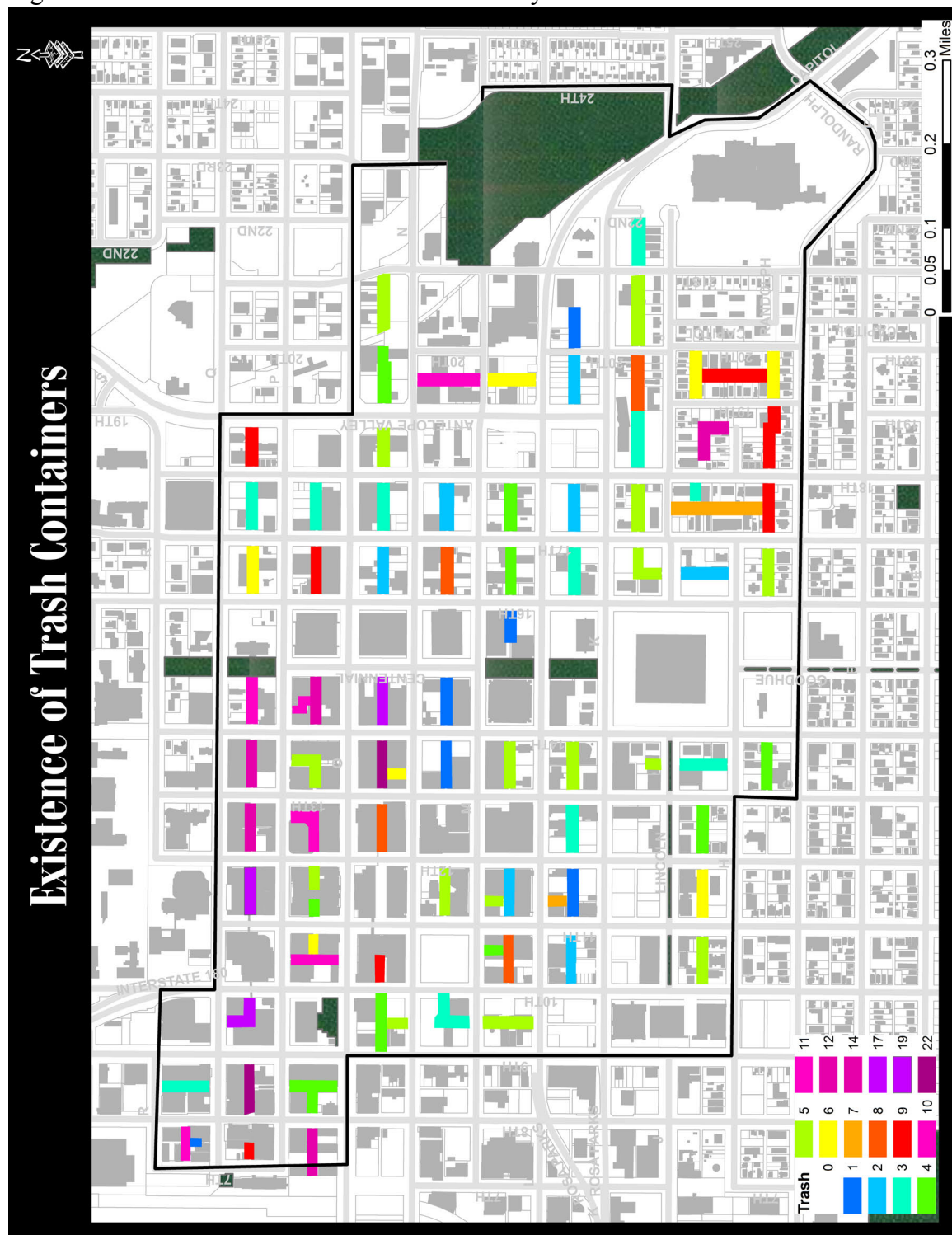


Figure 57: Number of Lights at Alleys in Downtown Lincoln

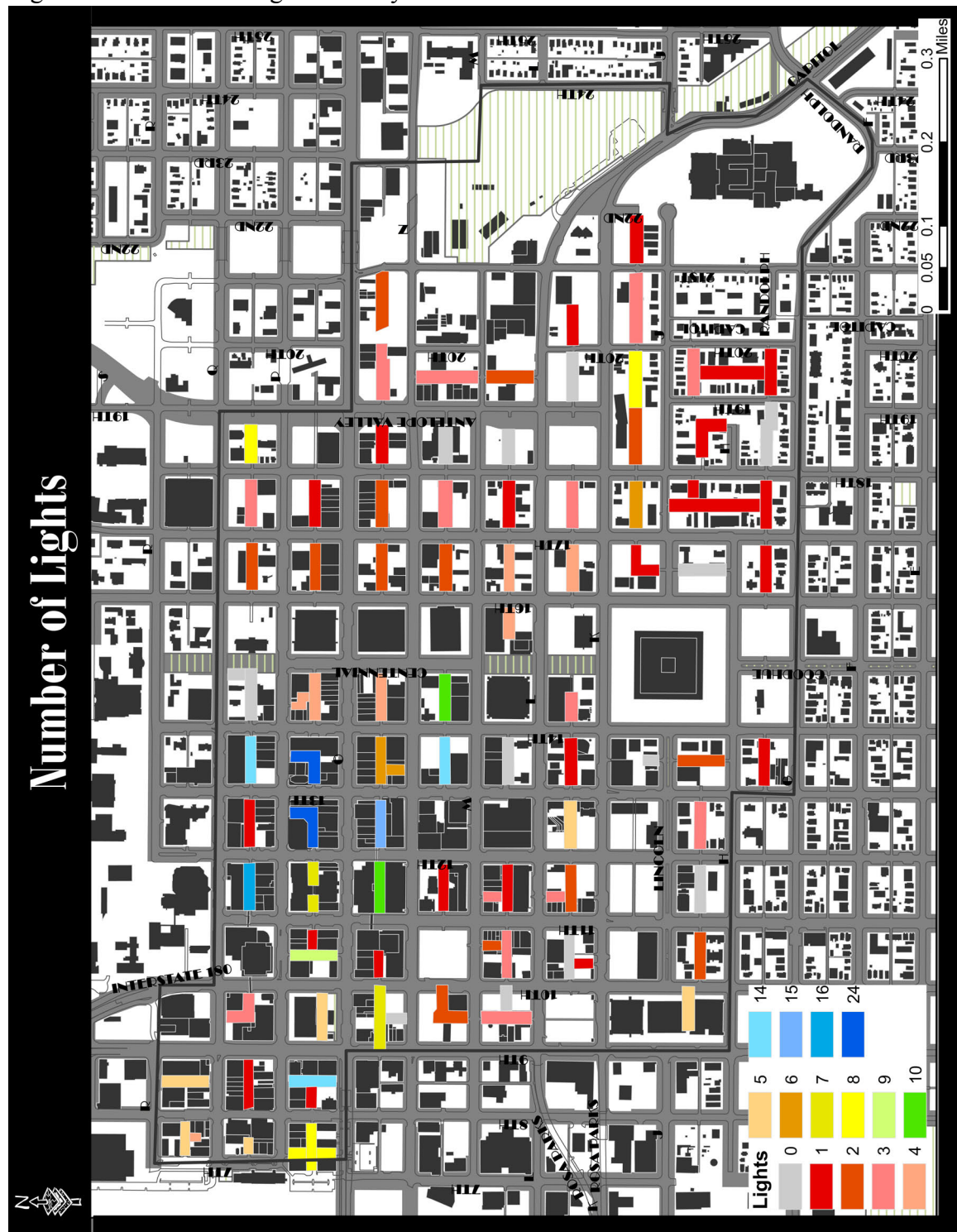


Figure 57: Number of Lights at Alleys in Downtown Lincoln

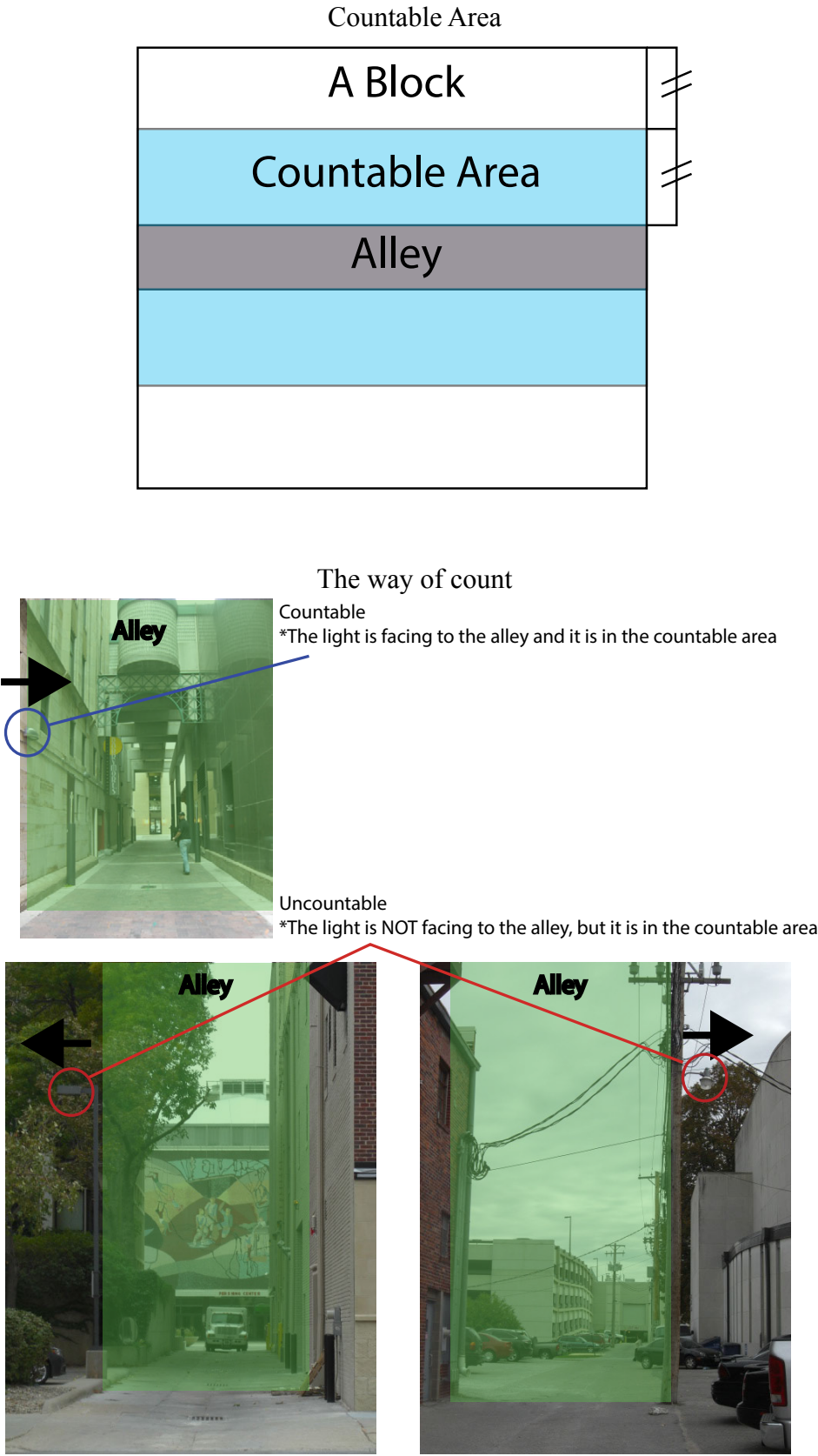


Figure 59: Alley Paving Materials in Downtown Lincoln

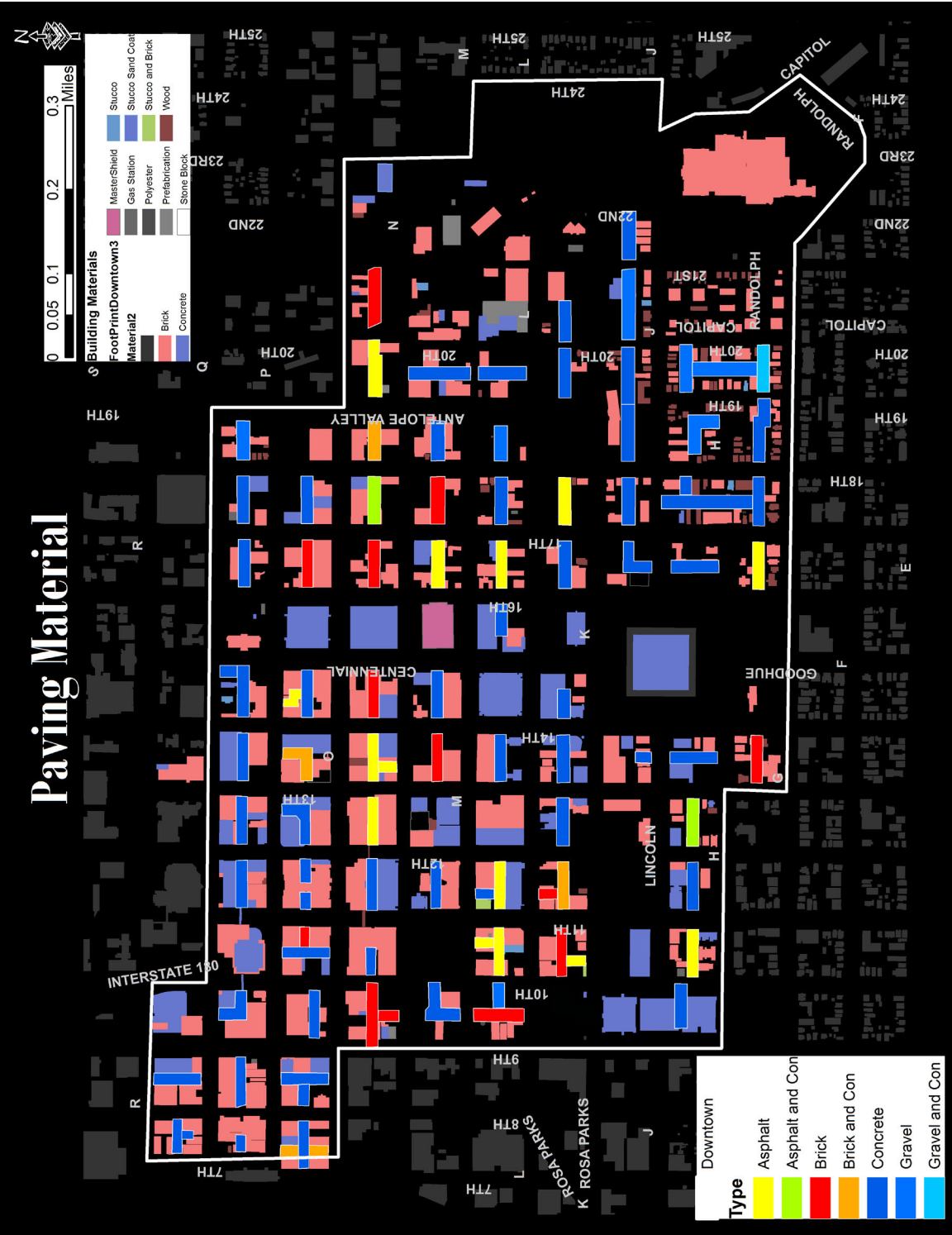
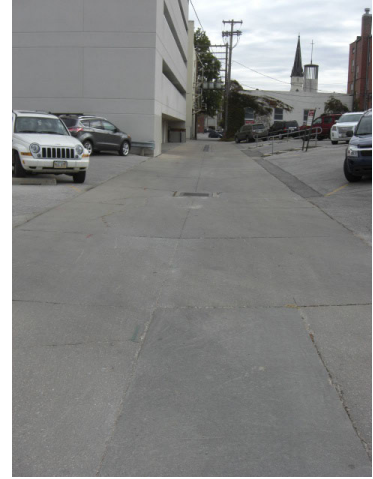


Figure 60: Alley Paving Condition in Downton Lincoln



Figure 60: Alley Paving Condition in Downton Lincoln

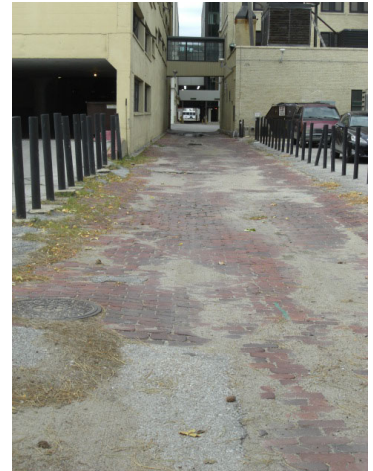
Good



Fair



Poor



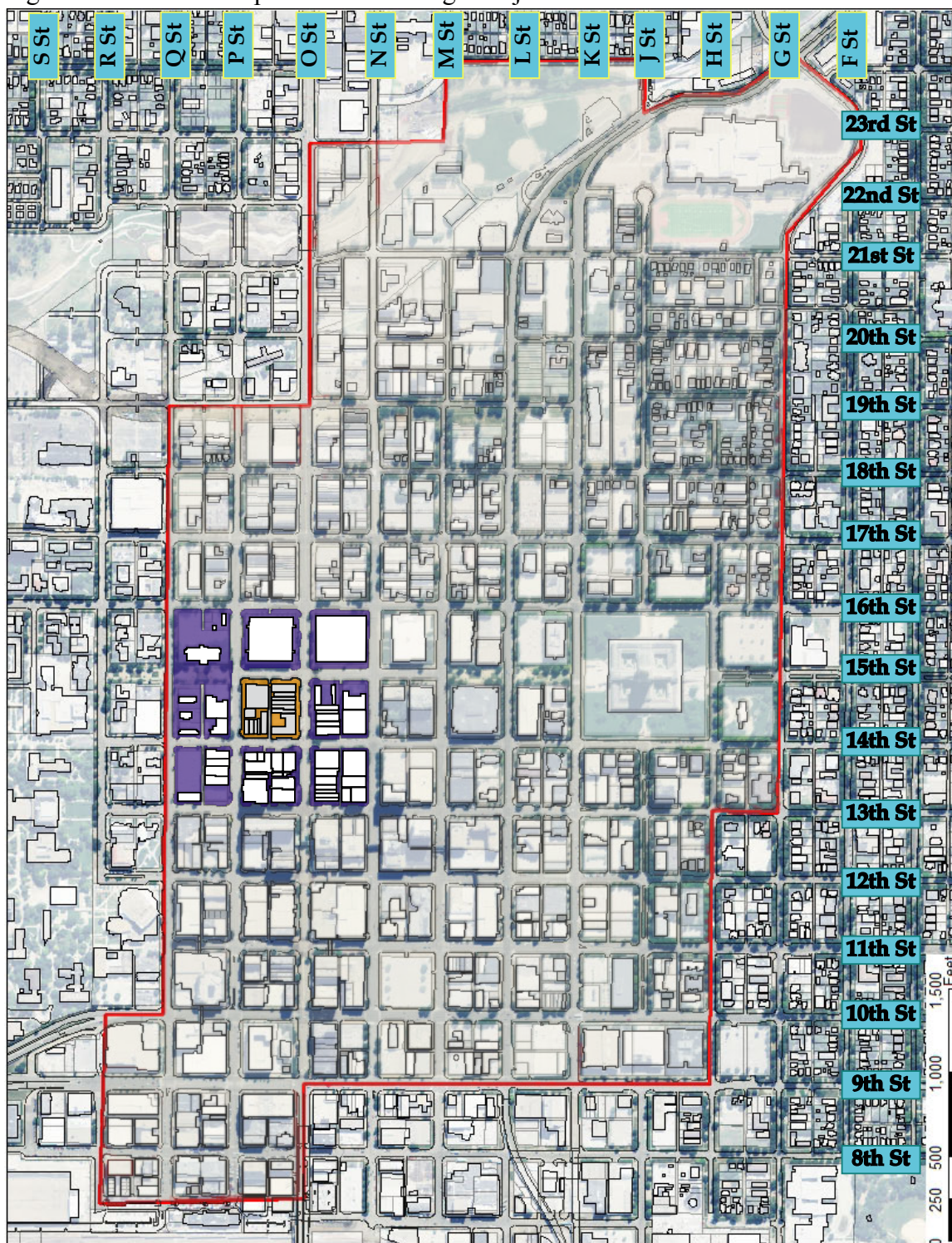
Section 5.2.13: Proposal Area

To stimulate a future alley revitalization project, connectivity will be one of the most important factors. Downtown is constrained to the University of Nebraska-Lincoln to the north, the Haymarket to the west, the residential neighborhood on the south, Antelope Valley to the east, and the commercial area of O Street in the middle. O Street has become the biggest streets connecting the commercial/retail area from East to West. There are many projects going on around O Street such as Block 38, P Street envision, N street, Centennial Mall, and Plan Big. The commercial/retail area is the center of these projects and is located between the Haymarket project and Antelope valley, therefore it needs to work as the center place of Lincoln through improved connectivity.

The key concept of this project is to incorporate the achievements of other cities and apply unique ideas tailored to the site specific alleyway conditions of the City of Lincoln. The form of alleys at the proposal area is not a simple pattern (Figure 61). It will be more reminiscent of a maze, like a complicated grid pattern such as the alleys in Japan and in Europe, and some cities in the U.S.. In addition, there are small open spaces enclosed by buildings. The strategies for the alley should be different from strategies for other alleys in Lincoln.

It is important to include diversity and attract different types of people to the downtown area. Since it is for the public, Economic development and the revitalization should be connected to citizens The alley will work as the connection of areas, people, and activities.

Figure 61: Selected Proposal Area and Eight Adjacent Blocks



Section 5.3: Existing Conditions in the adjacent eight blocks and the block of the Proposal Area

Adjacent eight blocks has stronger relationships with the proposal area and it will have a huge effect on the proposal; therefore, it is carefully observed (Figure 62, Figure 63, Figure 64, Figure 65, Figure 66).

Figure 62: Building Uses in the Adjacent Eight Blocks and Proposal Area

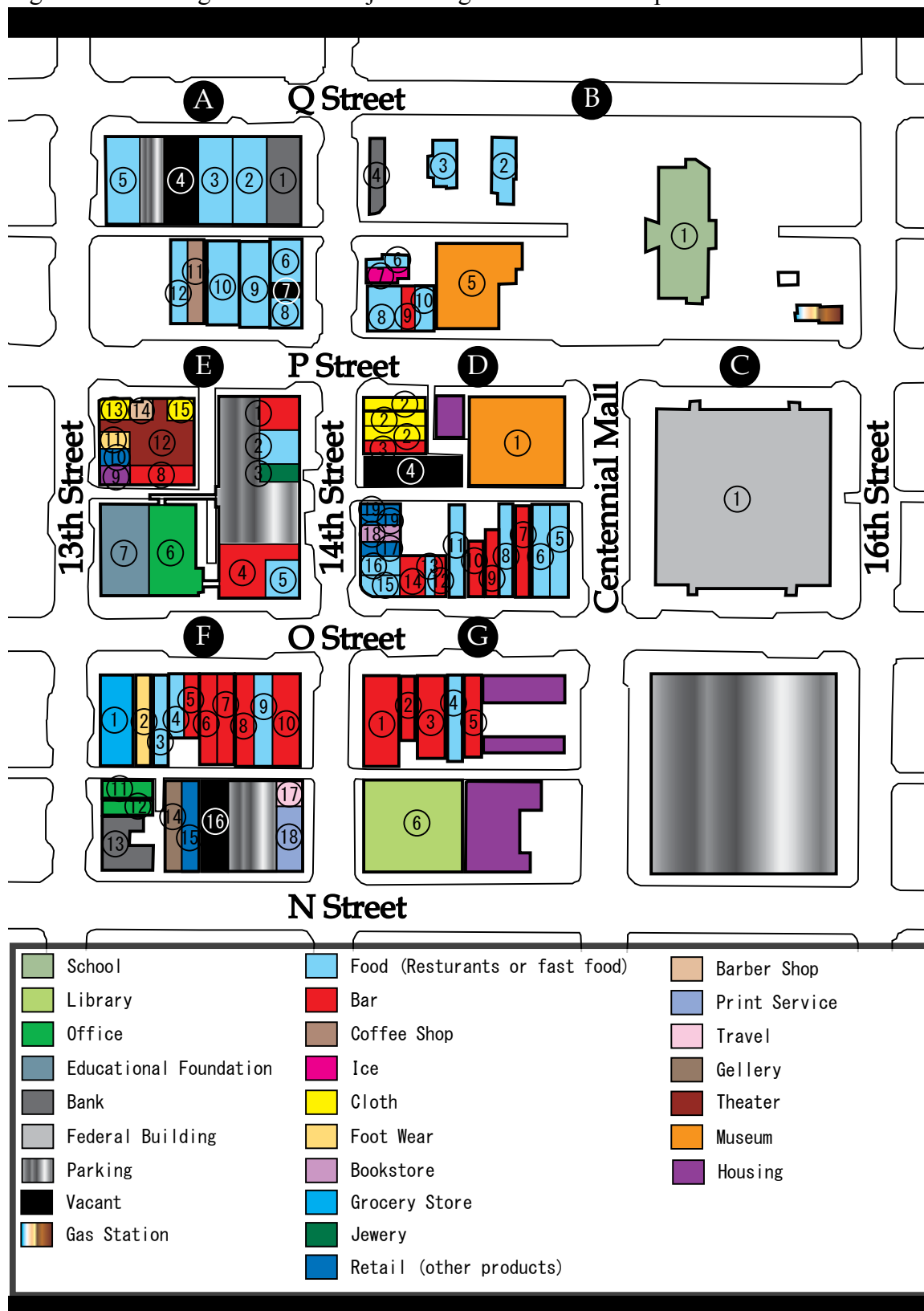


Figure 62: Building Uses in the Adjacent Eight Blocks and Proposal Area

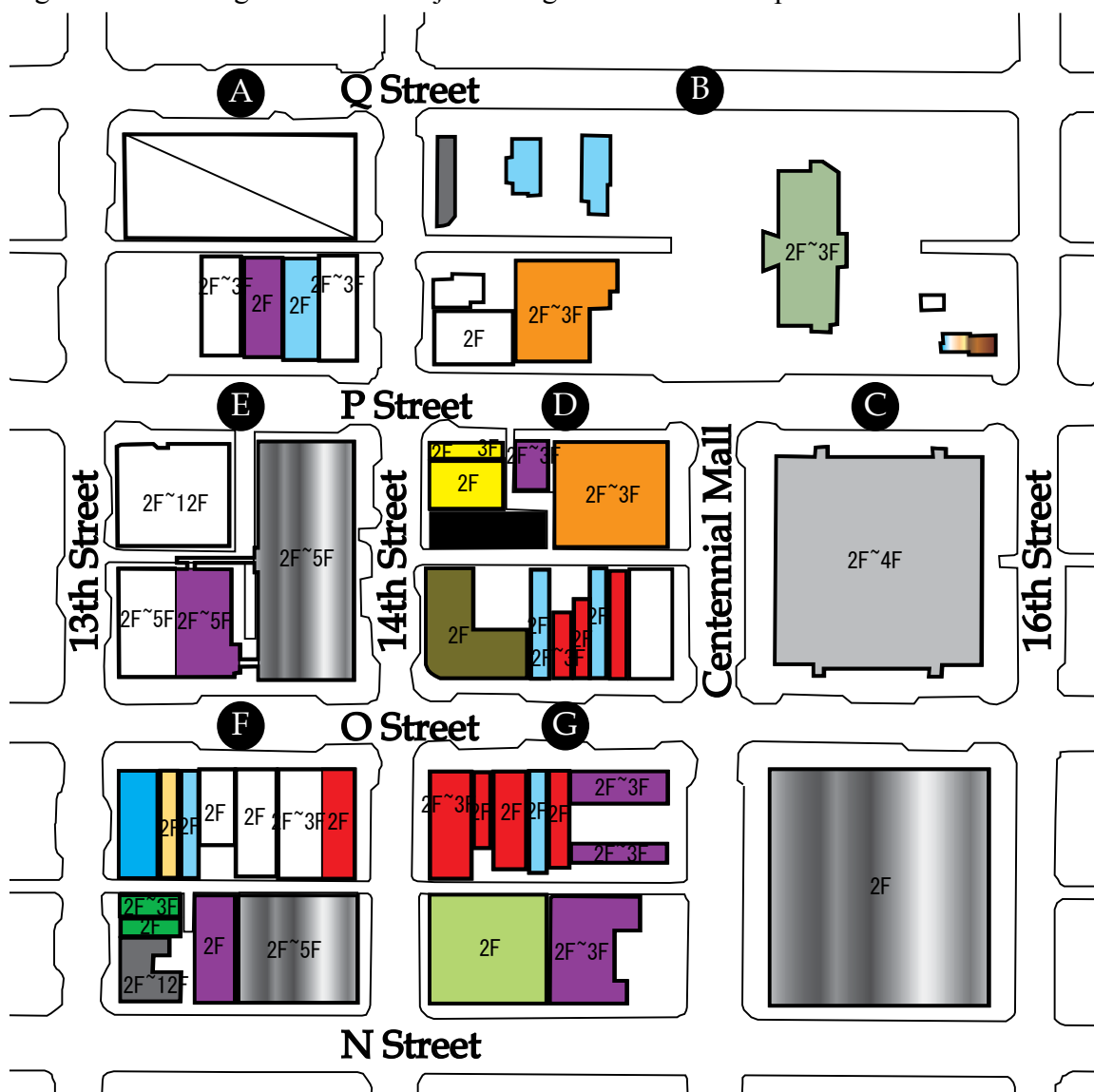


Figure 62 shows the building use in the adjacent eight blocks and proposal area. Between P Street and Q Street there are many foods services. Between O Street and P Street there is more variety and there are many small retail shops. O Street is mainly composed of bars; however, along P Street there is much more variety of retail. Between O Street and N Street there is also retail variety. N Street has fewer activities such as housing, library, and small offices. On the east side of Centennial Mall it is silent and much less activities take place there due to a federal parking facility and a campus building located in close proximity.

Figure 62: Building Uses in the Adjacent Eight Blocks and Proposal Area

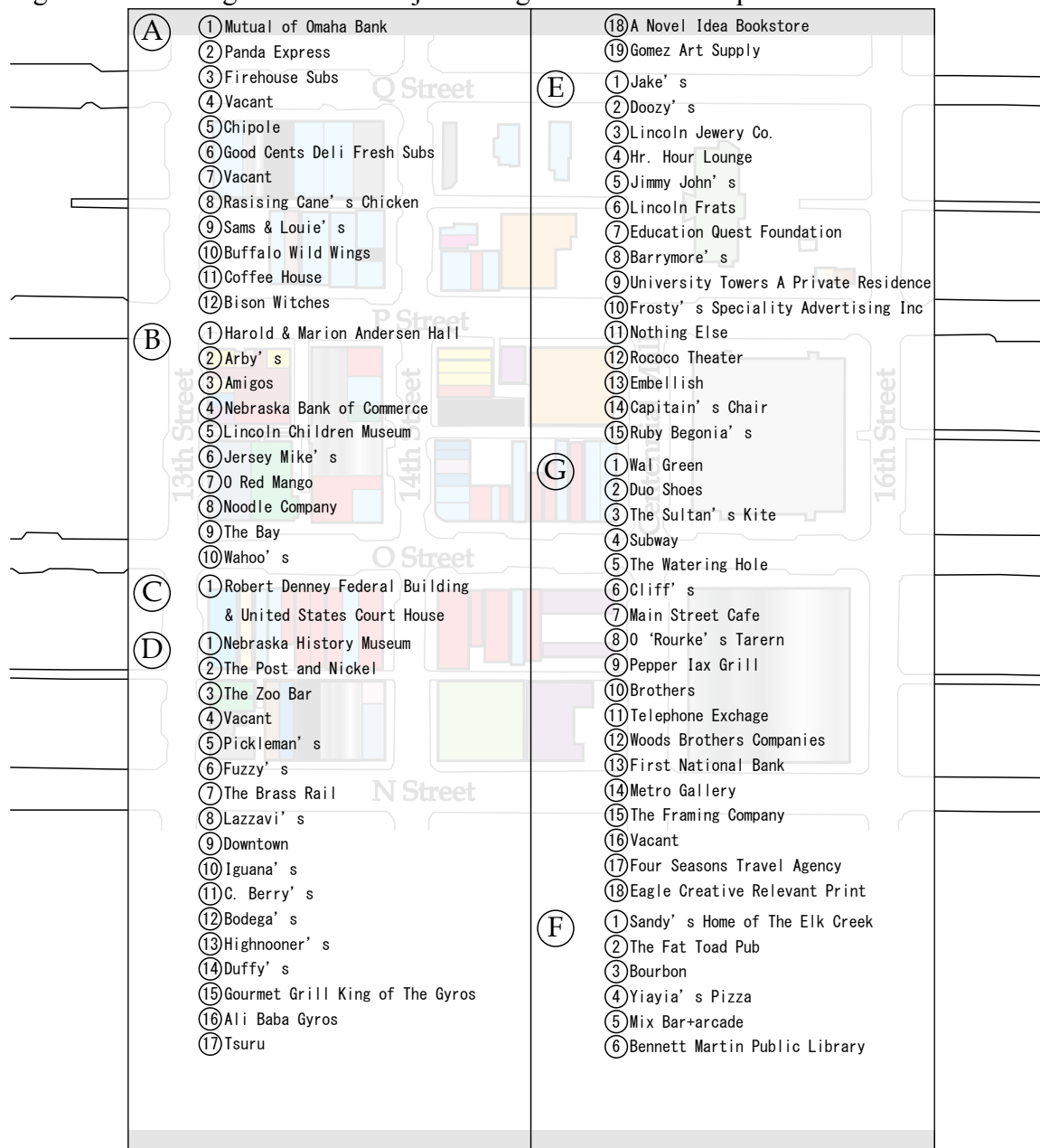
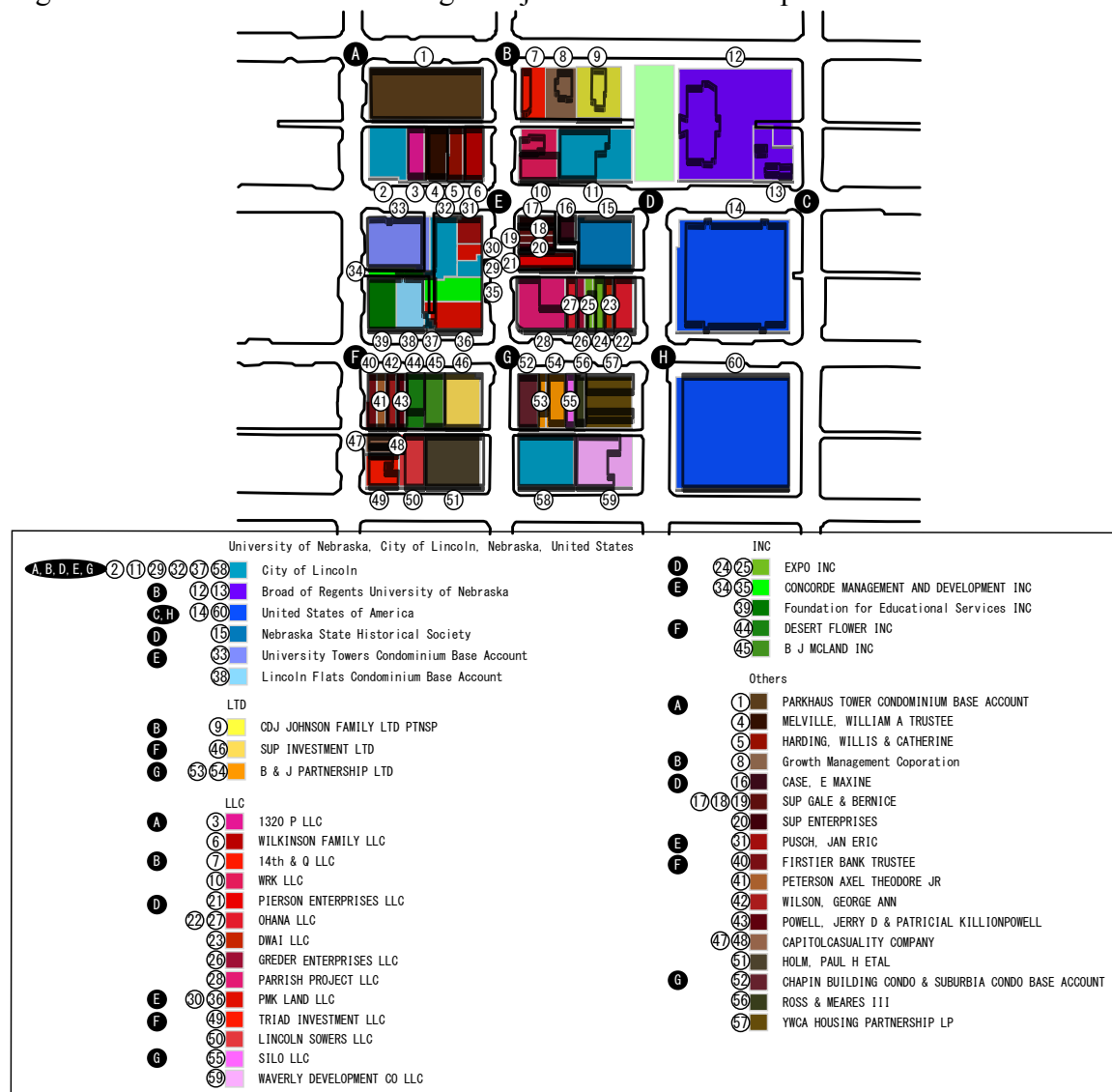


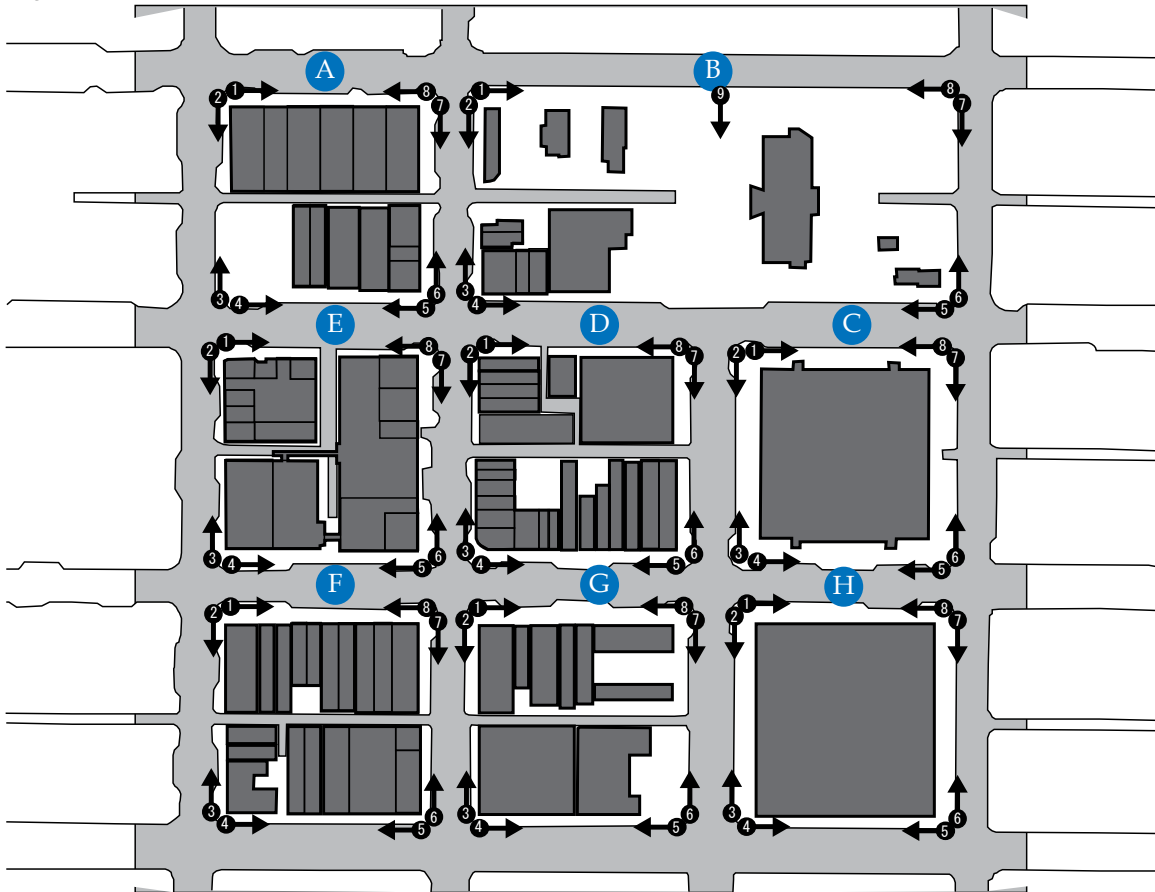
Figure 63: Parcel Owners in the Eight Adjacent Block and Proposal Area



Source: City of Lincoln

Who owns each parcel in the eight adjacent blocks and the proposal area are shown in Figure 63. Some companies own a few parcels, but it is basically diverse in ownership. The government also owns several parcels in the area. The east side has larger parcels due to public use and ownership by the Federal government or the University of Nebraska Lincoln. This means it could be difficult to bring consensus about the alley revitalization with all parcel owners. It might need some alternatives.

Figure 64: Street and Site View at the Edges of Each Block



The Figure 64 shows the views from each corner of blocks in the area. There are few canopies and few trees on the sidewalk and in the area. Some canopies do not completely cover the area, so it might not serve well as weather strips. Sidewalks adjacent to public buildings are likely to have clear views while others are more likely to be congested. There are not as many signs and benches on the sidewalks in the area. It seems like there are not many attractive areas and places for relaxation when viewed from the perspective of sidewalk corners. The proposal will take the condition of sidewalks into account because it will serve as alternative through ways for pedestrians.

Figure 64: Street and Site View at the Edges of Each Block

A



B



C



Figure 64: Street and Site View at the Edges of Each Block

D



E



F



Figure 64: Street and Site View at the Edges of Each Block

G



H



Figure 65: Entrance View of Each Alley in the Eight Adjacent Block and Proposal Area

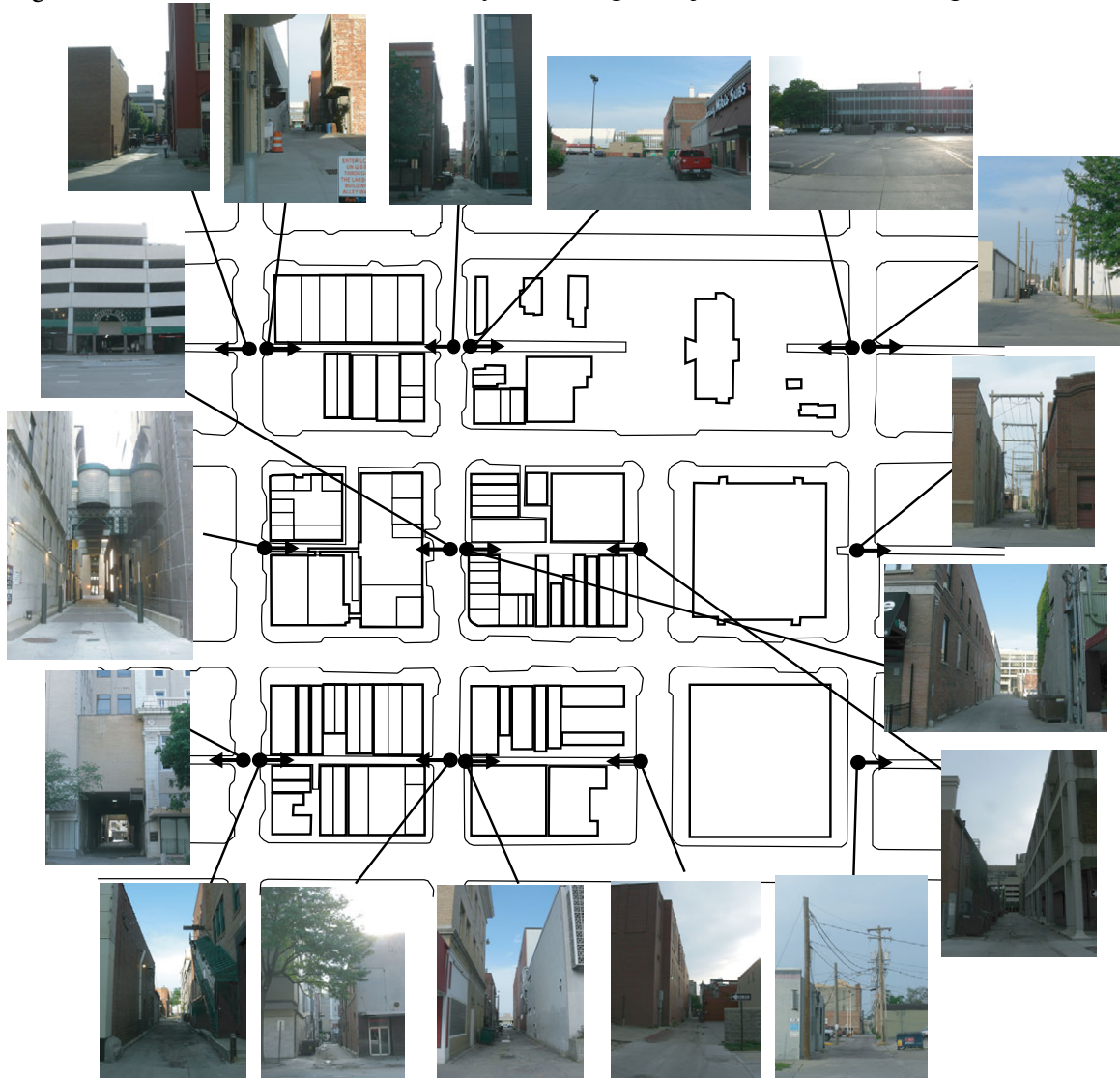
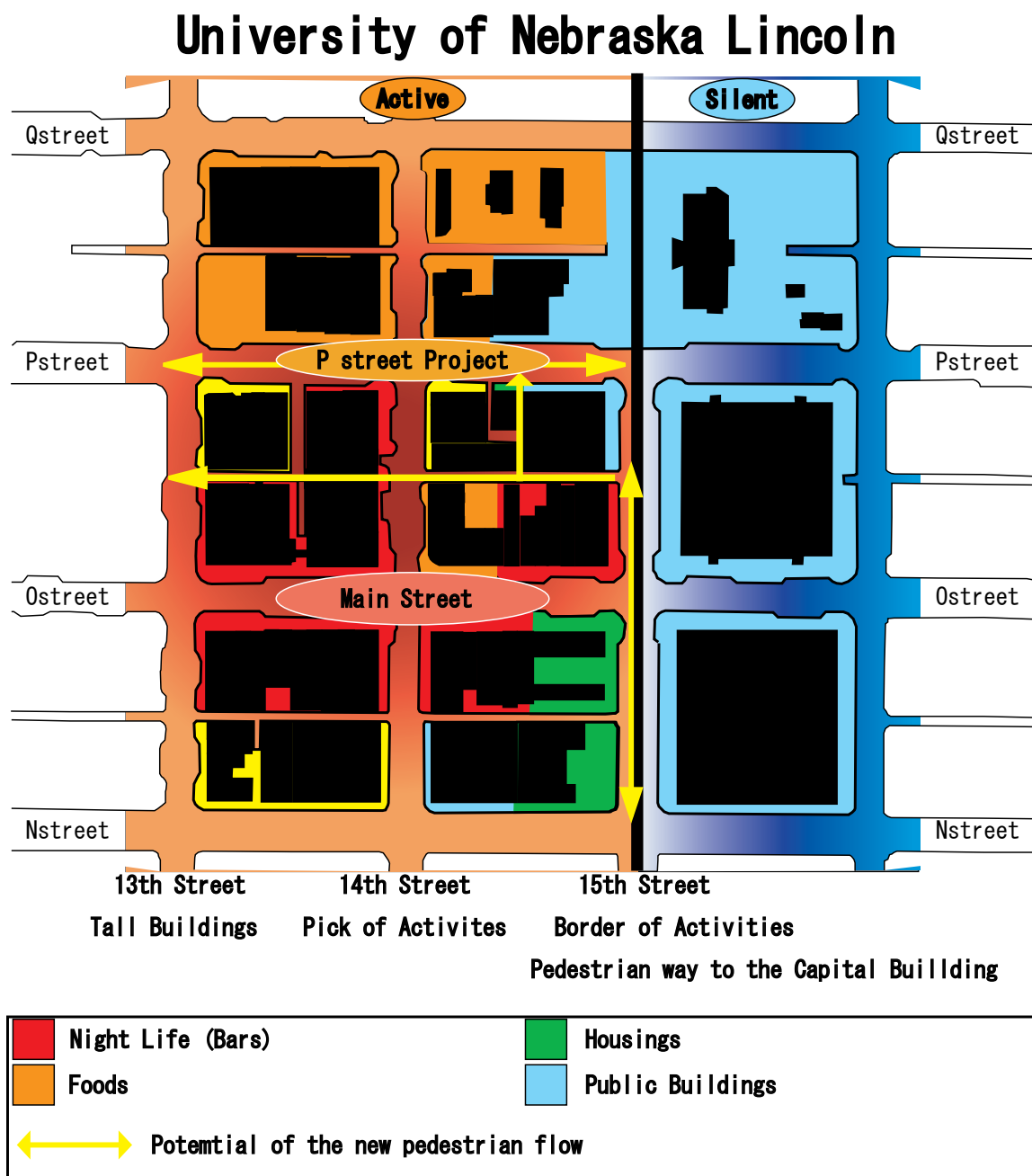


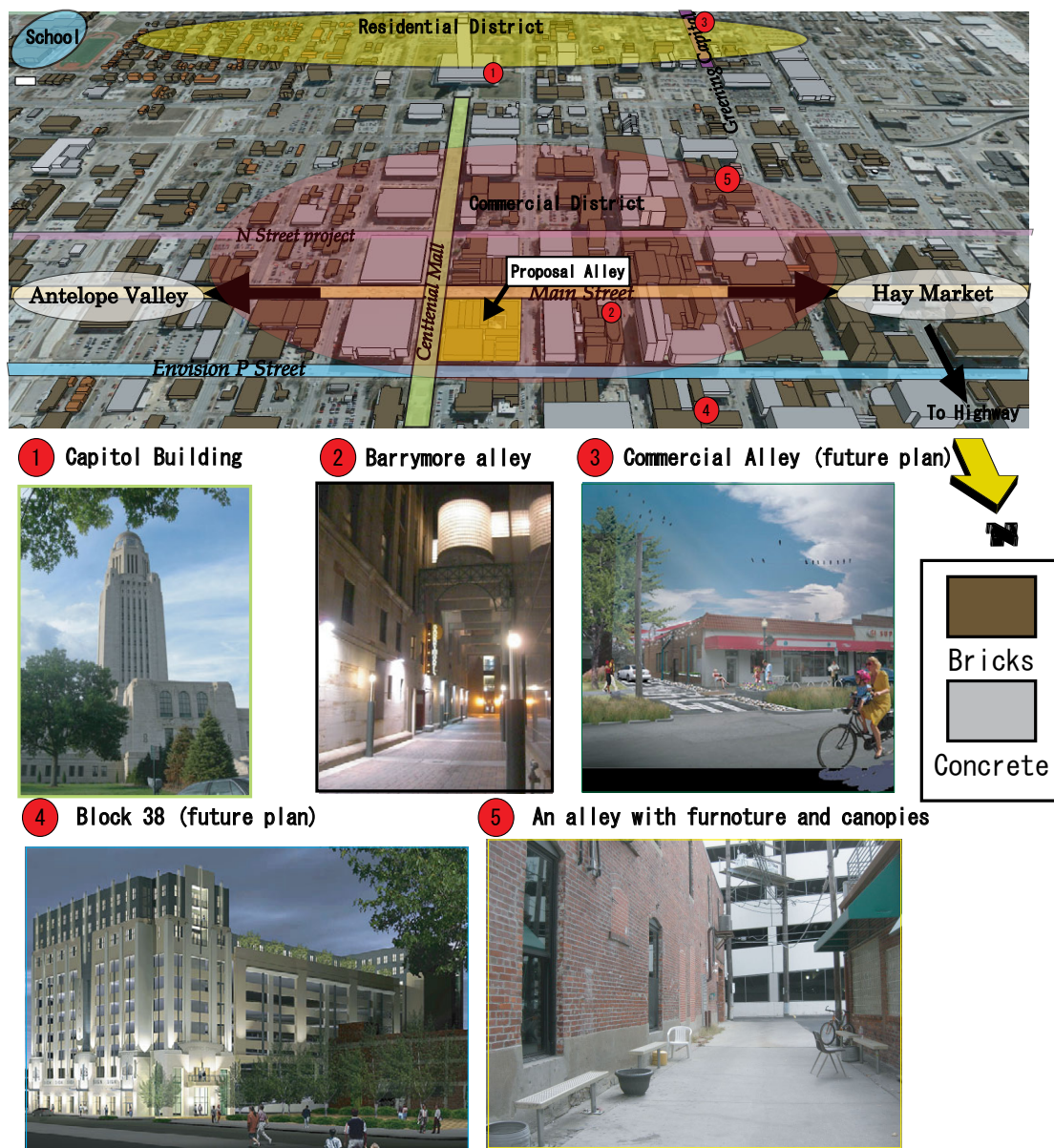
Figure 65 shows the entrance of each alley in the area. There is only one revitalized alley in the area, however, it is not completely connected. It is blocked by the parking to the east, so it is hard to see the alley from east side, even though there is a gate sign. How to make a connection with the already revitalized alley and the proposal alley could be important since it is adjacent. The alleys at the north side have comparatively better quality. This is evident in aspects such as better pavement and wider alleys. The alleys connected to 13th Street have higher adjacent buildings than 14th and 15th Streets.

Figure 66: Comprehensive Analysis of the Eight Adjacent Block and Proposal Area



The comprehensive analysis of the area is shown in Figure 66.

Figure 67: Comprehensive Analysis of Downtown Lincoln



2 and 5 are relatively better existing alleys in downtown Lincoln. Barrymore's has had a project for revitalization and there are an opening facade, many lights, and repavement, and drainages for the revitalization. 5 has furniture and canopies. There are low volume music played for 24 hours. These have made a good atmosphere at the alley to relax.

The comprehensive analysis of Downtown Lincoln is shown in Figure 67.

Chapter Six - Revitalization of Alley in Lincoln

Section 6.1: Key Elements

Invitation

Signs and Lights

The Melbourne's Laneways have considers signage as design features. One of the importance is the unification of its size and height. When urban design is considered, the unity is one of the important factors, which enhance the community and town beauty (Figure 68, Appendix D-23). The signs and lights, if unified, will give the area a sense of connection and unity.

View From Entrance

The view from the entrance will be important because it attracts people (Figure 68). It is also important to consider what can be seen from the entrance.

Decoration

Many alley projects include decoration because, of course, anything looks a little better when it's spruced up (Figure 68). Impressions can vary greatly depending on how the alley is decorated, so this must be considered with care.

Rain shelter

If it is a rainy day, rain shelter such as walls, canopies, parasols, and so forth would be a welcoming invitation into alleys. The proposal alley originally has the rain shelter such as the ground level of the Nebraska History Museum; alleys are naturally narrower and enclosed by buildings.

Trash removal/enclosure

It provides a better look for the alley and renders the current image of alleys obsolete. It also helps provide a better walking experience since there will be less obstacles. By putting enclosed trash areas at the East entrance, it allows trash-collecting vehicles to collect and pass through quickly since there is only access from one entrance. This also helps protect the alley from the smell of garbage.

Pavement and interesting facade

Providing sectional proportions for walking with interesting facades will attract pedestrians. Better pavement also allows handicapped people to access alleys and move through them more freely. The permeable pavement will work as water management and control the flow of trash. The certain materials for pavement also gives characteristics to alleys (Appendix D-11, Appendix D-12, Appendix D-21, Appendix D-22).

Store front and Sittable space

Store front provides the space for standing and chatting--and the canopies act as shelter from the rain. Achieving public spaces should provide spaces used for sitting and help keep pedestrians in the area (Whyte, 1980).

Protection

Restricted Vehicle Access

It allows pedestrians to walk around freely, sit comfortably, eat and relax because it provides safety and more choices of activities (Figure 68).

Traffic

It allows vehicle access from the East, which is less traffic volume.

Space restriction

It allows pedestrians to have more variety of activities.

Delight

Scale

Human scale alleys will be digestible for most pedestrians, so it should be kept.

N-S Orientation

It will provide a more pleasant experience to pedestrians such as enjoying sunshine (Whyte, 1980), and it will give opportunities for shade during hot summer days.

Figure 68: Key Elements

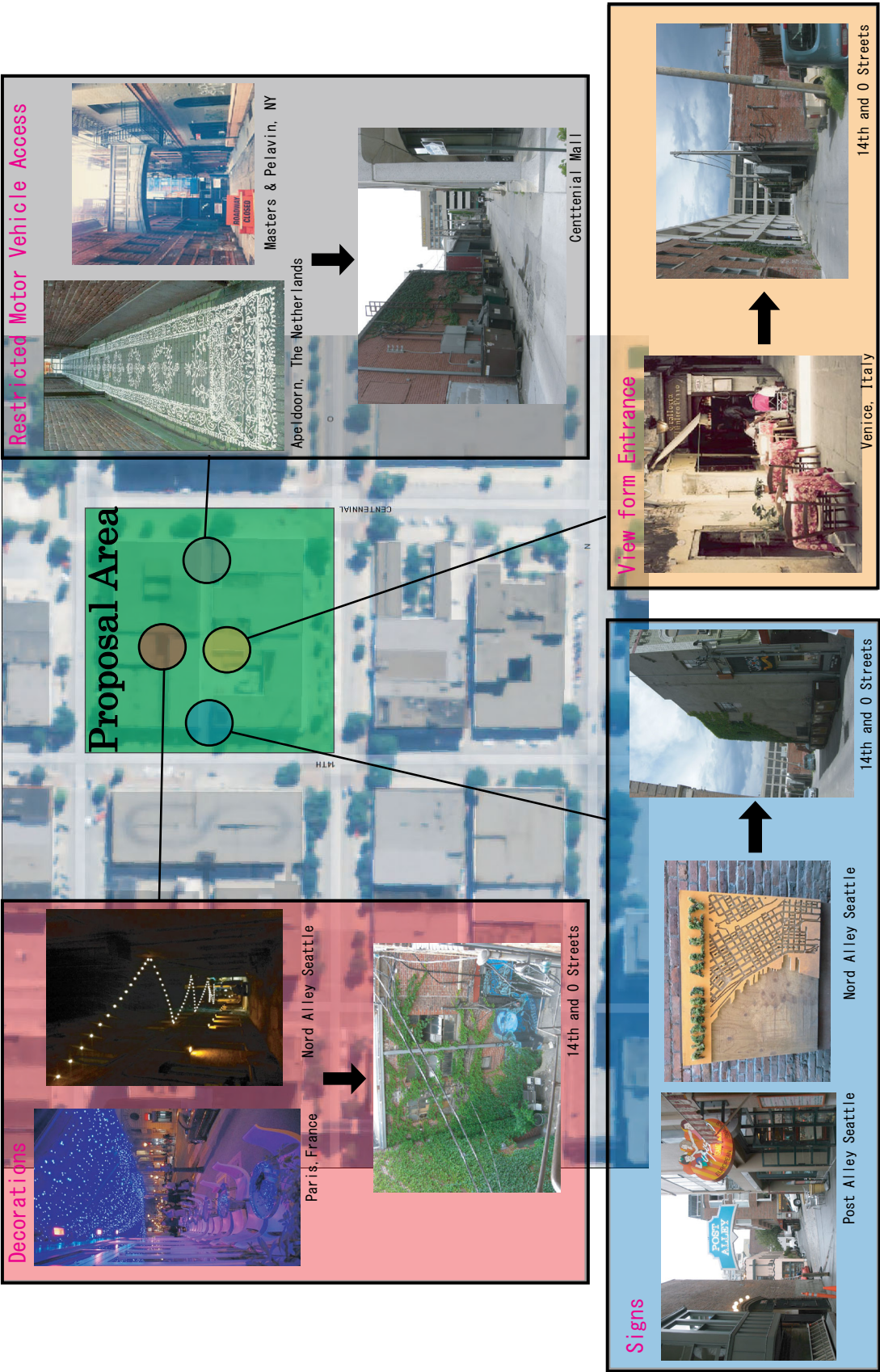
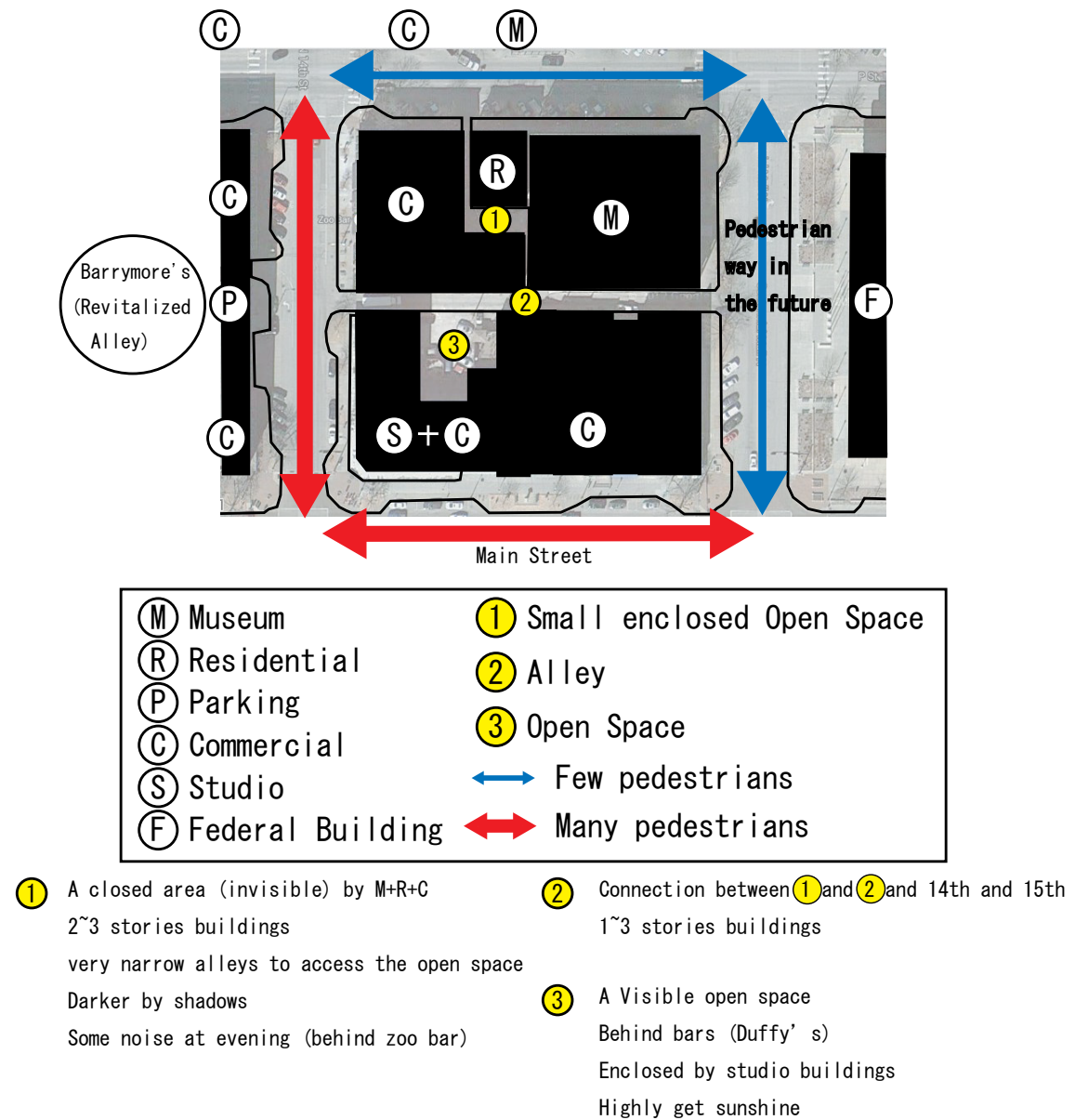


Figure 69: Comprehensive Analysis of the Proposal Area



The comprehensive analysis of the proposal area is shown in Figure 69.

Existing Condition of the Proposal Area

Figure 70: Existing Condition of the Proposal Area

**Entrance of the Alley
(From 14th Street)**



East side of Alley



**Entrance of the Alley
(From Centennial Mall)**



The Smaller Open Space



The Bigger Open Space



**Entrance of the Smaller
Open Space (From Alley)**



**Exit from the Smaller
Open Space (To D Street)**



**Entrance of the Smaller
Open Space (From D Street)**



Chapter Seven - Proposal

It is important to include diversity and attract different types of people to the downtown area. Since it is for the public, Economic development and the revitalization should be connected to citizens. The alley will work as the connections of areas, people, and activities.

Alternatives represent the potential of alley revitalization. Due to the need for a pedestrian friendly space and enhanced community, and also to create less damage on the alley, there are restrictions of vehicle access by movable bollards, gates, timeline, or change of alley materials. Therefore, vehicles are able to access only from the east, and this could extend 70 feet from the east edge of the alley. This scale is for delivery service, and therefore, makes the size of the truck a concern. Vehicle access from the west will be banned to provide free comfortable activities to pedestrians and to let people stay on the alley. The alley which Barrymore's is located and which is the only alley having been revitalized in Lincoln is located to the west side of the next block (Figure 64), and the adjacent street located to the west side of the alley is much more lively with more pedestrians and vehicles than the east side of alley (Figure 63, Figure 65, Figure 68). The Federal buildings, parking, and campus buildings are located to the east side of the adjacent block (Figure 62, Figure 64, Figure 66). There are no alleys at the east side of the adjacent blocks, so there is no hope for alley revitalization at the east and stimulus connection to another alley on the east side (Figure 65). Therefore, the west side of the alleys has more potential to be more vital and visible. To connect the Barrymore's alley and the proposal alley, there will be a series of revitalized alleys, which will enhance connectivity and degree of attention.

Any alternative should represent its characteristics due to it is initiative. Therefore, it needs to demonstrate possibility and impress people. Identity is the one of the most feasible strategies and it helps alleys to remain in their memory. These alternatives

also include naming.

Since it is an initiative alley revitalization project, it is important to have a clear purpose of revitalization and to be remained in their memory.

It gives a lot of choices of places to relax such as chairs, steps, and benches. It is important for people to stay comfortable in a public space. The alley will be the place where people escape from the cities and relax.

Clark found amenities are significant factors to improve local economic growth; “Clark (2003) identifies four types of amenities. These include: (1) natural physical amenities like climate, humidity, temperature, water access, and overall natural attractiveness, (2) constructed amenities ranging from ‘big’ institutions like research libraries, museums, and opera house to ‘small’ films like bookstores, juice bars, specialty grocery stores, and coffee shops, (3) socio-economic composition and diversity, and (4) values and attitudes of residents” (Steinmann, 2009, 17).

When the alley revitalization project is planned, these types of amenities are needed to be considered to make amenities function well.

Shim and Chong (2004) had a laneway housing project in Toronto at the University of Toronto, and it suggests that Toronto needs to have sustainable development and extensive alley networks with existing infrastructure (Brigitte Shim, Donald Chong, 2004). Shim and Chong (2004) also asked students to seek different potentials of Toronto’s laneway systems (Brigitte Shim, Donald Chong, 2004). The grid is very simple in Downtown Lincoln. However, the form of alleys at the proposal area is not as simple as others in Downtown Lincoln. It will more reminiscent of a maze-like complicated grid pattern, such as alleys in Japan and Europe. In addition, there are small spaces enclosed by buildings. There will be more of a variety of strategies for revitalizing the alley than other alleys in Lincoln because of its uniqueness.

Section 7.1: Alternatives1: Asian Block (Asian Retails Alley)

Alleys should be locally connected because of their scale, location, and function. Therefore, the new community space in Downtown Lincoln could be one of the ways to revitalize the area.

The first alternative is Asian Block, which creates a block size of Asian town. The alternative came about because of demographics, existing Asian communities, observation of Asian downtown activity, and case study. Case study (Appendix B, Appendix C-3, Section 4.2) represents commercial districts likely to have retail in alleys.

Demographics and Observation of Asian Downtown Activity

Alleys in Asian cities are likely used for retail because Asian cities are very populated, and small retail will help to use urban lands effectively. Steinmann (2009) says “the support of new condominium and townhome development throughout the downtown area has been one of the main reasons why new commercial-retail development has become increasingly attractive” (Steinmann, 2009, 15). The Lincoln population growth is much higher than the national average and state average. Since the population in Lincoln has been growing so quickly, the commercial district should be more attractive to the people. Having retail at the alley in downtown Lincoln could be a possibility.

Because of such a quick population growth in Lincoln, the city of Lincoln’s Comprehensive plan has tried to put the certain number of residents in Downtown area (LPLan 2040, Lincoln Metropolitan Planning Organization, 2011), causing the necessity for more retail. Steinmann (2009) also mentions “the development of new residential units throughout the downtown area has forced the City and the Agency to focus on new residential service-oriented retail” (Steinmann, 2009, 15) and new service-oriented retail could be available to a diverse group of people. “residential service-oriented retail are

needed, not only to support existing residential levels, but also to help make continued residential development attractive to potential developers and potential future residents” (Steinmann, 2009, 15). For instance, one of the problems for Asian students in Lincoln is that many Asian students do not have a car because the tuition is considerably higher than those with in-state tuition, and they only plan on staying for a short period of time. Therefore, they have trouble with grocery shopping since there are no markets near or on the University of Nebraska Lincoln campus. If the oriental markets are located near the University, not only would Asian students but also many other students and workers would be able to come buy groceries.

The Figure 71 shows the density of each race in Lancaster County. Asian and African American density is higher at around the center of downtown. In contrast, white population density is higher at the suburban areas, and these races’ population has grown quickly. Therefore, there will be more African American and Asian population in the future. Since African American culture has a larger population and many of them have grown up here, there may be certain communities. However, many of the Asians temporarily visit Lincoln due to school being here. Therefore, it could be harder to organize certain community places even though there is such a high population growth and Asians are the third biggest population race in Lincoln; in addition, Asians are concentrated around the University of Nebraska Lincoln which is a few blocks away from O street and adjacent to commercial areas where African American are spotted. Therefore, commercial areas could be a good place for creating a place for Asian community. Asian population in Lancaster County is only 3.5 percent of whole population (Figure 71), however, Asian population in census tract 7 is 30.74 percent of whole population. Asian population in census tract 4, 9, 10.2, 17, 18 is about seven to nine percent of the whole population, and the Asian population in census tract 6, 8 is almost five percent of the whole population (Appendix A-7, Figure 71, Figure 72).

According to Appendix A-11, the highest Asian population in Lancaster County is

20 to 29 which is students and young professionals, and these are the age group likely to go to downtown. Despite Asians living near downtown and their age contribution, most Asians do not go to downtown often; especially, they do not enjoy night life in downtown Lincoln. Since the map shows more diversity of population in the downtown area, the ethnic communities need to be considered.

Existing Asian Communities

Lincoln has lacked in opportunities of coming in touch with foreign culture because of such a huge majority of white people. However, it does not mean that people in Lincoln have not been interested in foreign culture. If there is any certain place showing foreign culture such as China town or Korean town, some people in Lincoln may be willing to experience it. In addition, according to Steinmann (2009), “tourists today want to enjoy and take in cultural and artistic events through museums, galleries, and even local events that showcase local area culture” (Steinmann, 2009), and the artistic tourism is growing rapidly (Steinmann, 2009).

Case Study

According to the case study, commercial districts are likely to choose retail alley types of revitalization. The proposal area could be ideal area to have retail-development. For example, The city of Reno has its own;

“in a 2005 study conducted by the Reno Redevelopment Agency, it was estimated that the combined one year annual retail buying power of these three institutions was approximately \$1.0 billion. Given the proximity of two major employers and the University of Nevada, Reno to the downtown, this area is an ideal location for a concentration of restaurants, nightclubs, and taverns designed to attract

employees, visitors, and college students” (Steinmann, 2009, 20).

According to Steinmann, “just completing and building a retail project is usually not enough to ensure that a commercial-retail led revitalization strategies will be successful. In order to attract new commercial-retail to a declining urban central city core, communities must first increase the number of potential shoppers through either new residential development or new tourism development” (Steinmann, 2009, 20).

The city of Reno had looked for new forms of commercial-retail development, looking ‘outside the box’ toward the incorporation of new artistic, entertainment, and cultural centers throughout the downtown Reno area in an attempt to revitalize the downtown’s commercial-retail base. Alley has the potential to be the outside the box in Lincoln.

Since there are two huge stadiums, and one of them in Haymarket was relatively new, the tourism in the area will be expected to increase. Since there may be more tourists, the downtown should have more variety of entertainment and should provide a good downtown experience. The event area, the retail area, and the vendor area will increase more variety of the downtown experience. Steinmann found “entertainment-oriented commercial-retail development has helped not only to enhance the ‘downtown experience’, but has also helped generate additional investment throughout the downtown area” (Steinmann, 2009, 17). There have already been some small existing boutiques such as Tsuru, Gomez Art Supply, A Novel Idea Bookstore, and The Post and Nickel (Figure 62), and there will be more boutiques providing Asian products, and these boutiques will give downtown more characteristics. Steinmann says “retailers and national retail chains, specialty and boutique retail is what gives a downtown its special character and charm” (Steinmann, 2009, 19).

One of the problems of the alley revitalization in Lincoln is that there is no organization conducting the maintenance. Therefore, having retails at alleys could be beneficial since these retail owners may carry out maintenance because it could be one of their

concern. Since there are retails and more activities there, the city also may pay attention and implement maintenance projects there.

Therefore, retail-development in the area may have many benefits. It also promotes safety as well because of eye on the alley, better visibility, and more lights.

Figure 71: Percentage of Each Race in Lancaster County Based on 2010 Census data

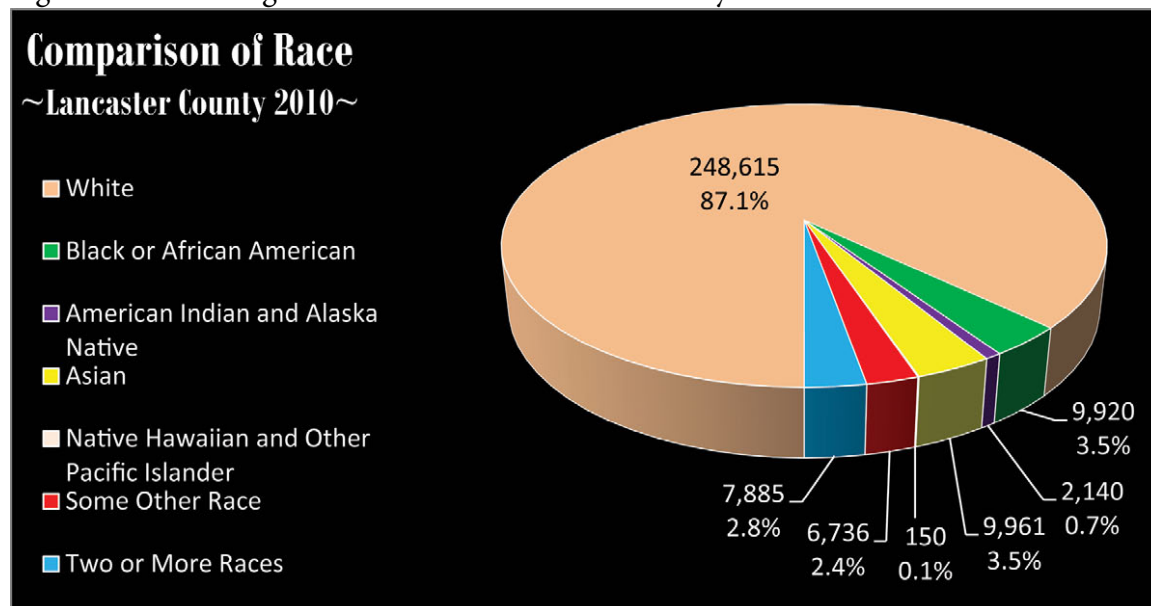


Figure 72: Lincoln and Lancaster County 2010 Census Tracts and Asian Concentration

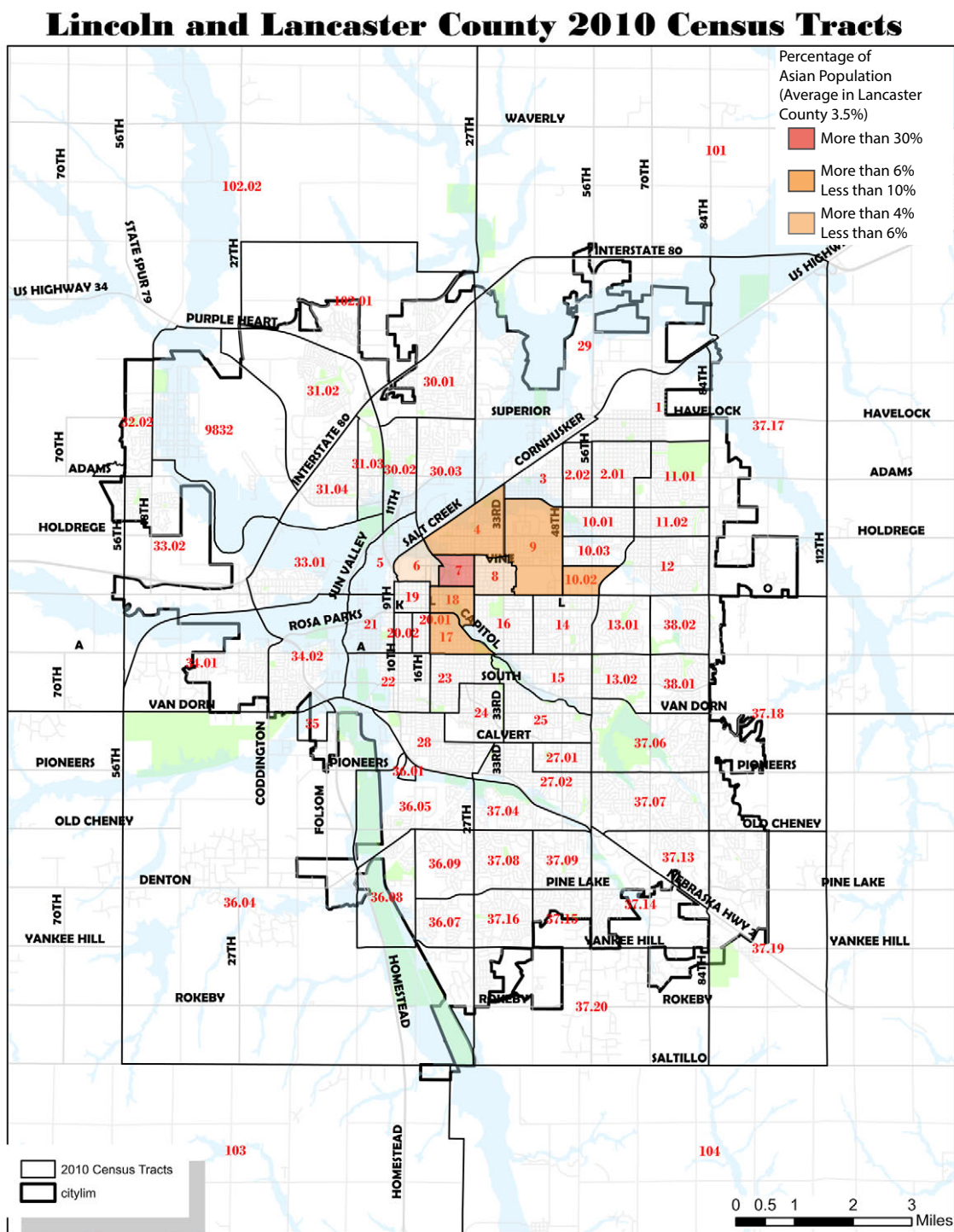


Figure 73: Site Analysis and Proposal Idea (Asian Block)

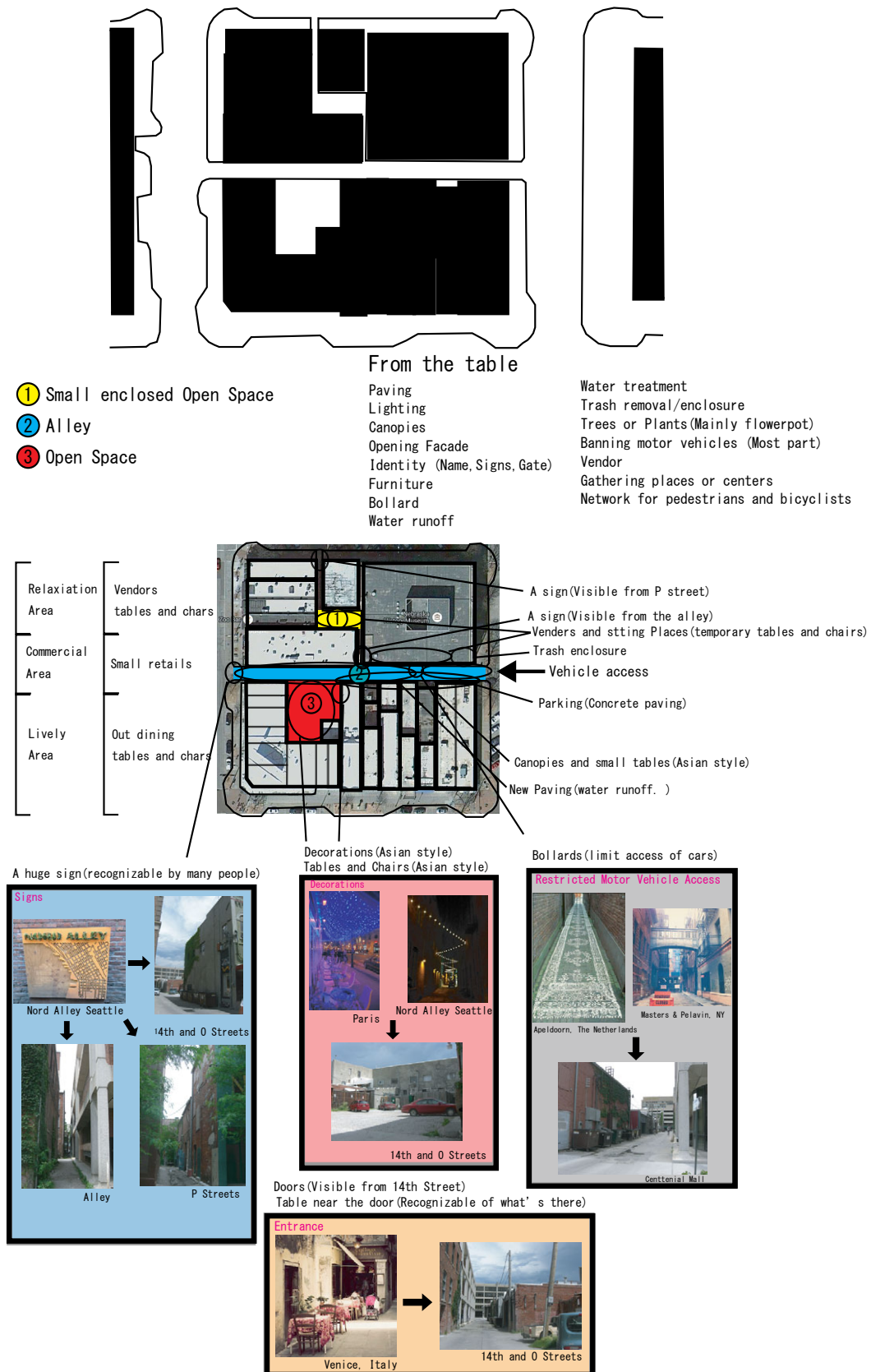
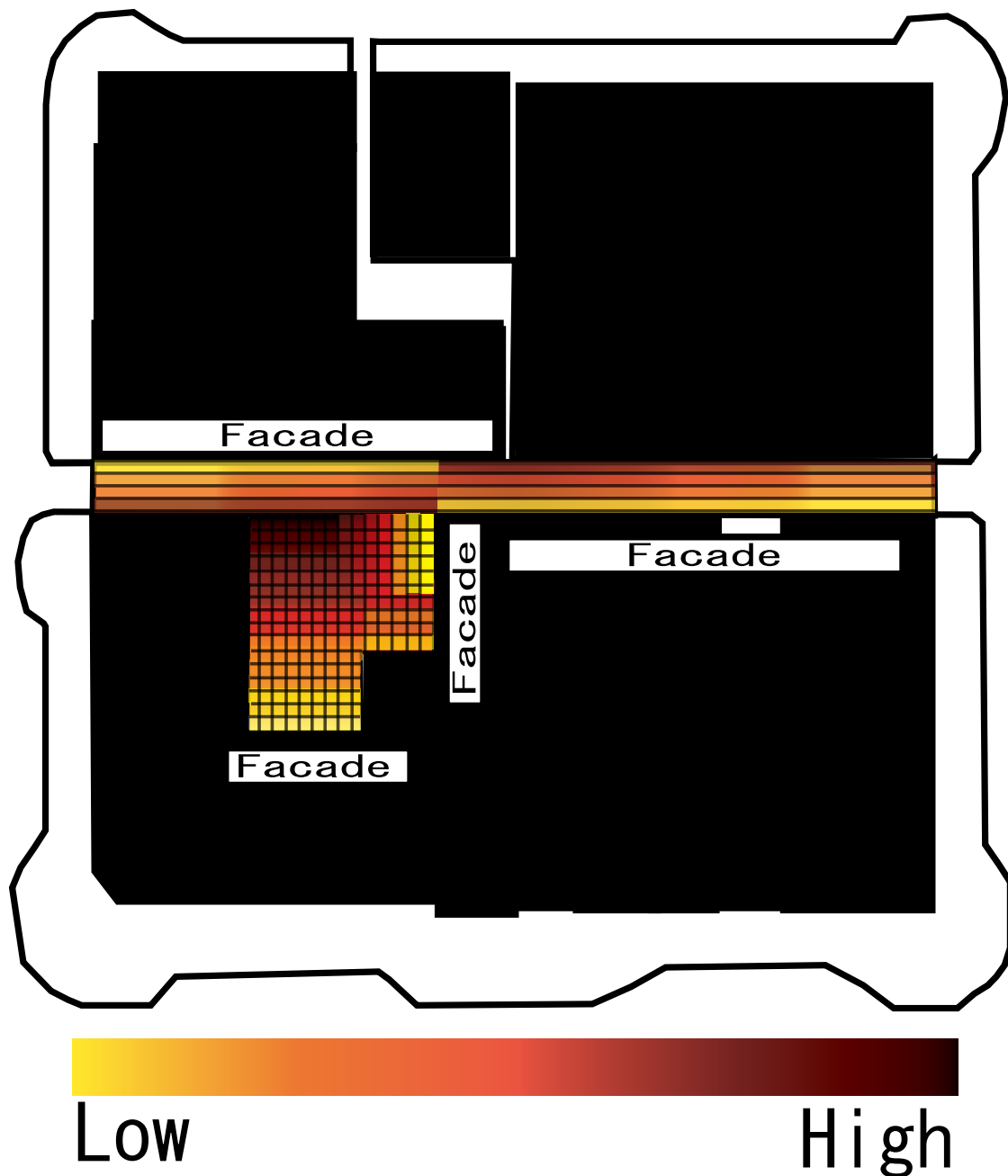


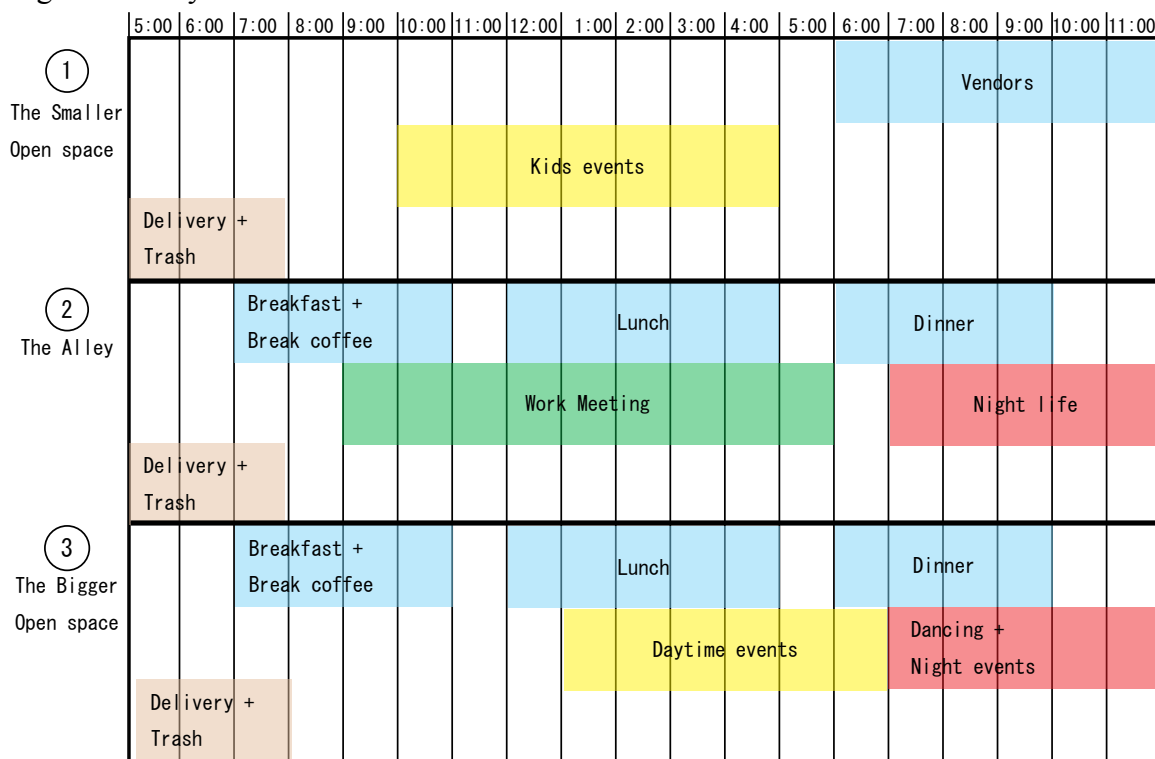
Figure 74: Public Space Fees



One of the issues here is how public space could contribute to private business. The solution should be beneficial to both enterprises and the city. Since alleys in Lincoln are usually used for delivery services and trash, it may give enterprises a cheaper price. There is a study for changing public policies to encourage the private businesses in Venice, Italy. Carrera, Novello, and Gallo say that the balance of private and public sphere

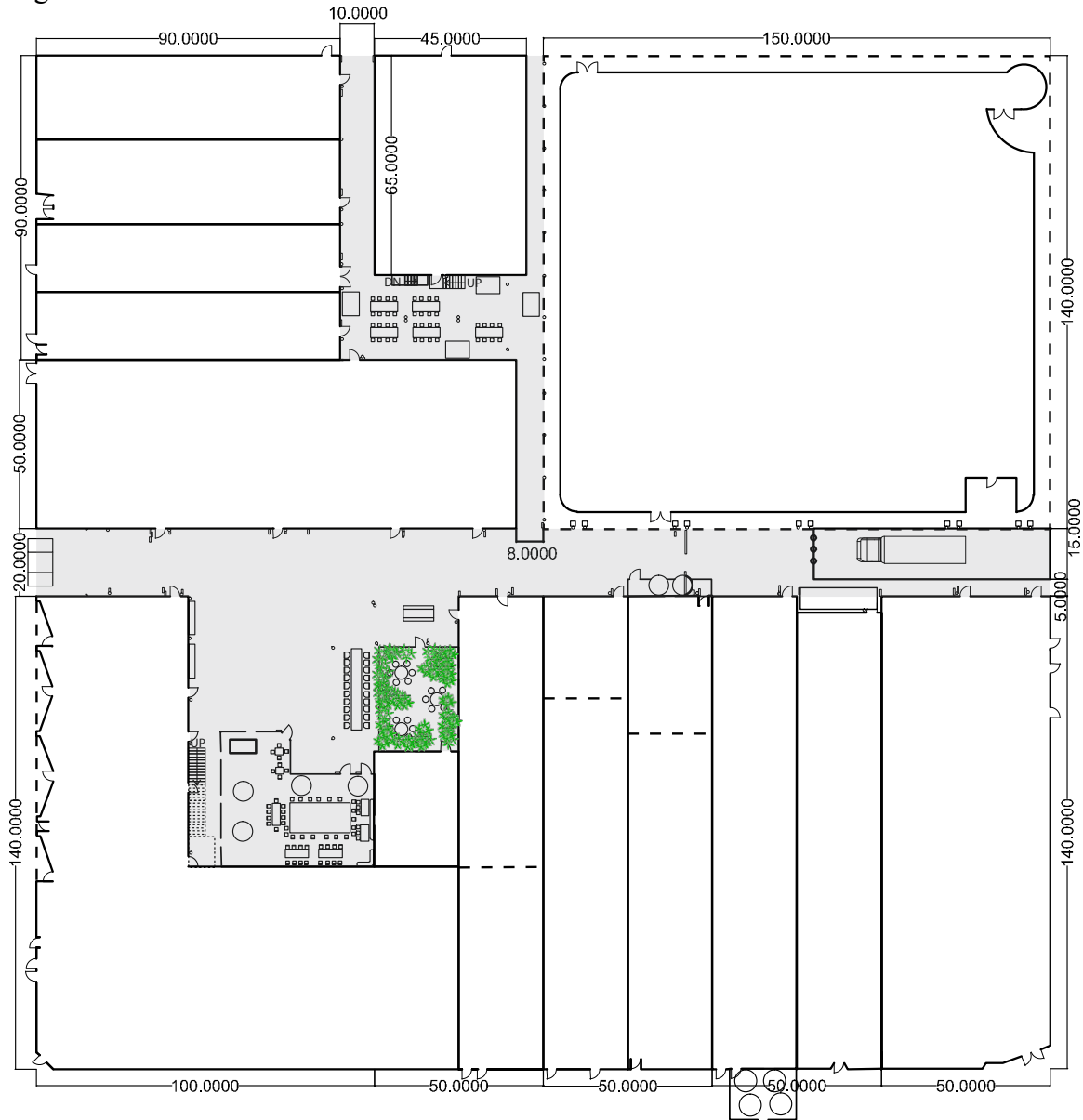
are delicate and sensitive (Carrera, Fabio, Andrea Novello, Alberto Gallo, 2008). The study suggests to rent the public space for enterprises and decide the price according to the distance from the facade (Carrera, Fabio, Andrea Novello, Alberto Gallo, 2008). Since these alternatives are going to encourage new Asian enterprise of retails, they could have outdoor use. Since the father space from the facade will require higher tax, the center of the open space could be open (Figure 74). Therefore, there will be potential to have another activity at the center of the open space.

Figure 75: Day in the Asian Block



The time schedule was made to control vehicle access (Figure 75). The delivery and trash trucks need to access the alley only in the morning. So, it's easier to control. The time schedule also gives the image of how the alley is used for the entirety of a day. The basic idea is that the alley will be occupied by pedestrians' activities. By separating the activities and areas, it shows the multitude of possibilities. The commuting time, events time, night activities time, and meal time were considered to make achievable public space. This showed that the alley could be used for a diverse group of people.

Figure 76: Ground Plan of Asian Block



These mixed-use buildings may attract different types of people: Steinmann (2009) Also mentions that mixed-use and single-use make “attractive entertainment, cultural, and specialty boutique retail choices for area residents, while also creating a vibrant night life complete with independent nightclubs, restaurants, and taverns”

Figure 77: The Details of Ground Plan (Asian Block); Smaller Open Space

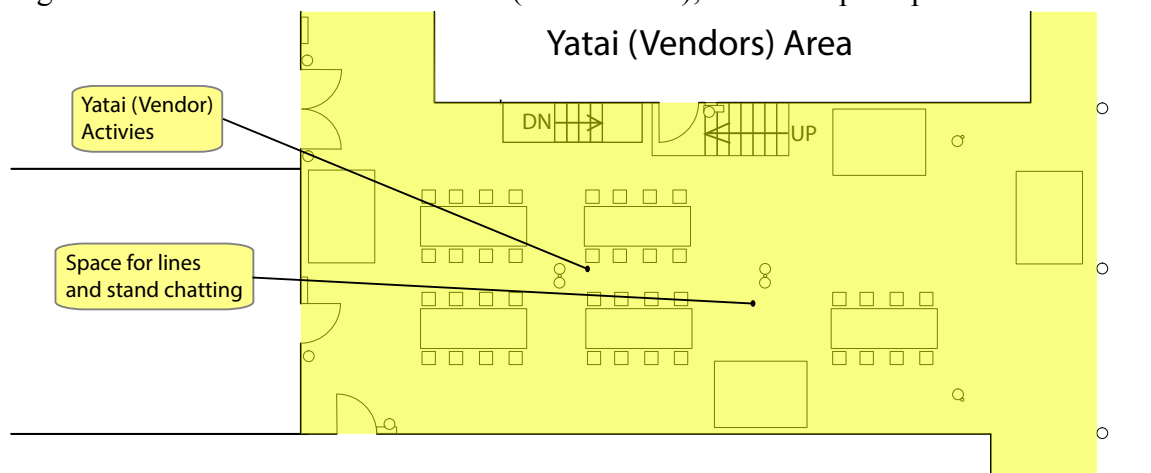


Figure 78: The Details of Ground Plan (Asian Block); Alley

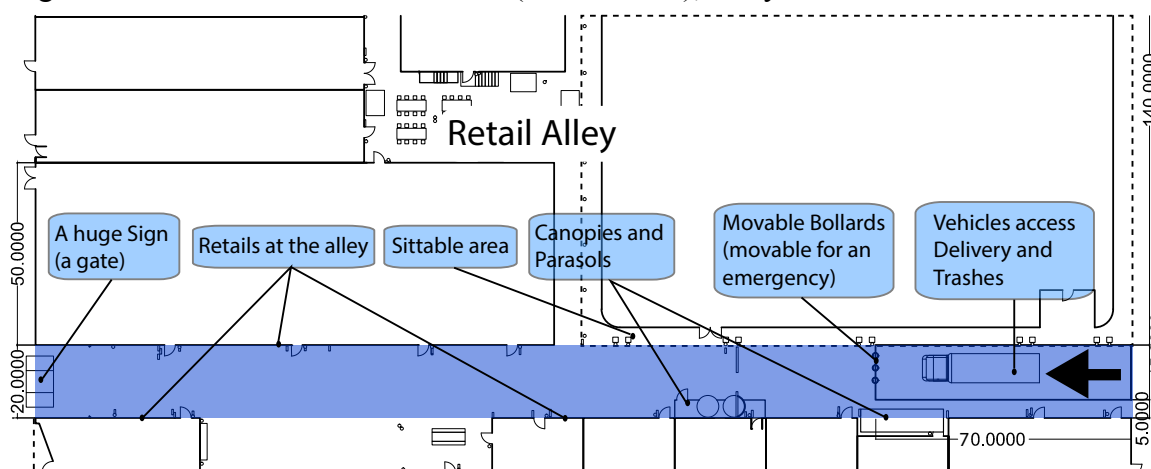


Figure 79: The Details of Ground Plan (Asian Block); Bigger Open Space

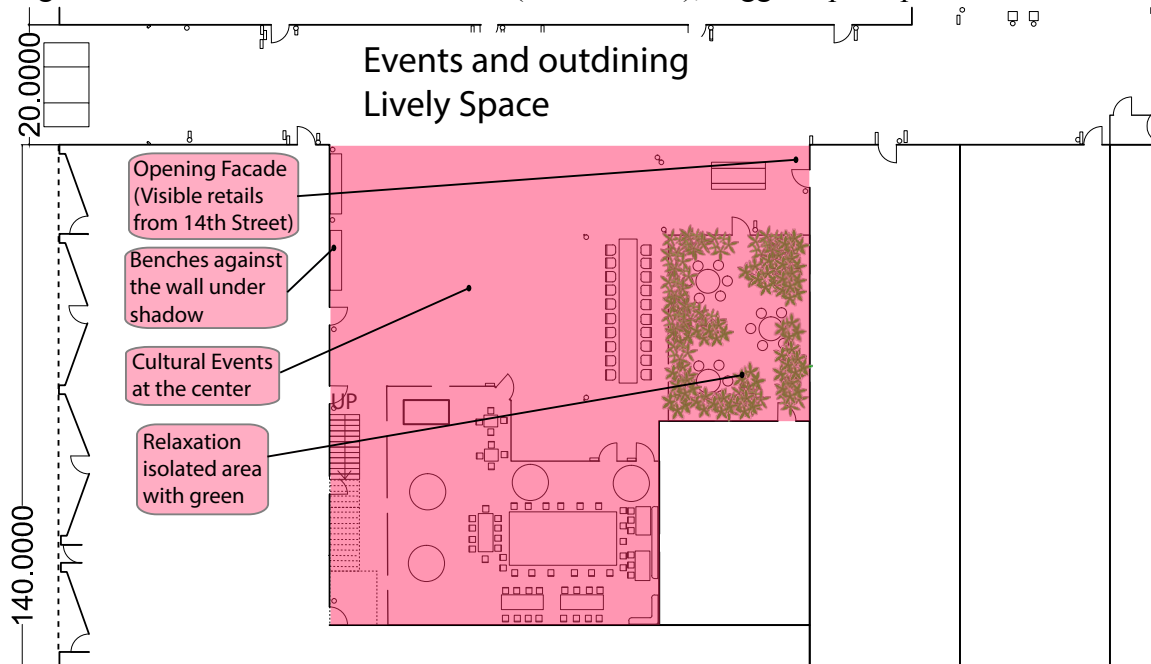


Figure 80: Cross Section of the Asian Block

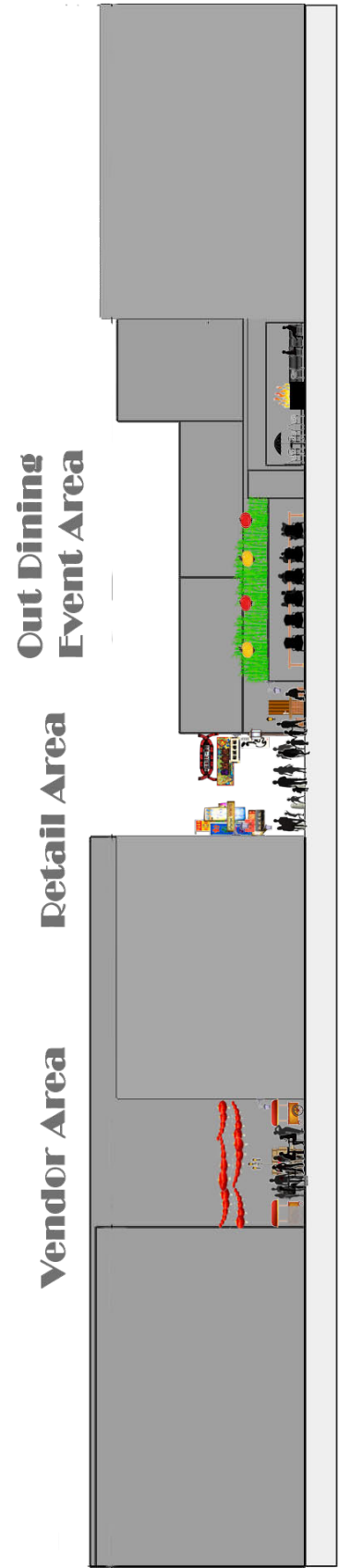


Figure 81: Impact of Huge Gate from 14th Street (at North-west Corner of the block)



Figure 82: Impact of Huge Gate from 14th Street (at West of the block)



Figure 83: Impact of Huge Gate from 14th Street (at South-west Corner of the block)



A huge gate (Figure 81, Figure 82, Figure 83) would get more pedestrians' attention, and it will face another gate located in the front of the park connecting Barrymore Alley (Figure 62, Figure 65, Figure 66, Figure 67). So, it may also work as a connection

to the Barrymore Alley.

Asian retails will be there little by little. A coffee shop, nuVibe, in the adjacent building of the Zoo bar was out of business and it is now new retail. In that way, there will be Asian retails if a business there becomes out of business, and there will be many new Asian retails eventually. This project would involve the City of Lincoln, a variety of different agencies, organizations, and private developers (Steinmann, 2009).

To enhance Asian communities and attract people into the alleys, the bigger open space will have some events. There is some furniture around the east edge of the open space and adjacent of the bar, Iguana, and Asian decorations in the air above the open space. Therefore, the event will be conducted at the center of the open space.

Venders provide food, and also function as social functions (Whyte, 1980). The smaller space provides spaces for talking, relaxing, and eating. It will function as a lively social space. There will be a few group size tables and chairs and these will be surrounded by vendors.

Figure 84: Existing Condition of the Alley; View from 14th Street)



Figure 85: Proposal for the Alley (Asian Block); View From 14th Street



Figure 86: Existing Condition of the Bigger Open Space



Figure 87: Proposal for the Bigger Open Space (Asian Block)



Figure 88: Existing Condition of the Smaller Open Space (Asian Block)



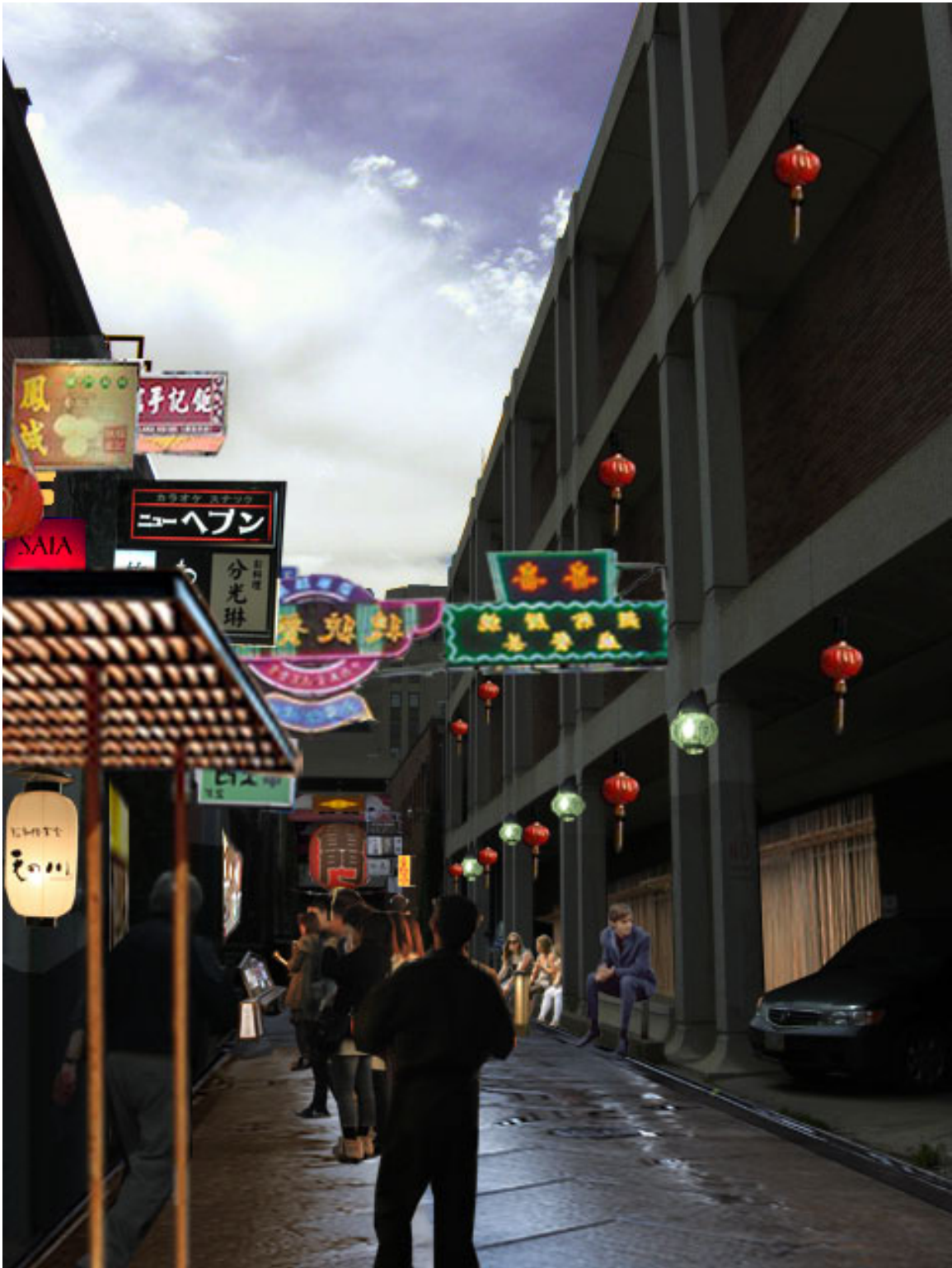
Figure 89: Proposal for the Smaller Open Space



Figure 90: Existing Condition of the Alley; View from Centtential Mall



Figure 91: Proposal for the Alley (Asian Block); View from Centtenial Mall



Section 6.2: Alternatives2: Lincoln Alley (Art Alley)

Nishimura (2006) mentions an alley in Taiwan. The alley became not streets, but instead an open space by setting a stage. Nishimura says that it is possible to use alleys as an open space by providing uniqueness that differs from daily life. So alleys could be the place where people not only pass through but where they also stay and relax (Nishimura, 2006, 22).

This alternative is based on how much Lincoln has put an effort on the activation of art in Downtown Lincoln such as art council activities, Downtown association activities, the concentration of public art (Figure 94), and the alley location--adjacent to the studio (Figure 62, Figure 94, Figure 95). It is also based on the case study.

Location and Art Activities in Downtown Lincoln

One of the characteristics of the proposal area is art. Figure 94 shows the art activities in the downtown area. There are three lively areas of art, the Haymarket, art zone which is 12th street, and the proposal area. The proposal area has the museum, Nebraska History museum, in the block, and the Children's museum, in the adjacent block. The proposal area also has a studio in the block, therefore, there are already existing art activities, but with little exposure. Public space is one of the most suitable places for art because it is available to anybody, so art in public space is conspicuous.

There is a studio in the block at the proposal area. The studio is located on the second floor. The studio is directly connected to the bigger open space by a door and stairs. Therefore, the art alley alternative could provide more extension of their activities and it may create a stronger relation between the studio and the alley.

Case Study

Commercial districts sometimes collaborate with art-type alley revitalization strategies to attract pedestrians. Even though there are projects which only utilize art types of revitalization strategies, and only put some art work into the alley, it will have a huge change such as Kimber Lane (Appendix B). Art as abstruse benefits, being that art attracts people to the area, it contributes to economic development, and “artistic activity produces is a return to the region as a whole on past investments” (Steinmann, 2009, 16).

Successful events in the Downtown area may help attract people to it. Events create a vibrant Downtown life. Successful events also aid in economic development. In the city of Reno, “successful events sponsored by the Reno Riverwalk Merchant’s Association is a monthly ‘wine walk’ where visitors can purchase a map and a wine glass for \$20”, and the event successfully brings back residents in other areas on a monthly basis and provides tourists a recreational event (Steinmann, 2009, 19), and the event successfully brings back residents in other areas on a monthly basis and provides tourists a Many other cities also hold local events. The event is locally connected to residents and will be important due to the creation of local characteristics. For example, the city of Sydney has many local events (Figure 92, Figure 93).

Artists who would like to show their works need to pay tax, and the tax depends on the seasons. The price would be higher, and during the semester season in the summer would be even more expensive. However, the price of tax will be cheaper during the winter vacation because it is cooler and students in

Figure 92: A Local Event in Sydney



Source: City of Sydney

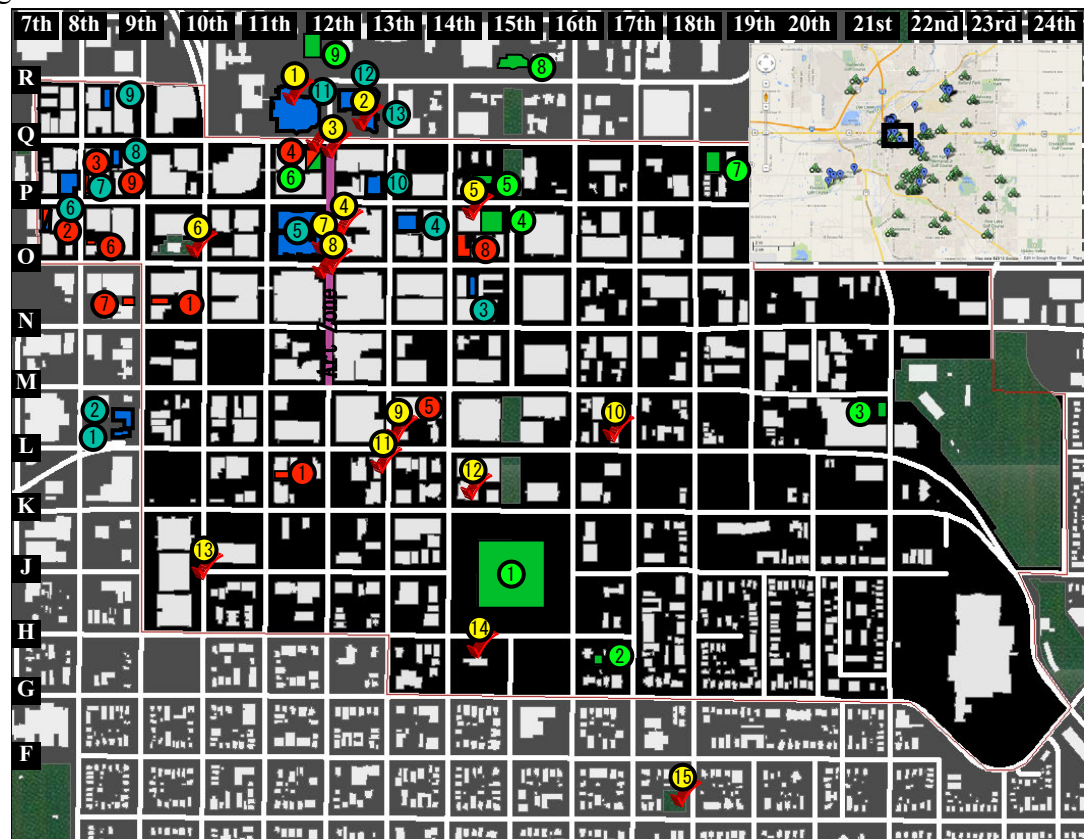
Figure 93: A Local Art Event in Sydney



Source: Art & About Sydney

Lincoln are likely to go back to their home for Christmas and New year. It goes the same for local musicians. To have events or concert there, they need to pay tax.

Figure 94: Lincoln Public Art



Public Art

- ① A Bicycle Built for Tunes
- ② Turn Notebook
- ③ On the Trail of Discovery
- ④ Crusin
- ⑤ Good Morning Sun, Good Night Moon
- ⑥ Acklie Fountain
- ⑦ Mosaicycle
- ⑧ 12th St. Art Zone Skywalk
- ⑨ Color Wheel
- ⑩ As One
- ⑪ Cycle/Lution
- ⑫ Placemark 71
- ⑬ The Rail Joiner
- ⑭ On the Trail of Evolution
- ⑮ Baroque Cherub

Museums

- ① Nebraska State Capitol
- ② Thomas P Kennard House
- ③ Frank H Woods Telephone Museum
- ④ Nebraska History Museum
- ⑤ Lincoln Children's Museum
- ⑥ Great Plains Art Museum
- ⑦ Lincoln Fire & Rescue Museum
- ⑧ Nebraska State Historical Society
- ⑨ Sheldon Museum of Art

Art Galleries

- ① 52' s Star City Bead Shop
Gallery 9
Kornbluh Design
Prairie Mile Tileworks
- ② Alan R. Smith-Photography
Albert & Karyn Maxey
Anne Goddard
Bobby Sward-Art Studio
Bonnie Sittig
Burkholder Art Studio & Galleries
Connie Backus Yoder
Ed Millican
Elizabeth Rieke
- ③ Larry Roots Studio
- ④ Lentz Center for Asian Culture
- ⑤ Live Yes Studios
- ⑥ Michael Forsberg Gallery
- ⑦ Noyes Art Gallery
- ⑧ Parrish Studios
- ⑨ Pleasant View Art

Performing Arts

- ① Nebraska Jazz Orchestra
- ② Arts Incorporated
Lincoln Midwest Ballet Co.
- ③ The Bourbon Theatre
- ④ Rococo Theatre
- ⑤ Marcus Lincoln Grand Cinema
- ⑥ TADA Theatre
- ⑦ Meadowlark Music Festival
- ⑧ The Haymarket Theatre
- ⑨ The Delray Ballroom
- ⑩ Douglas Theatre Co
- ⑪ Lied Center for Performing Arts
- ⑫ Nebraska Repertory Theatre
Johnny Carson School of Theatre and Film
Temple/Howell Theatre
Theatrix
- ⑬ Mary Riepma Ross Media Arts Center

Figure 94: Lincoln Public Art

① A Bicycle Built for Tunes



③ On the Trail of Discovery



⑤ Good Morning Sun, Good Night Moon



⑦ Mosaicycle



② Turn Notebook



④ Crusin



⑥ Acklie Fountain



Figure 94: Lincoln Public Art

⑧ 12th St. Art Zone Skywalk



⑩ As One



⑪ Cycle/Lution



⑭ On the Trail of Evolution



⑨ Color Wheel



⑬ The Rail Joiner



⑮ Baroque Cherub



Source: Lincoln Art Council, Google Map, and Field Study

Figure 95: Site Analysis and Proposal Idea (Lincoln Alley)

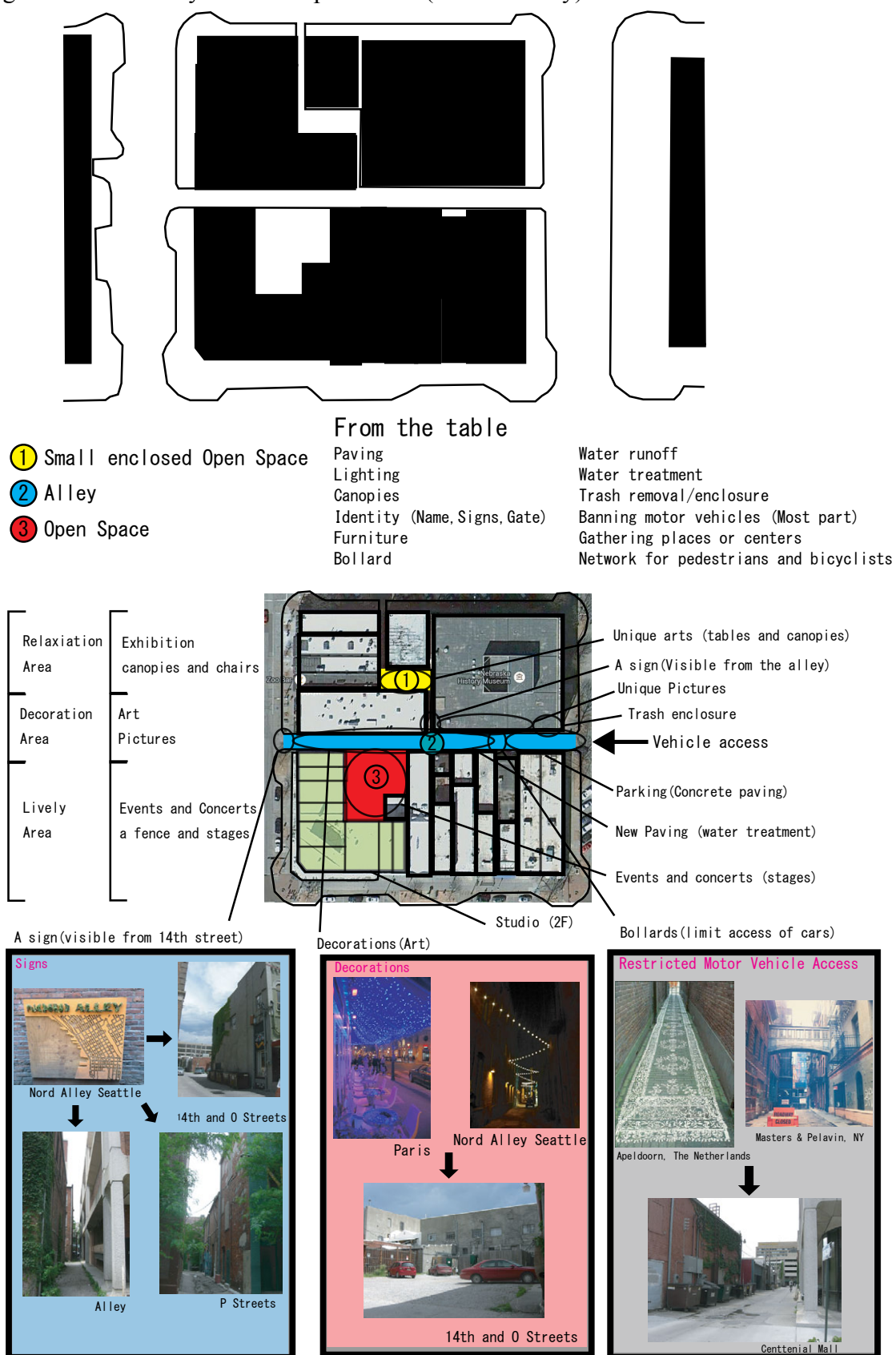
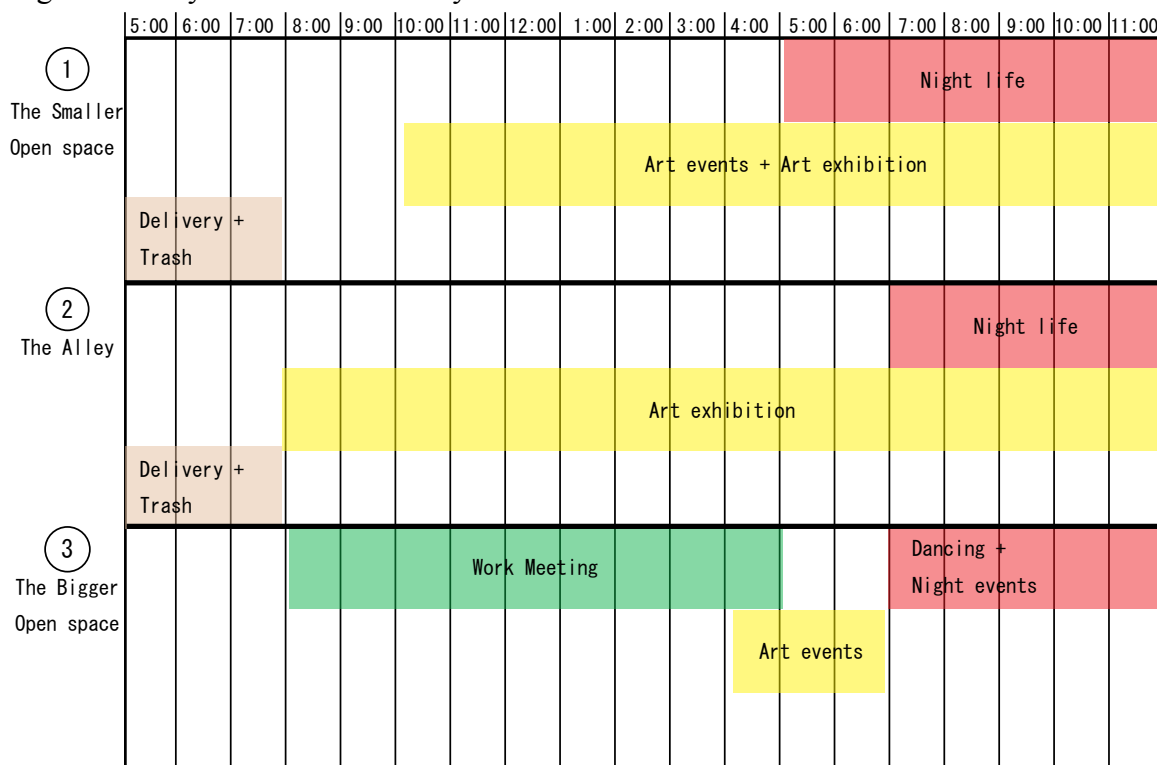


Figure 96: Day in the Lincoln Alley



Time schedule controls vehicle access (Figure 96), and the time schedule shows the possibility of the alley as a public amenity by considering who could use each space. The schedule could provide the alley with a plethora of human activity.

There was an event at the open space adjacent to the alley (Figure 97, Figure 98). The local band, University Contest played their music on the open space (Figure 103, Figure 107, Figure 108). One of the members of the band works at Duffy's and the owner of Duffy's owned the block. The existing fence for Duffy's was broken down (Figure 100, Figure 106, Figure 109, Figure 110), and a new temporary fence was established (Figure 99). To get inside of the fence, there was a cover and its price was five dollars. In spite of its price, there were many people that came and enjoyed the music. The stage was settled at the North east edge of the open space (Figure 107, Figure 108). There were also temporary liquor section and DJ booth (Figure 101, Figure 104 Figure 110). Since the existing fence was temporarily broken down at night, Duffy's and the open space was connected and it was almost like the expansion of Duffy's for live performance. It was a successful event and it shows the potential of open spaces for night life.

Figure 97: The Entrance of Event

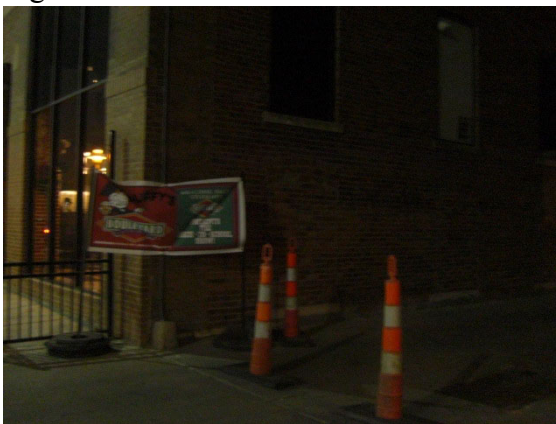


Figure 98: The Sign of the Event



Figure 99: Temporary Fence



Figure 100: Decorations at the Event

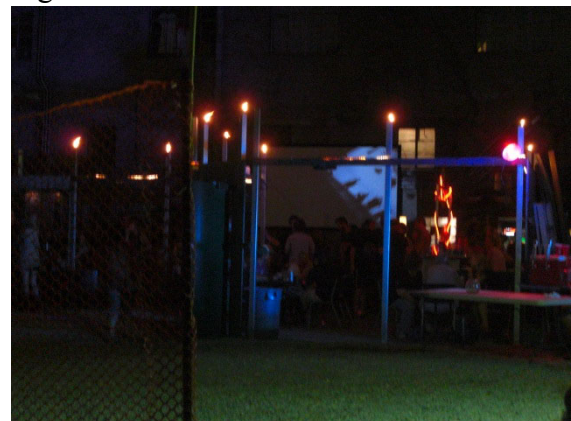


Figure 101: Temporary Liquor Section

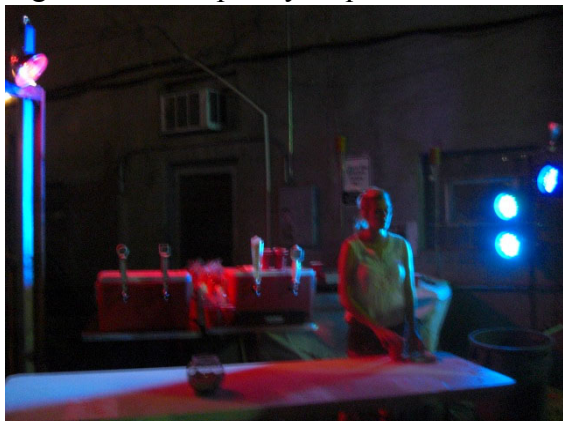


Figure 102: People at the Event



Figure 103: Temporary Stage



Figure 104: Temporary DJ Booth



Figure 105: Huge Screen at the Duffy's

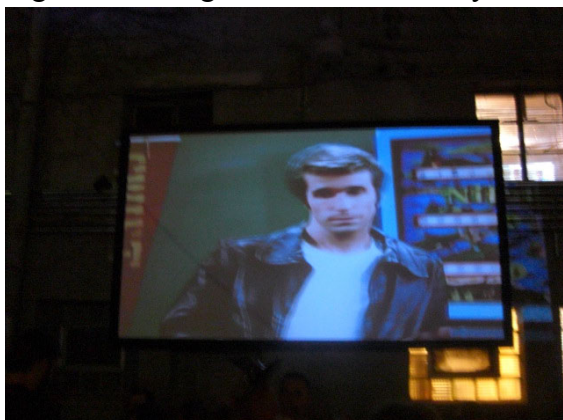


Figure 106: Decorations and People



Figure 107: Performance at the Event



Figure 108: Temporary Lights

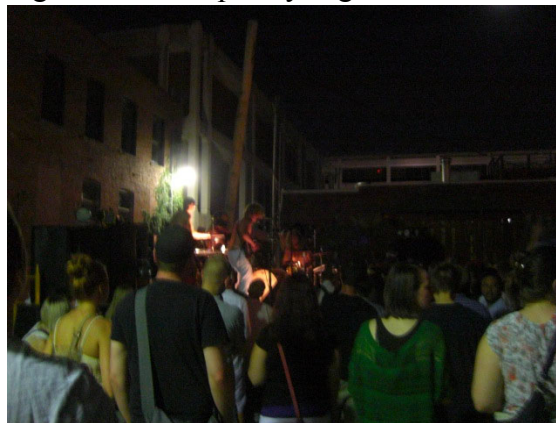


Figure 109: Customers at the Event



Figure 110: Location of the Liquor Section



Pop-up City

Pop-up cities are one of the trends of utilization of open spaces which is under used. It represents the possibility of open spaces because open spaces change their expression by people's ideas. This is often implemented by citizens; therefore, the cost of the plan is relatively cheaper. This is pop up so it is temporary. A few of planning students in Lincoln have implemented a pop up city. They showed a movie in a parking lot at 13th street and P Street by using a projector (Figure 114). The parking lot is a part of the Block 38 project area, therefore, the parking lot will eventually be an open space. One of the strangest characteristics of this trend is that it is available to anyone, and it shows their idea and potential of open spaces. The art alley has a similar idea to the pop up cities. It provides people space to demonstrate their works or their idea.

Figure 111: Project Bus Stop



Source: <http://popupcity.net/30616>

Figure 112: Office in Public Spaces



Source: <http://popupcity.net/30250>

Figure 113: Modular Pop-up Park

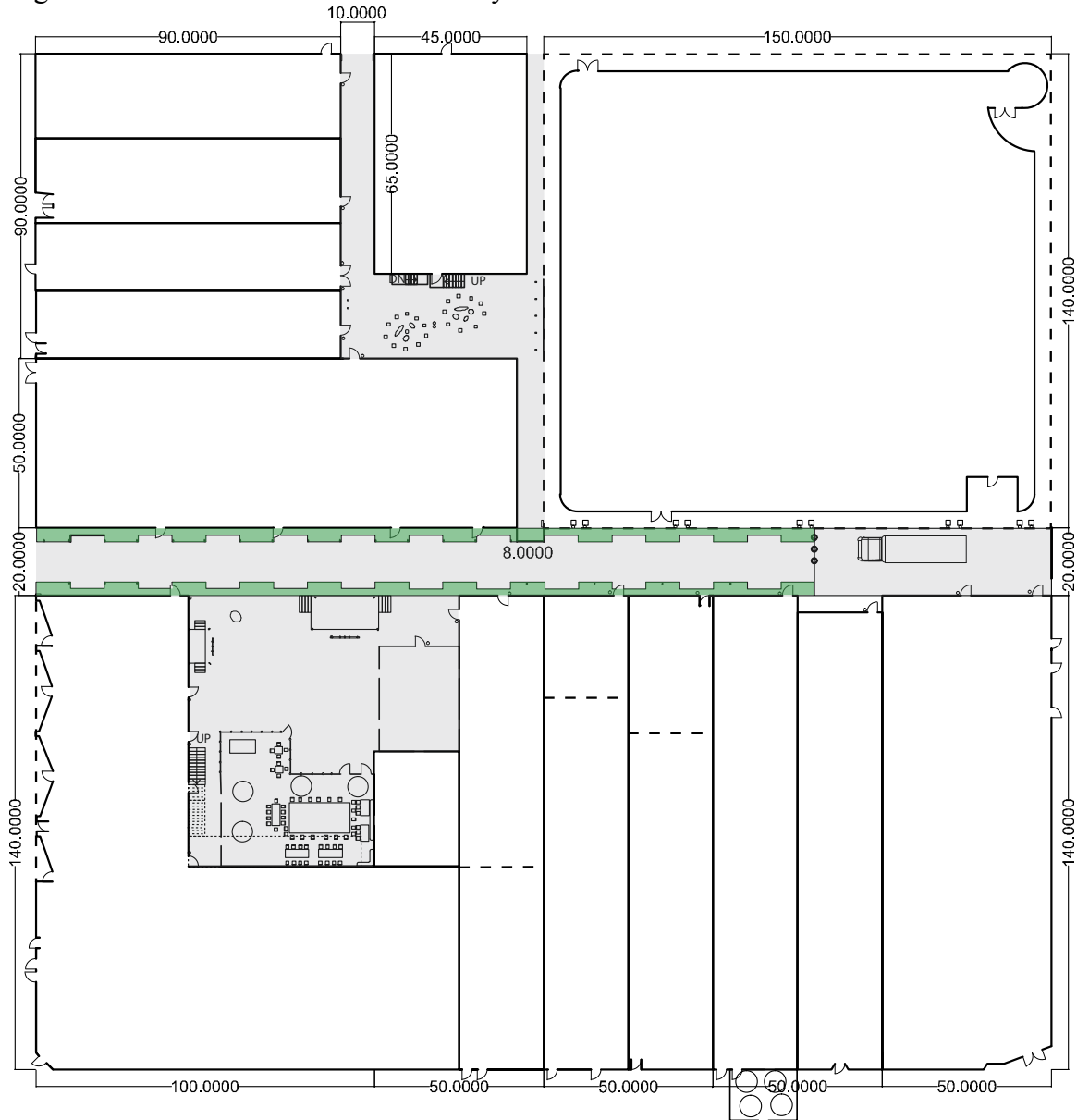


Source: <http://popupcity.net/30136>

Figure 114: Movie at a Parking



Figure 115: Ground Plan of Lincoln Alley



Events at the open Space could be one of the many effective ways to utilize the open spaces because it is connected to the alleys and enclosed by buildings. Therefore, there has been less activity, however, the open space in downtown is relatively bigger than many open spaces along O street between 11th and 15th street which is area congested by bars, in Lincoln (Figure 62, Figure 67). The open space will be utilized for performances and physical pieces of art. The smaller open spaces are silent and darker. So, these spaces will be used for some exhibition as well. The alleys with some art decoration

Figure 116: The Details of Ground Plan (Lincoln Alley); Smaller Open Space

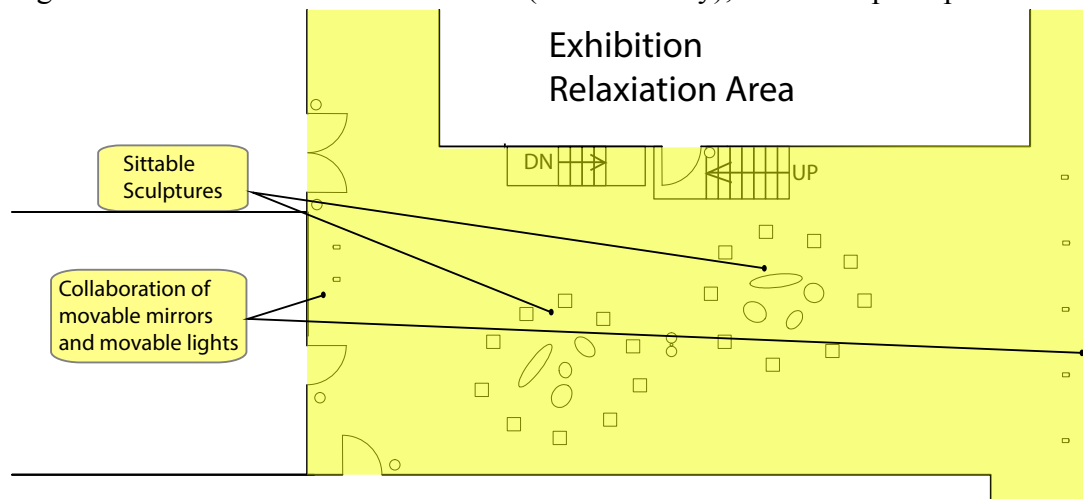


Figure 117: The Details of Ground Plan (Lincoln Alley); Alley

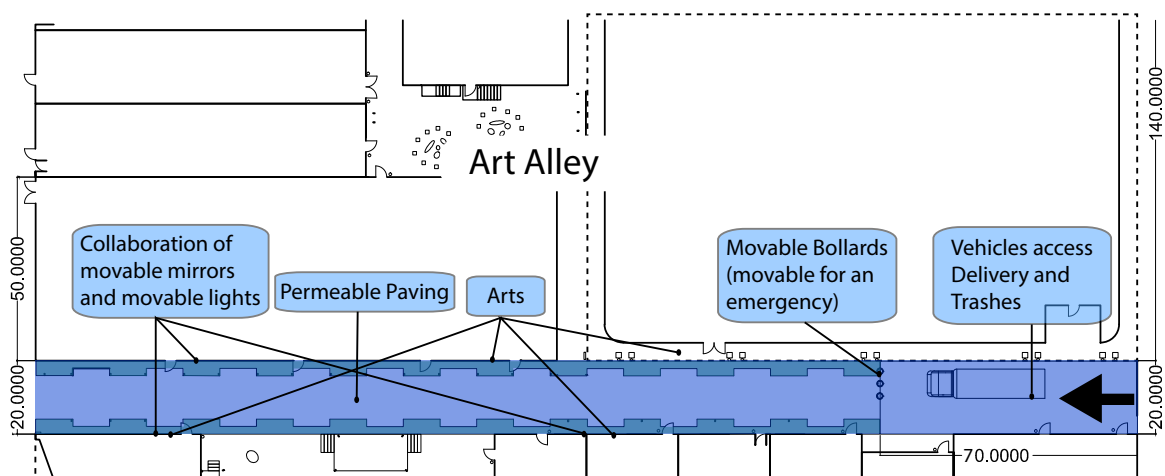


Figure 118: The Details of Ground Plan (Lincoln Alley); Bigger Open Space

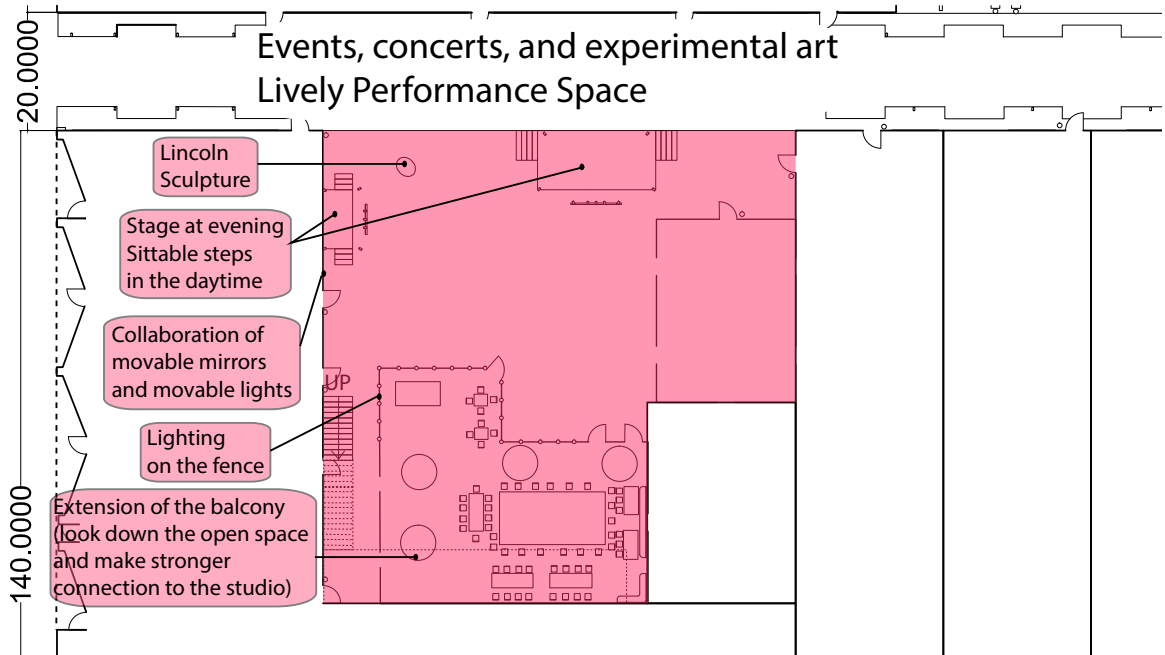
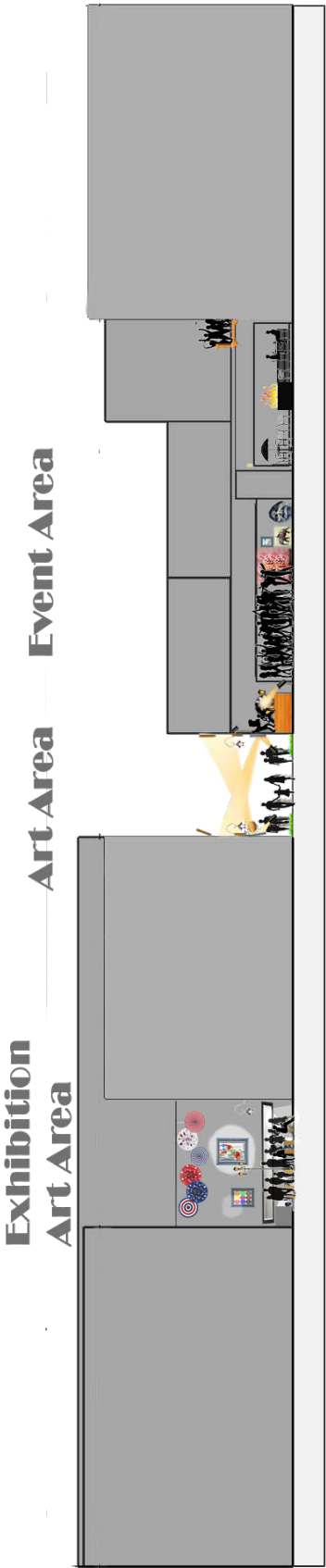


Figure 119: Cross Section of the Lincoln Alley



will connect these two open spaces.

Events at the open Space could be one of the effective way to utilize the open spaces because it is connected to the alleys and enclosed by buildings, therefore, there has been less activity, however, the open space in downtown is relatively bigger than many open spaces along O Street between 11th and 15th Street which is area congested by bars, in Lincoln (Figure 62, Figure 66).

Feature

Collaborations of mirrors and lightings will provide interesting effects. Lightings and mirrors have a strong relationship such as light and reflection. Mirrors will not work without light. Lightings will enhance safety, and the reflection of lights makes it double brighter. Since there will be many pieces of art in the block, the light will also work as a highlight of the art. The lighting itself could be art as illumination. Mirrors would help these effects of light. If there are mirrors at eye level, it will help to widen sights, and also enhance safety. Mirrors also work when pedestrians would like to check their appearances. If the lights and mirrors are movable, it will cast its lighting with many angles and many places. If these movable lights and mirrors are touchable by the public, people will find out their way to play with it, and it could be used for highlight, art, and so forth. In addition, lighting and mirrors will promote safety as their basic function. Therefore, there will be some collaborations of mirrors and lighting in smaller open spaces, the alley, and the bigger open spaces.

Figure 84: Existing Condition of the Alley; View from 14th Street)



Figure 120: Proposal for the Alley (Lincoln Alley); View From 14th Street



Figure 86: Existing Condition of the Bigger Open Space



Figure 121: Proposal for the Bigger Open Space (Lincoln Alley)



Figure 88: Existing Condition of the Smaller Open Space



Figure 122: Existing Condition of the Smaller Open Space (Lincoln Alley)



Section 6.3: Alternatives3: Green River (Green Alley)

Green infrastructure

This alternative is based on the case study.

Case Study

This alternative was considered because of the most common type of alley revitalization among the newer projects, such as projects after 2010, and the most common type of alley revitalization in the U.S. (Appendix B, Appendix C-1, Appendix C-2), and Green Infrastructure is less likely to specify a district. Even commercial district sometimes adopts this alley strategy if the alley is going to be repaved. This type has feasibility.

Its main purpose will be sustainability. It is the most feasible alternative among these three alternatives. The basic idea is the permeable paving at areas which may have less damage by restricting vehicle access, and by promoting green.

Figure 123: Site Analysis and Proposal Idea (Green River)

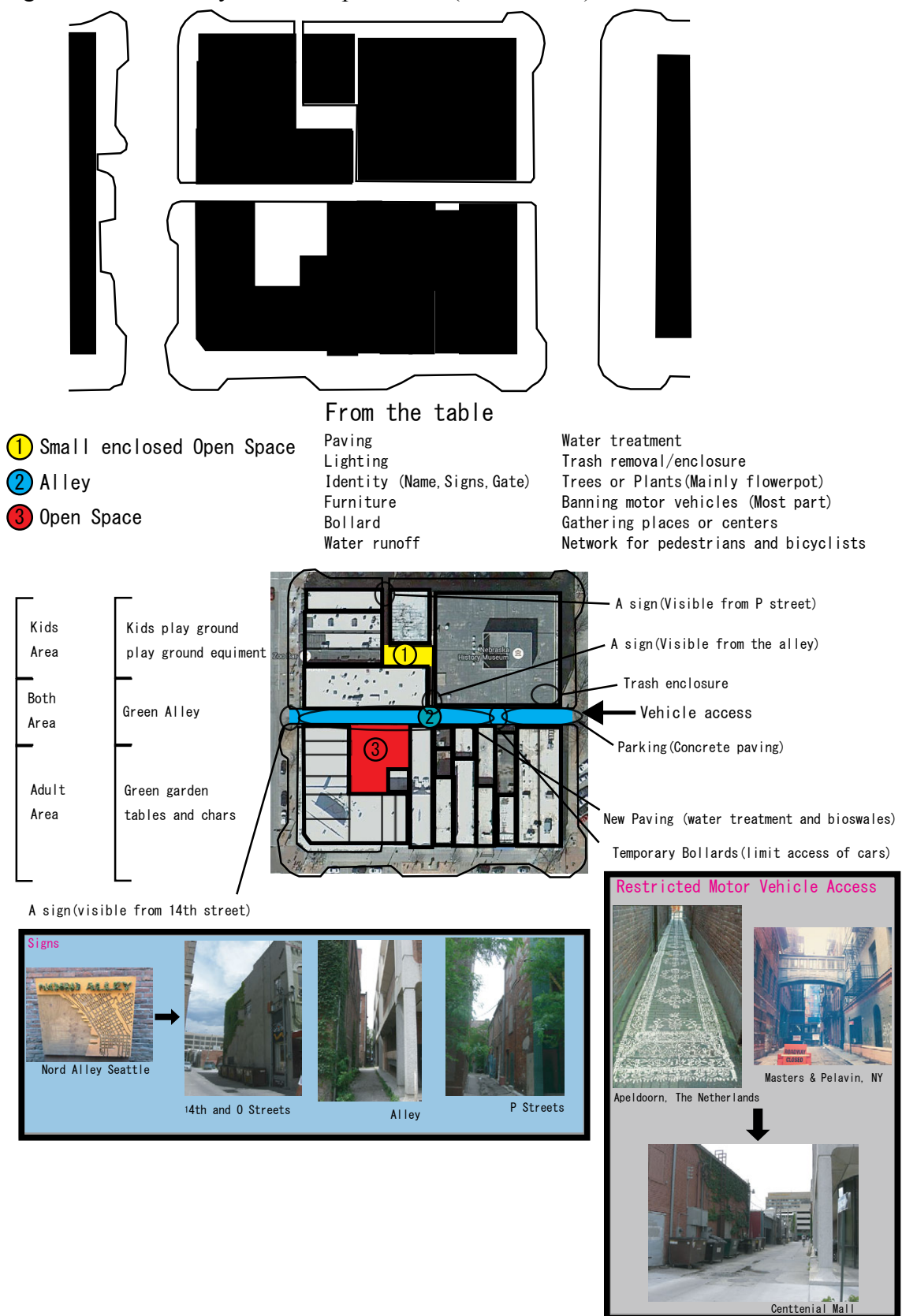
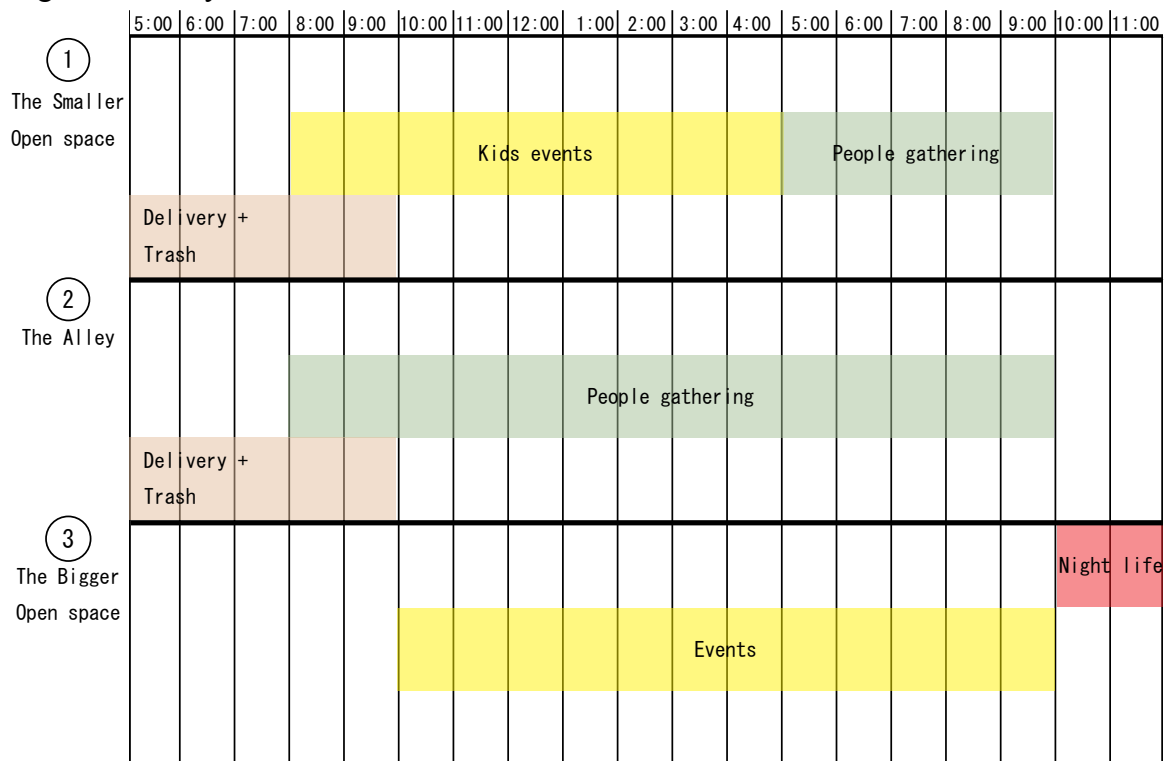


Figure 124: Day in the Green River



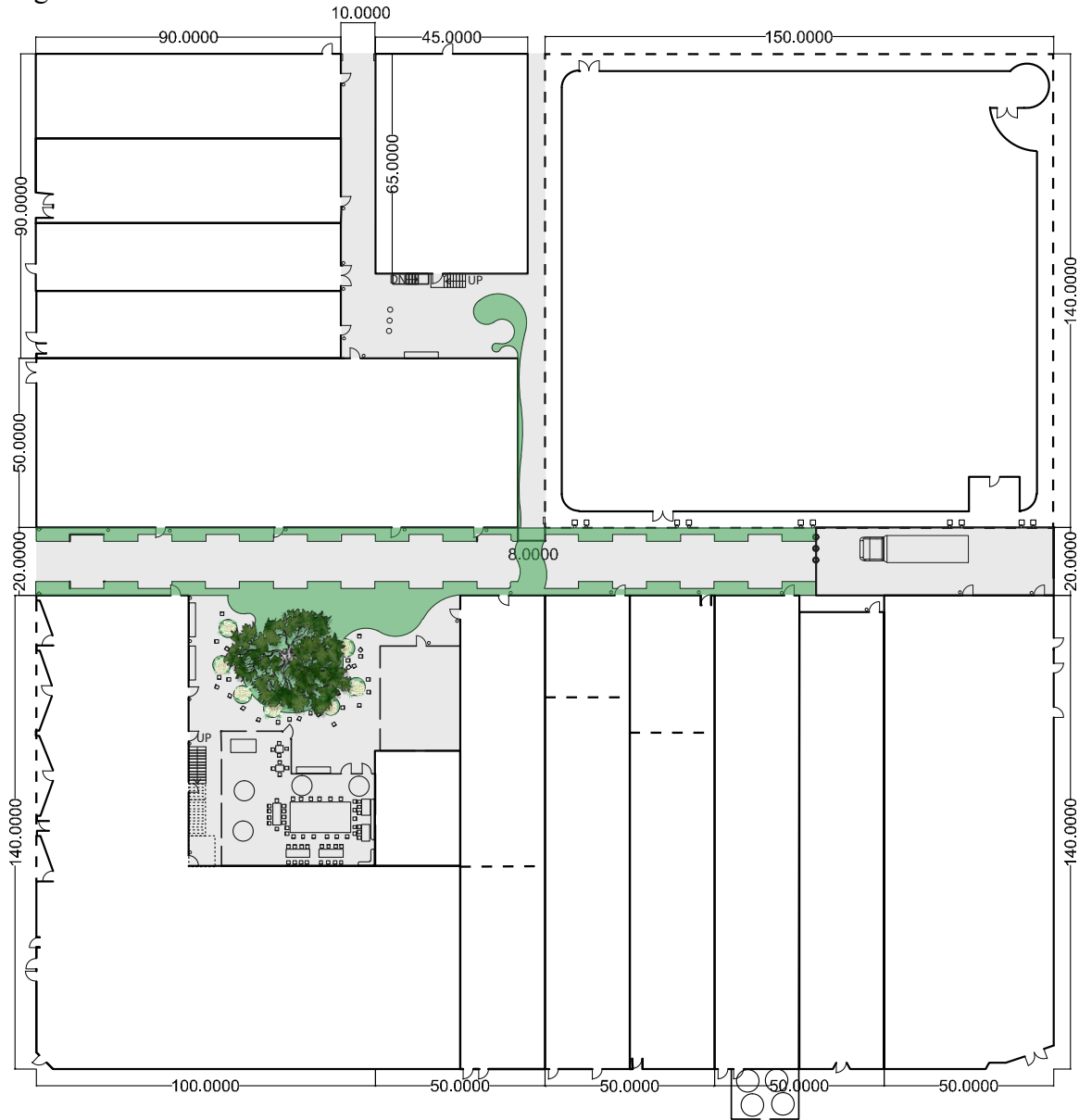
Time schedule is one of the tools needed to control vehicle access, and it shows how the alley can be used a public space for a diverse array of people. (Figure 124).

There are three sections: the smaller open space, the alley, and the bigger open space. It would provide more varieties of activities if these areas were separated.

Green river

Green river connects three places, the smaller open space, the alley, and the bigger open spaces. Since the activities are separated by their purpose, the kids are likely to want to stay in smaller open spaces and adults may want to stay at the bigger open spaces. This river represents connection, such as: connection among people in different areas, connection between the alley and two open spaces, and connection to nature. The image of the Green river is that water keeps dropping, which is tree, and splashing, which is flower bed, and it starts flowing all over the area, which is permeable pavement, and grass, and connects three points which are the bigger open space, the alley, and the smaller open space. This alternative provides many sittable areas.

Figure 125: Ground Plan of Green River



There will be many movable chairs, which give more choices to people in the alley--in the bigger open space. The smaller open space will function as a playground since the small open space is adjacent to the Children's Museum (there are not enough places for kids in Downtown Lincoln). The alley will focus on pedestrians and sustainability. There will be permeable paving and bioswales. Since there will not be enough spaces for parents to wait for their kids in the smaller open space, the bigger one will function as a public spaces for relaxation. It will be used by not only these parents, but also any other

Figure 126: The Details of Ground Plan (Green River); Smaller Open Space

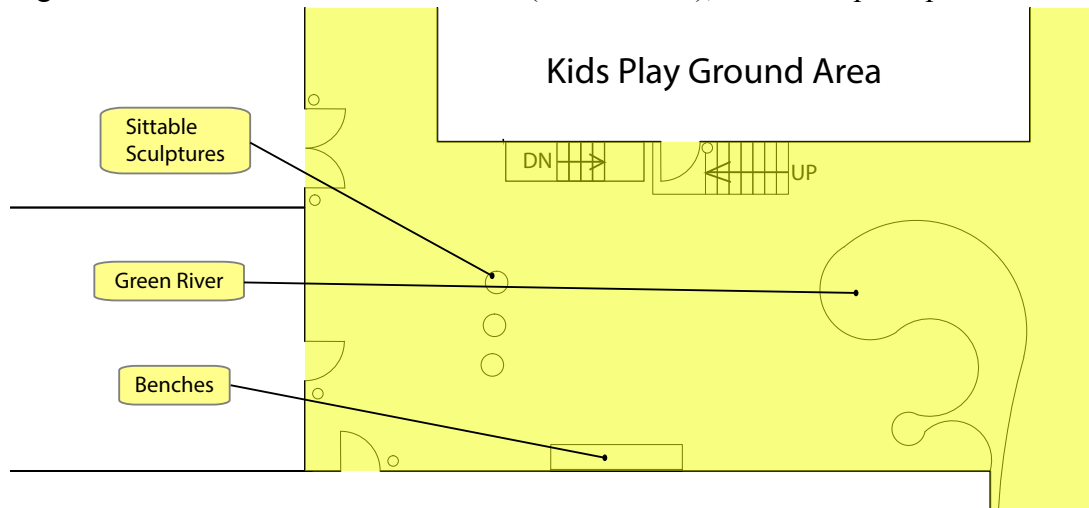


Figure 127: The Details of Ground Plan (Green River); Alley

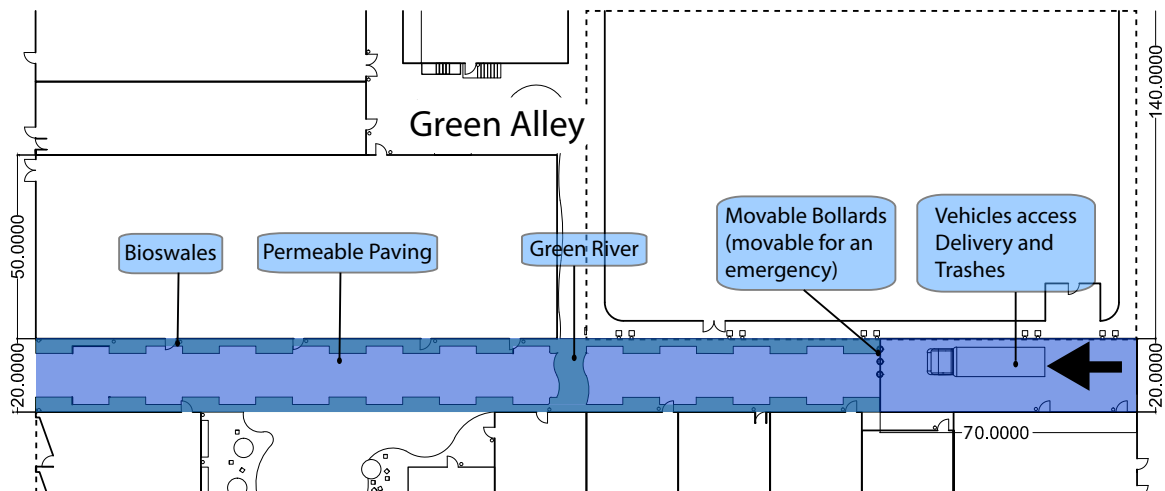


Figure 128: The Details of Ground Plan (Green River); Bigger Open Space

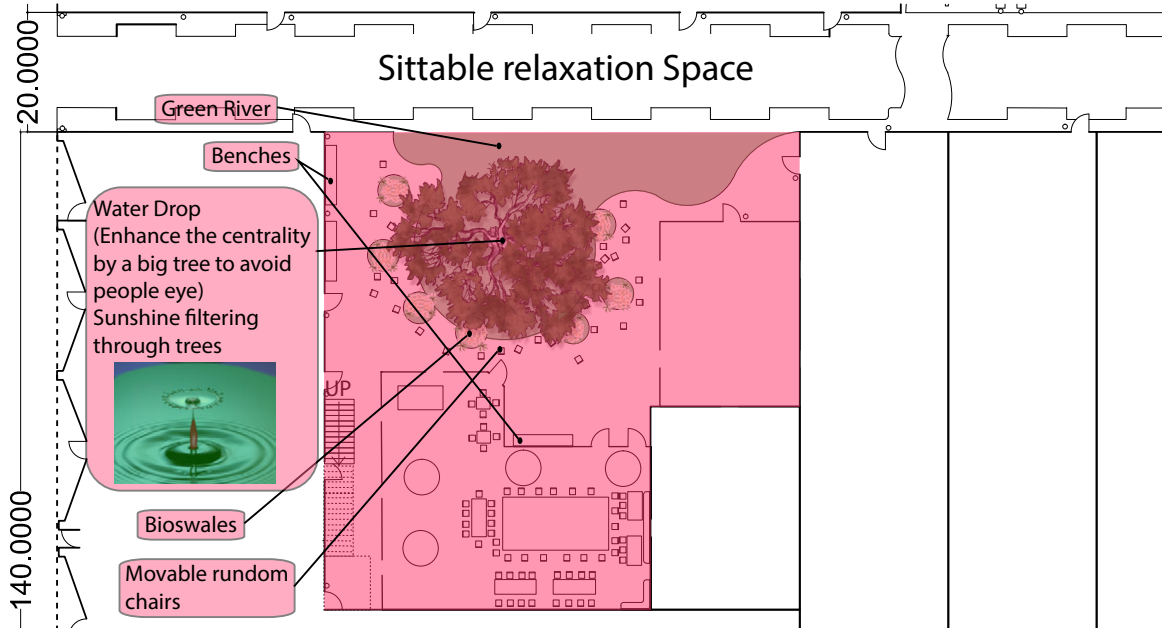
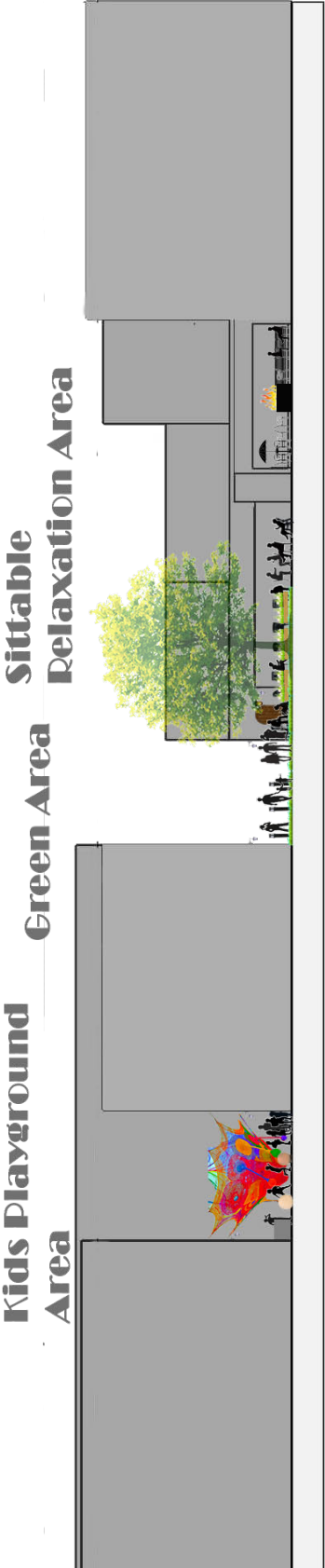


Figure 129: Cross Section of the Green River



people. The smaller open space would have some soft paving, which is permeable, and bioswales. The bigger open space will also have bioswales. These will enhance water management and keep the rivers clean from runoff.

The tree provides many benefits for the city, such as microclimate, shade, transpiration, cooling, beauty, etc (Whyte, 1980). These natural amenities, trees and plants, and constructed amenities (kids' playground), will "help rejuvenate an aging urban central city core while also helping to reposition an entire local community to attract wider variety of tourists and new residents" (Steinmann, 2009, 17). As seen in Chapter 2, there is less green infrastructure or simply green in commercial areas. Therefore, it might be important to think about putting more green in the commercial areas. "In Clarks own view, both natural and constructed amenities help create vibrant street-life that many central business districts currently lack" (Steinmann, 2009, 17).

Kids areas has focused on relationship with the bigger open space, adult area, and relationship with the Children Museum. This area are located between these two areas and the alley. To think of the safety when kids are playing, there should be enough plants rather than pavement, therefore bioswale will be used like Baltimore Blue alleys. It will work for safety and sustainability.

Figure 84: Existing Condition of the Alley; View from 14th Street)



Figure 130: Proposal for the Alley (Green River); View From 14th Street



Figure 86: Existing Condition of the Bigger Open Space



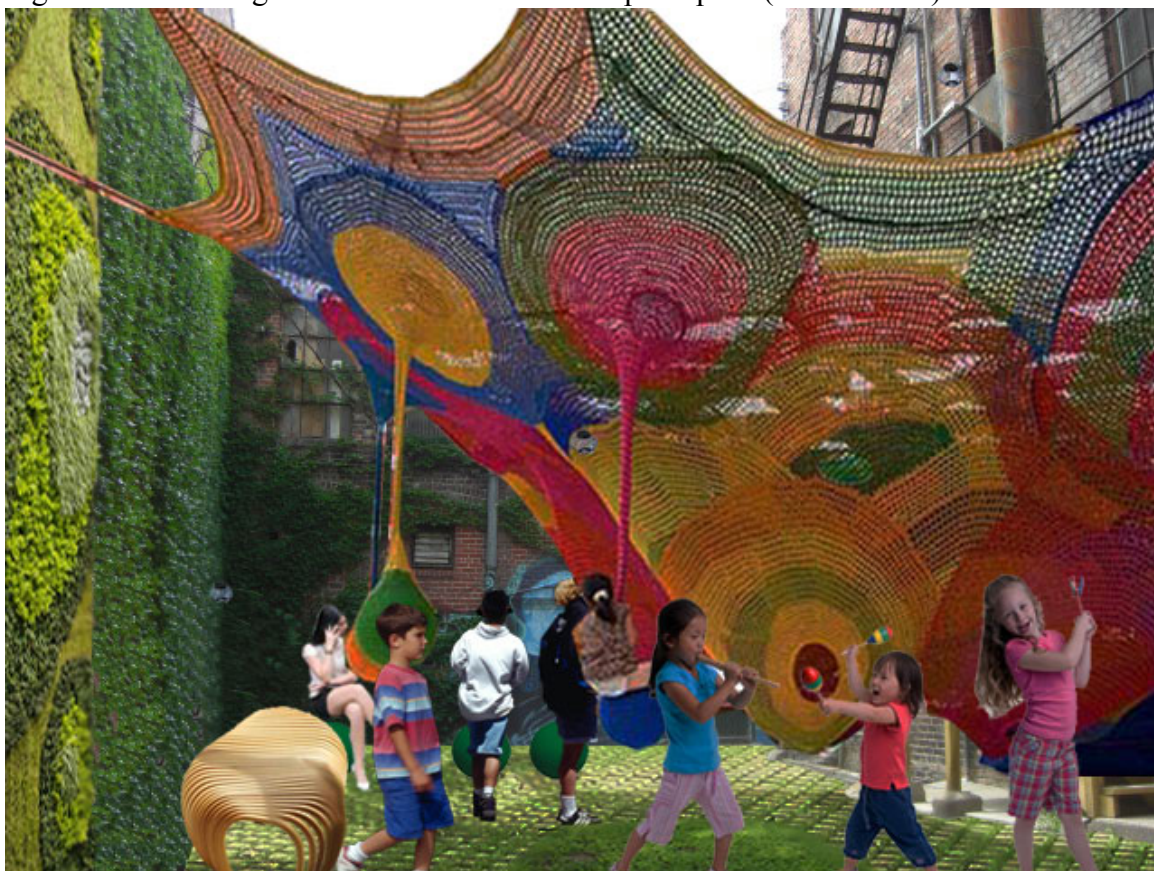
Figure 131: Proposal for the Bigger Open Space (Green River)



Figure 88: Existing Condition of the Smaller Open Space



Figure 132: Existing Condition of the Smaller Open Space (Green River)



Chapter Eight - Conclusions/Recommendations

Alleys in the U.S. suffer from neglect even though the problems have openly been recognized. Today, the number of alley revitalization projects have been steadily increasing in the U.S. However, since the history of neglect stretches way back, general strategies for revitalization are still unclear. There are many existing well-used alleys, revitalized alleys, and ongoing projects around the world. Therefore, these alleys are analyzed in this paper in efforts to hopefully clear some of the smoke and dust and help develop strategies and provide a clearer image of alley revitalization. However, different alleys in different cities all have varying characteristics due to their purpose, district, starting project year, cultural background, and history. In addition, alleys should have strong connections to their respective communities. Because of their location and scale, these alleys are related to neighbors, retail venues, and general culture. To deal with those differences and factors, the most influential of factors are observed by hypothesizing based on case studies such as year, district, size of projects, and countries. These factors are related to an alley's state. And since district had a strong influence over their state and project purpose, the type of alleys are defined mainly by district. Few other types were created because they could not belong to these district types. By analyzing other hypotheses and these types, general strategies for each type were made with types of revitalization strategies and criterion (which were created by fluency of appearance in the case study).

Residential districts pay more attention to the existing neighbors around alleys rather than economic development, whereas commercial districts focus more on developing strategies to coax people into its alleys. Commercial districts also respects existing conditions such as what types of bars and restaurants are in the area and the general cultural background of the area. Mixed-use districts have both residential and commercial characteristics, so the alleys in these areas are more likely to provide relaxation areas rather than night life areas to deal with economic development and existing residents. Art,

Cultural/Historical districts are likely to involve art and other things that deal with cultural background--so, there might be stricter rules for revitalization (so as not to taint long-standing cultural characteristics). Multiple Alleys type tends to be pretty straightforward. For example, if the purpose is beautification and sustainability, there might be permeable paving, water treatment, water runoff, trees, plants, recycled materials, etc. The Parking Alley type is separated from some district types because it is not enclosed by buildings and is instead used for parking. So, each district strategy cannot apply to this type. This type has less of a possibility to revitalize since it is already occupied by parking and there are no true alley characteristics. However, There would be few strategies that would apply to this type, such as lines for pedestrians or bikers to improve walkability. Temporary Idea type also cannot match to any district type due to the fact that it is temporary. The originally arranged alleys should be left untouched in order to preserve their history. Each type has strong characteristics and the demands of each will be different. Therefore, setting revitalization purpose and goals to match each particular type is of utmost importance.

Alleys have huge effects on existing communities. Therefore, investigation of the area and the relationship it has with the people who live in the area is integral when deciding its purpose and goals. The alley will last as long as the community around it does, so the project should be planned based on the prediction of the community's continual evolution. Architects, urban designers, landscape architects, and planners must not over-design and lose sense of the purpose and goals of the project.

Since these purposes of revitalization and goals are set, this paper will show the general strategies used to achieve said goals. Since alleys are public space, the alleys should be accessible to a wide, diverse range of people. When alleys are going to be revitalized, it is also important to have some alternatives due to the fact that the area involves communities and these people will see more possibilities in the alley than just the designers would. Depending on the purposes and goals, the alley could have many different

functions, faces, and characteristics--being that a wide variety of people will most likely pass through it over time. Before professionals start their work, there should be an ample amount of communication with the community and research on the area. After an alley is successfully revitalized, it will show its potential for a variety of human activities and/or provide communities with a comfortable lifestyle. This means one of the neglected dim areas was removed, which will help to restrain urban sprawl.

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APPENDIX A: Demographics**Appendix A-1: Population Growth in City of Lincoln**

Year	Total Population	Total Change Ten Yr.	Annualized Change Ten	Percent Change Ten
1960	128,521			
Growth in 1960's		20,997	2,100	1.52%
1970	149,518			
Growth in 1970's		22,414	2,241	1.41%
1980	171,932			
Growth in 1980's		20,040	2,004	1.11%
1990	191,972			
Growth in 1990's		33,609	3,361	1.63%
2000	225,581			
Growth in 2000's		32,798	3,280	1.37%
2010	258,379			
Growth Rates:				
10 Year		32,798	3,280	1.37%
20 Year		66,407	3,320	1.50%
30 Year		86,447	2,882	1.37%
40 Year		108,861	2,722	1.38%
50 Year		129,858	2,597	1.41%

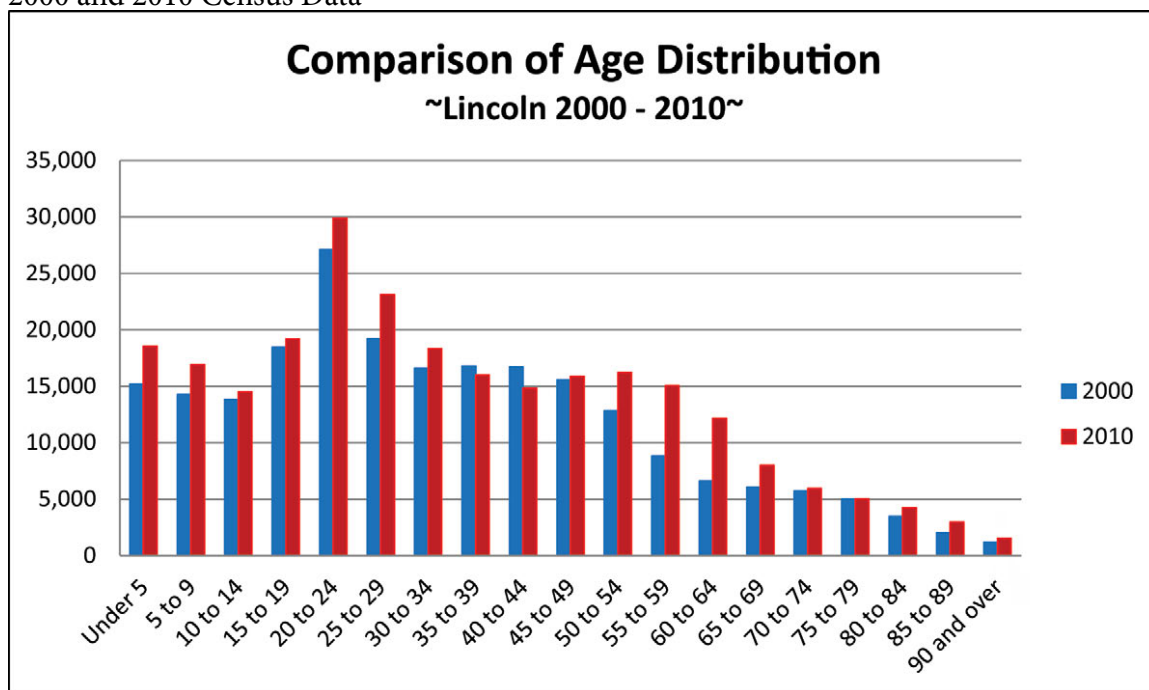
Appendix A-2: Population Change of Each Race

Race/Ethnic	Population		Total Change 2000-2010	Percent Change 2000-2010	Percentage of Total	
	2000	2010			2000	2010
Total	225,581	258,379	32,798	14.54%	100.00%	100.00%
White	201,322	222,331	21,009	10.44%	89.25%	86.05%
Black/African Am.	6,960	9,824	2,864	41.15%	3.09%	3.80%
American Indian	1,537	2,073	536	34.87%	0.68%	0.80%
Asian	7,048	9,773	2,725	38.66%	3.12%	3.78%
Native Hawaiian	141	147	6	4.26%	0.06%	0.06%
Some Other Race	4,081	6,569	2,488	60.97%	1.81%	2.54%
Two or More	4,492	7,662	3,170	70.57%	1.99%	2.97%
Hispanic/Latino*	8,154	16,182	8,028	98.45%	3.26%	6.26%

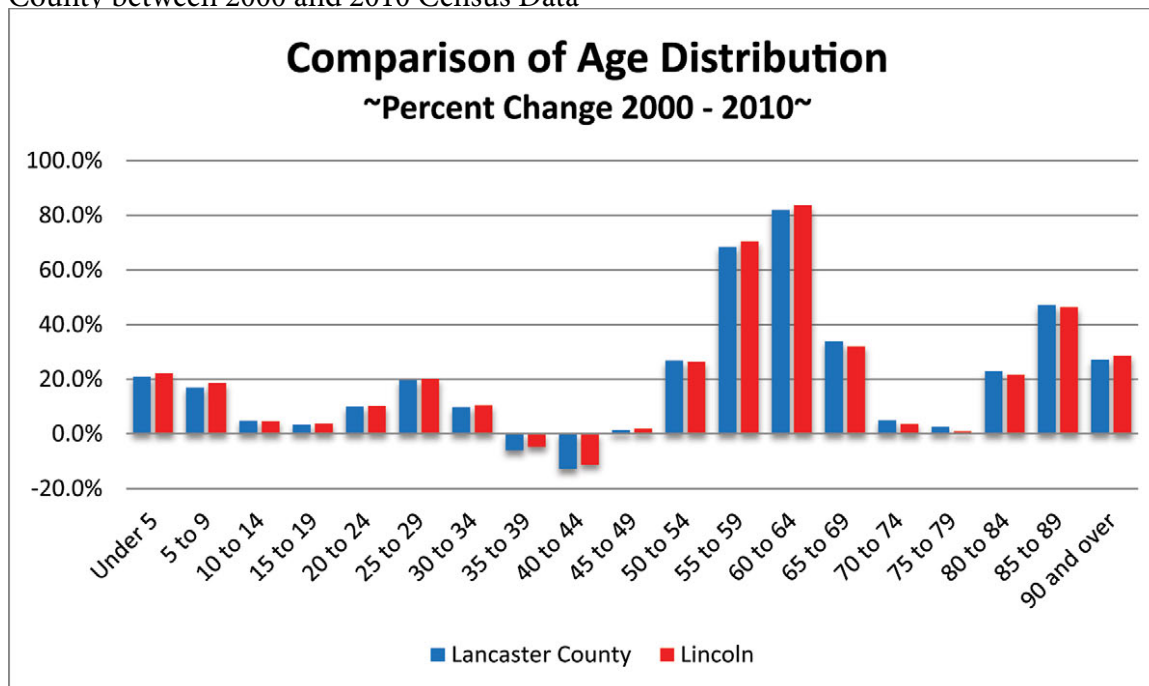
Appendix A-3: Comparison between Housing Occupancy, Tenure, and Vacant Status in Lincoln and Lancaster County, Nebraska between 2000 and 2010

Housing Occupancy	Housing units				Change between 2000 and 2010			
	2000		2010		Absolute		Percentage(%)	
	Lancaster County	Lincoln	Lancaster County	Lincoln	Lancaster County	Lincoln	Lancaster County	Lincoln
Total	104,217	95,199	120,875	110,546	16,658	15,347	16.0%	16.1%
Occupied housing units								
Total	99,187	90,485	113,373	103,546	14,186	13,061	14.3%	14.4%
Owner occupied	59,990	52,448	69,309	60,664	9,319	8,216	15.5%	15.7%
Renter occupied	39,197	38,037	44,064	42,882	4,867	4,845	12.4%	12.7%
Vacant housing units								
Total	5,030	4,714	7,502	7,000	2,472	2,286	49.1%	48.5%
For rent	2,570	2,507	3,574	3,494	1,004	987	39.1%	39.4%
For sale only	757	700	1,280	1,177	523	477	69.1%	68.1%
Rented or sold, not occupied	448	405	588	532	140	127	31.3%	31.4%
For seasonal, recreational, or occasional use	303	264	405	352	102	88	33.7%	33.3%
For migratory workers	0	0	1	1	1	1	(x)	(x)
Other vacant	952	838	1,654	1,444	702	606	73.7%	72.3%

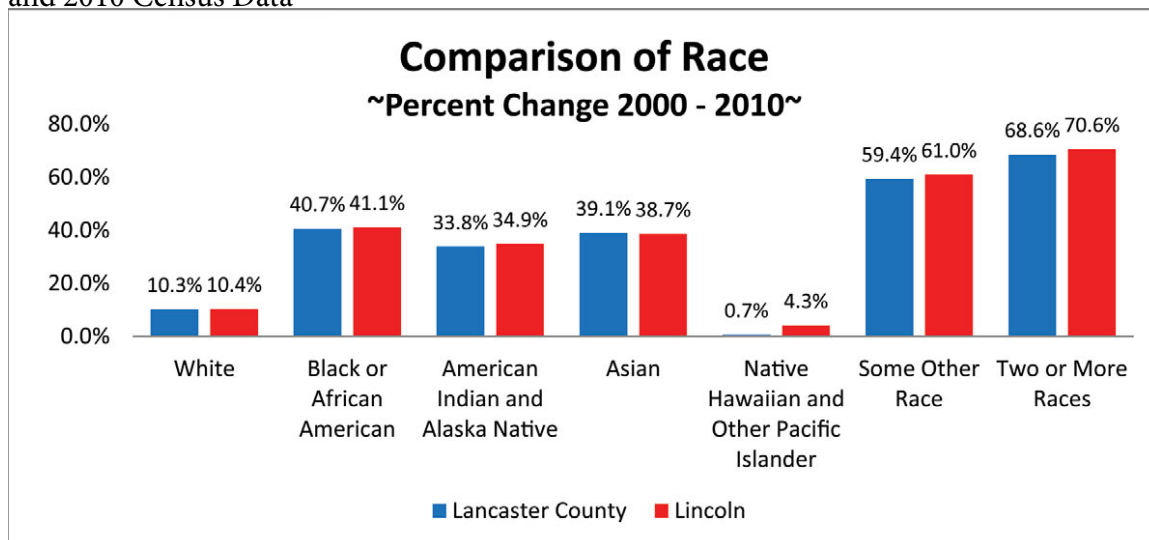
Appendix A-4: Absolute comparison of age group distribution in City of Lincoln between 2000 and 2010 Census Data



Appendix A-5: Percentage Change of Age Group Distribution in Lincoln and Lancaster County between 2000 and 2010 Census Data



Appendix A-6: Percentage Change of Race in Lincoln and Lancaster County between 2000 and 2010 Census Data



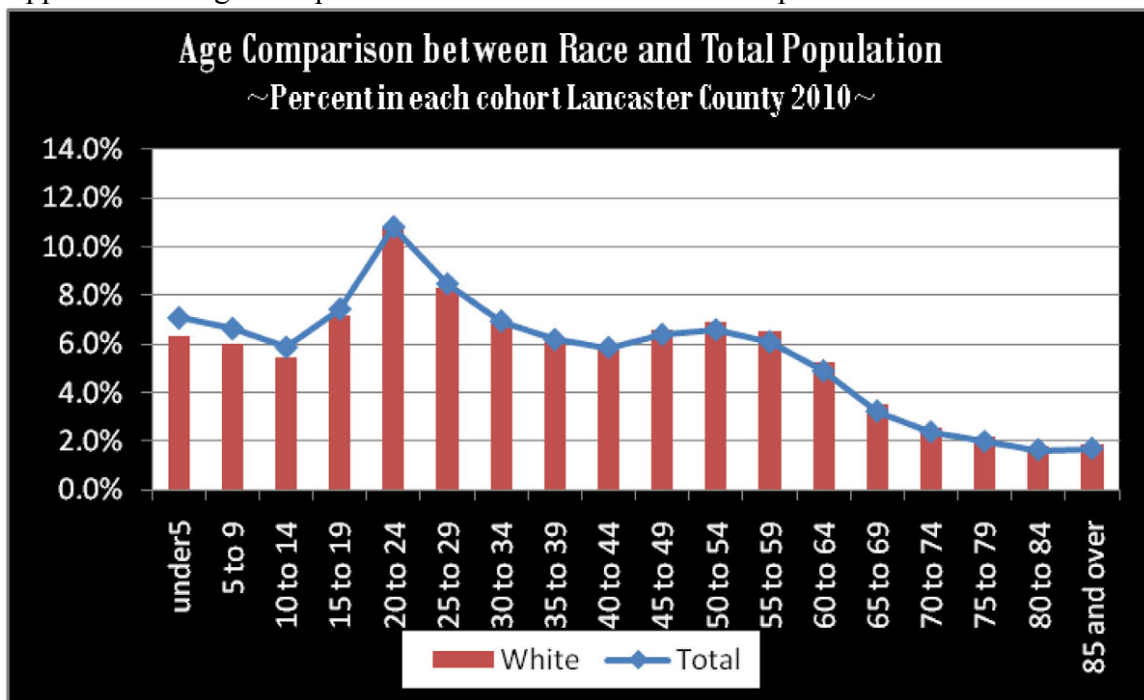
Appendix A-7: Four Races Contribution in Each Census Tracts

2010CT	TOTAL POP.	TOTAL WHITE	% WHITE	TOTAL BLACK OR AFRICAN AMERICAN	% BLACK OR AFRICAN AMERICAN	TOTAL AMERICAN INDIAN AND ALASKA NATIVE	% AMERICAN INDIAN AND ALASKA NATIVE	TOTAL ASIAN	% ASIAN	2010CT
1.00	3,364	3,017	89.68%	87	2.59%	26	0.77%	13	0.39%	1.00
2.01	4,654	4,338	93.21%	62	1.33%	16	0.34%	52	1.12%	2.01
2.02	4,351	3,787	87.04%	187	4.30%	33	0.76%	31	0.71%	2.02
3.00	3,352	2,762	82.40%	222	6.62%	45	1.34%	61	1.82%	3.00
4.00	5,145	3,384	65.77%	635	12.34%	137	2.66%	353	6.86%	4.00
5.00	1,648	1,387	84.16%	94	5.70%	30	1.82%	24	1.46%	5.00
6.00	6,413	5,705	88.96%	160	2.49%	18	0.28%	316	4.93%	6.00
7.00	2,570	1,324	51.52%	229	8.91%	47	1.83%	790	30.74%	7.00
8.00	3,497	2,323	66.43%	350	10.01%	80	2.29%	169	4.83%	8.00
9.00	3,749	3,093	82.50%	133	3.55%	30	0.80%	288	7.68%	9.00
10.01	2,997	2,699	90.06%	122	4.07%	14	0.47%	57	1.90%	10.01
10.02	1,569	1,314	83.75%	45	2.87%	7	0.45%	125	7.97%	10.02
10.03	3,278	2,865	87.40%	116	3.54%	11	0.34%	79	2.41%	10.03
11.01	4,555	4,315	94.73%	79	1.73%	7	0.15%	73	1.60%	11.01
11.02	3,456	3,227	93.37%	55	1.59%	20	0.58%	55	1.59%	11.02
12.00	6,155	5,680	92.28%	105	1.71%	16	0.26%	172	2.79%	12.00
13.01	3,669	3,443	93.84%	51	1.39%	17	0.46%	68	1.85%	13.01
13.02	2,900	2,768	95.45%	19	0.66%	14	0.48%	36	1.24%	13.02
14.00	4,694	4,149	88.39%	175	3.73%	26	0.55%	132	2.81%	14.00
15.00	4,612	4,094	88.77%	165	3.58%	24	0.52%	82	1.78%	15.00
16.00	5,712	5,065	88.67%	195	3.41%	64	1.12%	101	1.77%	16.00
17.00	4,949	3,331	67.31%	494	9.98%	112	2.26%	380	7.68%	17.00
18.00	1,715	1,167	68.05%	162	9.45%	54	3.15%	149	8.69%	18.00
19.00	993	900	90.63%	30	3.02%	8	0.81%	29	2.92%	19.00
20.01	2,326	1,646	70.77%	273	11.74%	48	2.06%	93	4.00%	20.01
20.02	2,940	1,957	66.56%	299	10.17%	39	1.33%	253	8.61%	20.02
21.00	2,148	1,498	69.74%	139	6.47%	38	1.77%	50	2.33%	21.00
22.00	5,504	4,347	78.98%	362	6.58%	100	1.82%	97	1.76%	22.00
23.00	6,013	5,086	84.58%	243	4.04%	78	1.30%	227	3.78%	23.00
24.00	3,098	2,989	96.48%	15	0.48%	8	0.26%	24	0.77%	24.00
25.00	5,311	4,905	92.36%	76	1.43%	37	0.70%	106	2.00%	25.00
27.01	3,168	2,739	86.46%	142	4.48%	23	0.73%	45	1.42%	27.01
27.02	5,394	4,994	92.58%	120	2.22%	23	0.43%	102	1.89%	27.02
28.00	5,131	4,673	91.07%	116	2.26%	23	0.45%	93	1.81%	28.00
29.00	4,968	4,256	85.67%	199	4.01%	41	0.83%	196	3.95%	29.00
30.01	6,748	5,447	80.72%	203	3.01%	24	0.36%	797	11.81%	30.01
30.02	3,345	2,812	84.07%	144	4.30%	49	1.46%	96	2.87%	30.02
30.03	4,947	3,558	71.92%	356	7.20%	68	1.37%	362	7.32%	30.03
31.02	5,900	5,468	92.68%	83	1.41%	14	0.24%	165	2.80%	31.02

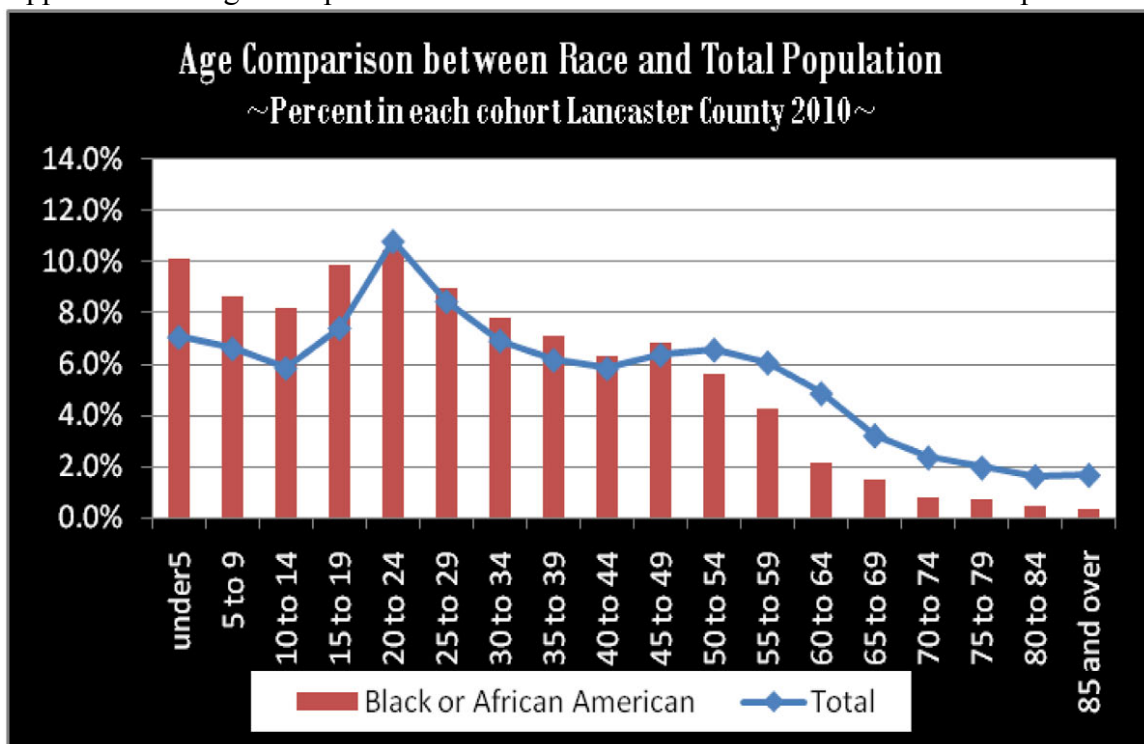
Appendix A-7: Four Races Contribution in Each Census Tracts

2010CT	TOTAL POP.	TOTAL WHITE	% WHITE	TOTAL BLACK OR AFRICAN AMERICAN	% BLACK OR AFRICAN AMERICAN	TOTAL AMERICAN INDIAN AND ALASKA NATIVE	% AMERICAN INDIAN AND ALASKA NATIVE	TOTAL ASIAN	% ASIAN	2010CT
31.04	5,062	3,906	77.16%	238	4.70%	68	1.34%	286	5.65%	31.04
32.02	3,156	2,569	81.40%	211	6.69%	68	2.15%	21	0.67%	32.02
33.01	4,119	3,350	81.33%	191	4.64%	32	0.78%	271	6.58%	33.01
33.02	3,830	3,244	84.70%	158	4.13%	33	0.86%	74	1.93%	33.02
34.01	5,805	4,919	84.74%	374	6.44%	87	1.50%	170	2.93%	34.01
34.02	6,216	4,952	79.67%	325	5.23%	49	0.79%	421	6.77%	34.02
35.00	212	169	79.72%	36	16.98%	2	0.94%	1	0.47%	35.00
36.01	1,125	678	60.27%	311	27.64%	51	4.53%	8	0.71%	36.01
36.04	2,787	2,675	95.98%	8	0.29%	3	0.11%	58	2.08%	36.04
36.05	3,553	3,241	91.22%	108	3.04%	31	0.87%	65	1.83%	36.05
36.07	3,581	3,200	89.36%	56	1.56%	10	0.28%	198	5.53%	36.07
36.08	1,114	1,041	93.45%	15	1.35%	2	0.18%	16	1.44%	36.08
36.09	2,369	2,163	91.30%	30	1.27%	1	0.04%	120	5.07%	36.09
37.04	5,254	4,693	89.32%	162	3.08%	24	0.46%	115	2.19%	37.04
37.06	5,864	5,537	94.42%	75	1.28%	11	0.19%	118	2.01%	37.06
37.07	7,660	7,170	93.60%	86	1.12%	24	0.31%	204	2.66%	37.07
37.08	4,121	3,857	93.59%	33	0.80%	9	0.22%	148	3.59%	37.08
37.09	5,008	4,705	93.95%	59	1.18%	6	0.12%	118	2.36%	37.09
37.13	2,392	2,234	93.39%	13	0.54%	5	0.21%	101	4.22%	37.13
37.14	2,147	2,055	95.71%	12	0.56%	3	0.14%	41	1.91%	37.14
37.15	2,500	2,290	91.60%	44	1.76%	4	0.16%	73	2.92%	37.15
37.16	5,105	4,645	90.99%	71	1.39%	5	0.10%	263	5.15%	37.16
37.17	2,543	2,385	93.79%	38	1.49%	6	0.24%	48	1.89%	37.17
37.18	2,126	2,028	95.39%	16	0.75%	6	0.28%	57	2.68%	37.18
37.19	3,707	3,438	92.74%	47	1.27%	4	0.11%	116	3.13%	37.19
37.20	1,380	1,289	93.41%	7	0.51%	11	0.80%	46	3.33%	37.20
38.01	4,684	4,448	94.96%	54	1.15%	14	0.30%	60	1.28%	38.01
38.02	2,990	2,827	94.55%	41	1.37%	8	0.27%	30	1.00%	38.02
101.00	6,030	5,916	98.11%	9	0.15%	14	0.23%	15	0.25%	101.00
102.01	3,354	3,078	91.77%	59	1.76%	4	0.12%	103	3.07%	102.01
102.02	4,388	4,251	96.88%	26	0.59%	19	0.43%	31	0.71%	102.02
103.00	3,855	3,742	97.07%	28	0.73%	8	0.21%	21	0.54%	103.00
104.00	7,821	7,600	97.17%	24	0.31%	19	0.24%	45	0.58%	104.00
9832.00	165	124	75.15%	30	18.18%	4	2.42%	1	0.61%	9832.00
TOTAL POP AND AVERAGE PERCENT	282,961	246,931	86.40%	9,737	4.14%	2,114	0.84%	9,804	3.46%	TOTAL POP AND AVERAGE PERCENT

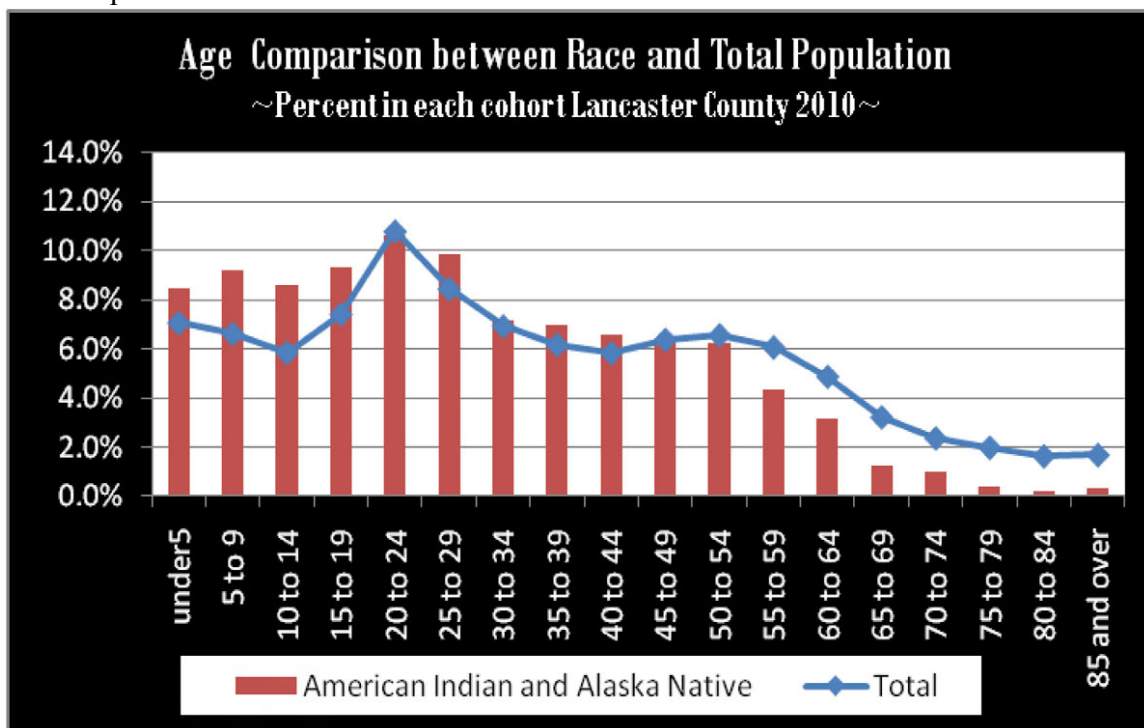
Appendix A-8 Age Comparison between White and Total Population



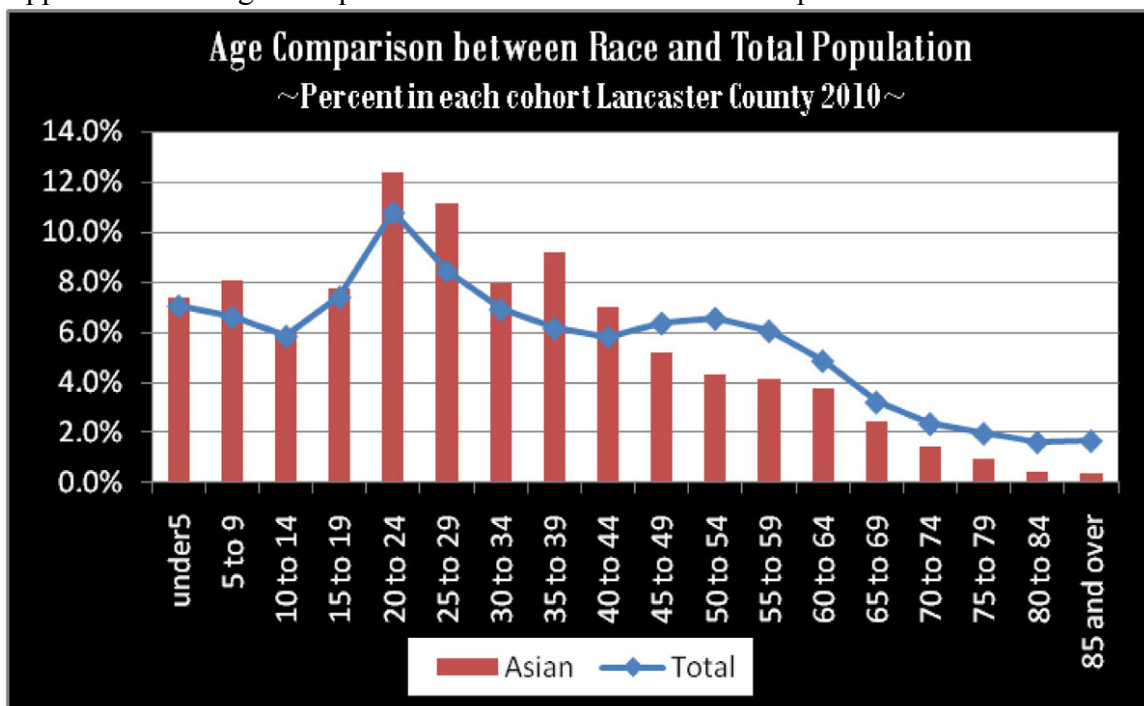
Appendix A-9: Age Comparison between Black African American and Total Population



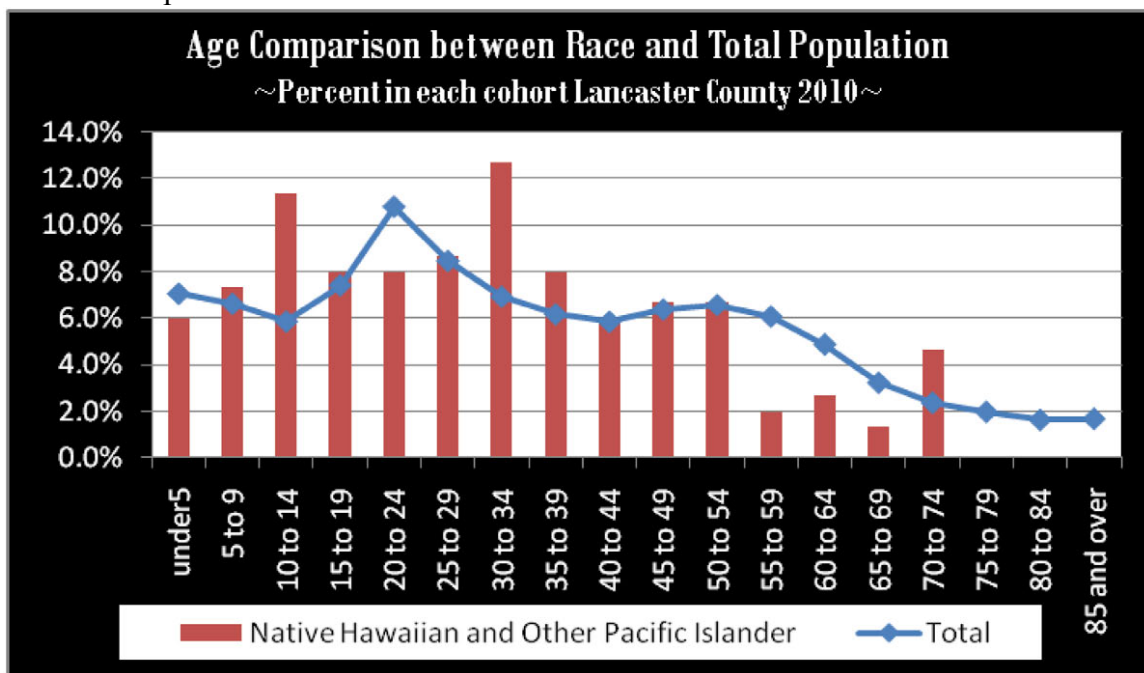
Appendix A-10: Age Comparison between American Indian and Alaska Native and Total Population



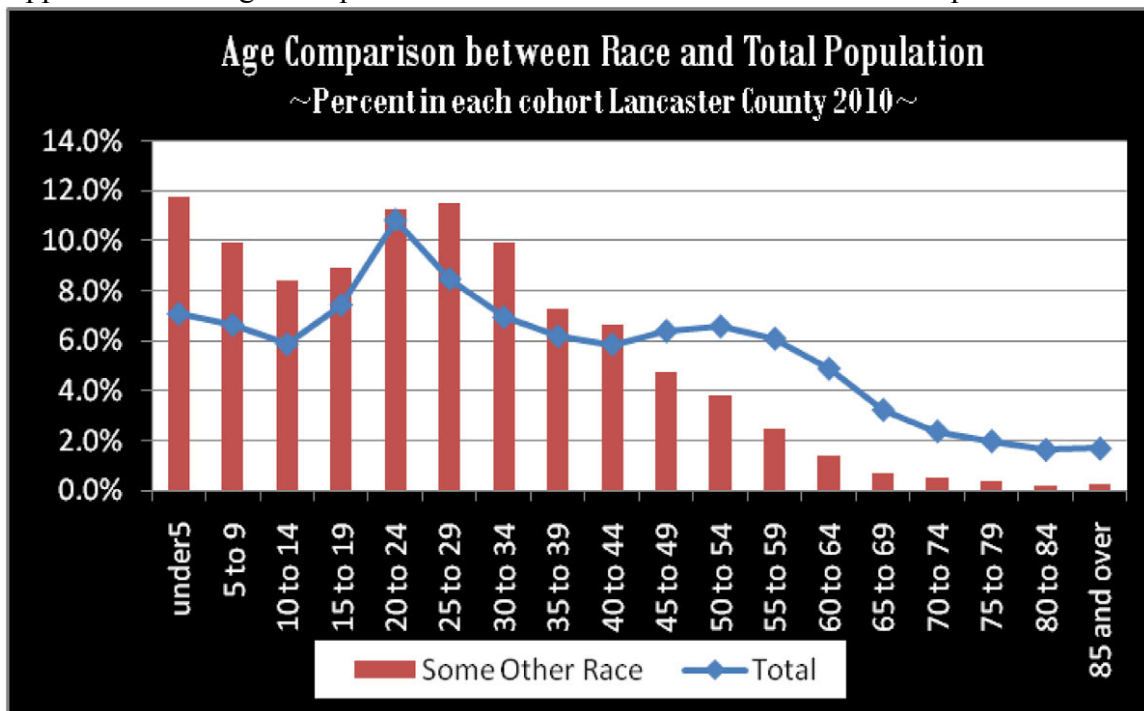
Appendix A-11: Age Comparison between Asian and Total Population



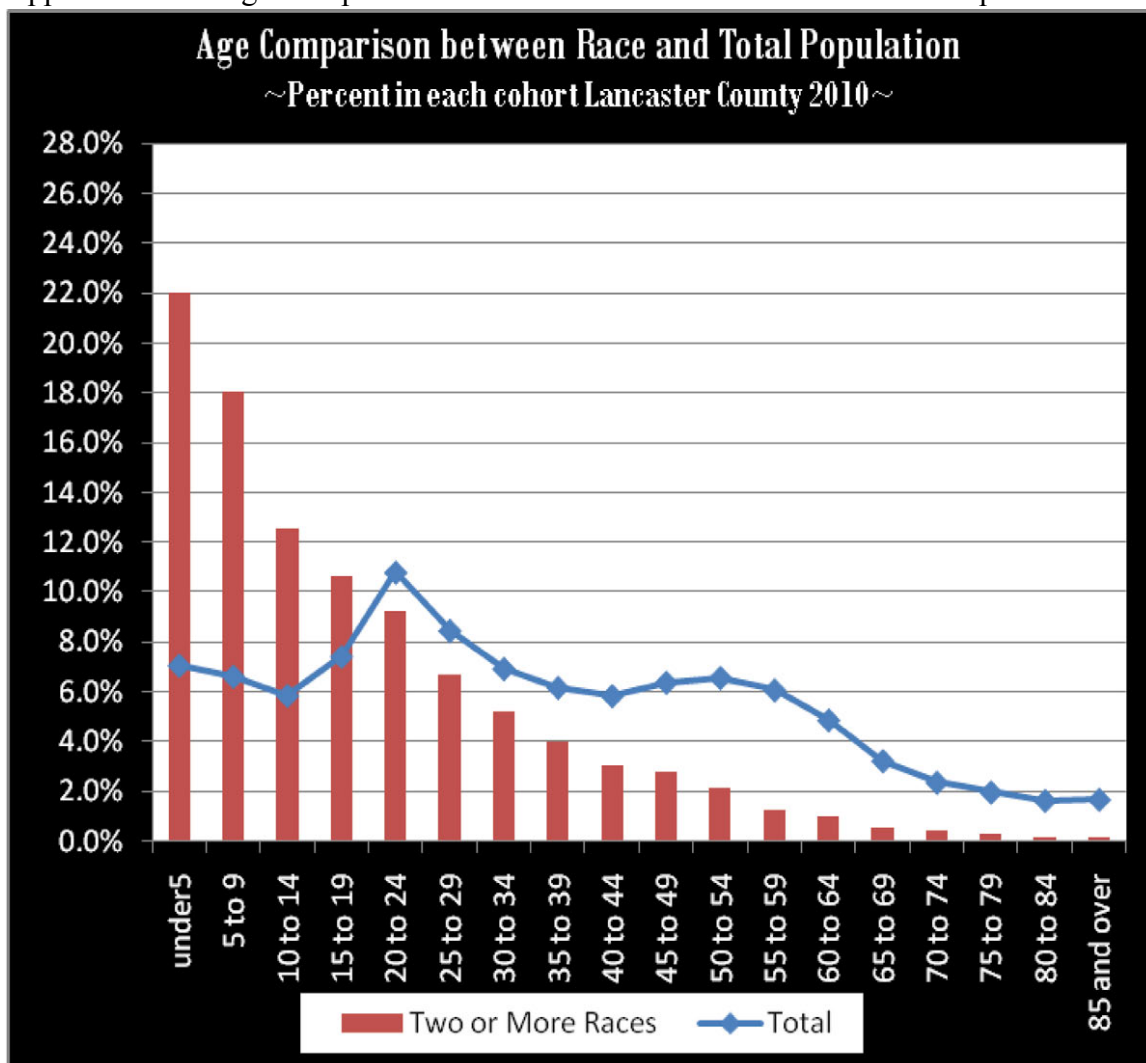
Appendix A-12: Age Comparison between Native Hawaiian and Other Pacific Slander and Total Population



Appendix A-13: Age Comparison between Some Other Race and Total Population



Appendix A-14: Age Comparison between Two or More Races and Total Population



APPENDIX B: Case Study Outcome

General Information		
Project	Alley	Started Year
Green Alley Program in Los Angeles		2008
South Los Angeles Green Alley Master Plan	Avalon Green Alley Network	2010
Green Alley Program	The Chicago Green Alley	2006
Activating Alleys for a Lively City		2010
Baltimore's Alley Gating and Greening Program		2007
Blue Alleys		2010
n/a		n/a
Community Revitalization		n/a
Green Alleys competition	Nord Alley	2010
Alley Network Project	Nord Alley	2005
Detroit's First Green Alley Demonstration Project	Cass Farms Green Alley	2008
Atherton Square Revitalization	McNeel Alley	n/a
Eaca Pedestrian Alley (Cosmo Pedestrian Alley)	EaCa Alley	2008
Alexander Leidesdorff	Alexander Leidesdorff alley	n/a
Hollywood Alley Retrofit Project		2011
Sniffen Court	Nestled in prosperous Murray Hill	1850 ~ 1860
The unpaved alley maintenance program		n/a
20 Ft Wide		n/a
Laneways Business Development Program		2008
Laneway Revitalization		
In Between Two Worlds/Laneway Revitalization	Kimber Lane	2011
Forgotten Songs		2011
Vibrant Laneways Program		2006
Greening Melbourne's Laneways		n/a
Melbourne Revitalized Laneways		n/a
AC/DC Lane	ACDC Lane (AC/DC Lane) (formerly Corporation Lane)	2004
Ruelle Vertes/Green Alleys		1997
Laneway Housing		2013
Community Design Project	O'Keefe laneway	2012
Umbrella Sky Project		2012
the planned alley (Shiturae no roji)		1600's~1800's
the planned alley (Shiturae no roji)		1600's~1800's
Golden Gui		1950's
I kai alley (I kai Roji)		1978
Fish Market	Nishiki Market	1615
Kamakura Roji Festival		2006
Alley	Project	Started Year
Avalon Green Alley Network	South Los Angeles Green Alley Master Plan	2010
Luzerne-Glover alley	Baltimore's Alley Gating and Greening Program	2007
Nord Alley	Green Alleys competition	2010
Nord Alley	Alley Network Project	2005
Cass Farms Green Alley	Detroit's First Green Alley Demonstration Project	2008
McNeel Alley	Atherton Square Revitalization	n/a
EaCa Alley	Eaca Pedestrian Alley (Cosmo Pedestrian Alley)	2008
Belden Place	Downtown Streetscape Plan, Chinatown Alley Masterplan, Better Streets Plan	1994
Jack Kerouac Alley	Chinatown Alley Master Plan and South of Market West Improvement Project	1998
Alexander Leidesdorff alley	Alexander Leidesdorff	n/a
Hotaling Alley	n/a	1990's
Pirate's Alley	n/a	1831
Post Alley	n/a	n/a
Nestled in prosperous Murray Hill	Sniffen Court	1850 ~ 1860
Commercial Alley	Greening America's Capitals	2011
Residential Alley	Greening America's Capitals	2011
Angel Place	Laneway Revitalization	
Kimber Lane	In Between Two Worlds/Laneway Revitalization	2011
	Forgotten Songs	2011
Hutton Lane	Hutton Lane upgrade (Vibrant Laneways Program Art Program)	2013
Eagle Lane	Eagle Lane upgrade (Vibrant Laneways Program)	2013
Burnett Lane	Burnett Lane upgrade (Vibrant Laneways Program)	2013
ACDC Lane (AC/DC Lane) (formerly Corporation Lane)	AC/DC Lane	2004
O'Keefe laneway	Community Design Project	2012
Pontocho	the planned alley (Shiturae no roji)	1600's
Nishi Hanami koji	the planned alley (Shiturae no roji)	1870s
Kakurenbo Yokocho	the planned alley (Shiturae no roji)	1870s
I kai Roji	I kai alley (I kai Roji)	1978
Nishiki Market	Fish Market	1615

General Information		
Project	District	Country
Green Alley Program in Los Angeles	Residential District	U.S.
South Los Angeles Green Alley Master Plan	Residential District	U.S.
Green Alley Program	Residential District	U.S.
Activating Alleys for a Lively City	n/a	U.S.
Baltimore's Alley Gating and Greening Program	n/a	U.S.
Blue Alleys	Residential District	U.S.
n/a	Residential District	U.S.
Community Revitalization	Residential District	U.S.
Green Alleys competition	Arts and Cultural/historic District	U.S.
Alley Network Project	Arts and Cultural/historic District	U.S.
Detroit's First Green Alley Demonstration Project	Mixed Use District (Midtown)	U.S.
Atherton Square Revitalization	Central Business District	U.S.
Eaca Pedestrian Alley (Cosmo Pedestrian Alley)	Entertainment District	U.S.
Alexander Leidesdorff	Financial District	U.S.
Hollywood Alley Retrofit Project	Residential District	U.S.
The unpaved alley maintenance program	n/a	U.S.
Sniffen Court	Historical District	U.S.
20 Ft Wide	n/a	U.S.
Laneways Business Development Program	Central Business District	Australia
Laneway Revitalization	Central Business District	Australia
In Between Two Worlds/Laneway Revitalization	Central Business District	Australia
Forgotten Songs	Central Business District	Australia
Vibrant Laneways Program	Commercial District	Australia
Greening Melbourne's Laneways	Residential District	Australia
Melbourne Revitalized Laneways	Commercial District	Australia
AC/DC Lane	Central Business District	Australia
Ruelle Vertes/Green Alleys	Residential District: eco-districts (focus on sustainability)	Canada
Laneway Housing	Residential District	Canada
Community Design Project	Mixed use	Canada
Umbrella Sky Project		Portugal
the planned alley (Shituraa no roji)	Hanamachi district (Portmanteau)	Japan
the planned alley (Shituraa no roji)	Commercial District	Japan
Golden Gui	Entertainment District	Japan
I kai alley (I kai Roji)	Residential	Japan
Fish Market	Commercial District	Japan
Kamakura Roji Festival	n/a	Japan
Alley	District	Country
Avalon Green Alley Network	Residential District	U.S.
Luzerne-Glover alley	Residential District	U.S.
Nord Alley	Arts and Cultural/historic District	U.S.
Nord Alley	Arts and Cultural/historic District	U.S.
Cass Farms Green Alley	Mixed Use District (Midtown)	U.S.
McNeel Alley	Central Business District	U.S.
EaCa Alley	Entertainment District	U.S.
Belden Place	Financial District	U.S.
Jack Kerouac Alley	Mission District	U.S.
Alexander Leidesdorff alley	Financial District	U.S.
Hotaling Alley	Financial District	U.S.
Pirate's Alley	Historic District	U.S.
Post Alley	Mixed Use District	U.S.
Nestled in prosperous Murray Hill	Historical District	U.S.
Commercial Alley	Commercial District	U.S.
Residential Alley	Residential District	U.S.
Angel Place	Central Business District	Australia
Kimber Lane	Central Business District	Australia
	Central Business District	Australia
Hutton Lane	Commercial District	Australia
Eagle Lane	Commercial District	Australia
Burnett Lane	Commercial District	Australia
ACDC Lane (AC/DC Lane) (formerly Corporation Lane)	Central Business District	Australia
O'Keefe laneway	Mixed use	Canada
Pontocho	Hanamachi district (Portmanteau)	Japan
Nishi Hanami koji	Hanamachi district (Portmanteau)	Japan
Kakurenbo Yokocho	Commercial District	Japan
I kai Roji	Residential	Japan
Nishiki Market	Commercial District	Japan

General Information		
Project	Area	status
Green Alley Program in Los Angeles	Los Angeles, CA	incompleted
South Los Angeles Green Alley Master Plan	South Los Angeles, CA	incompleted
Green Alley Program	Chicago, IL	incompleted
Activating Alleys for a Lively City	near the city center, Seattle, WA	incompleted
Baltimore's Alley Gating and Greening Program	Baltimore, MD	incompleted
Blue Alleys	Belair Rd, Baltimore, MD	incompleted
n/a	City of Fresno, CA	existing
Community Revitalization	City of Fresno, CA	completed
Green Alleys competition	Pioneer Square, Seattle, WA	incompleted
Alley Network Project	Pioneer Square, Seattle, WA	completed
Detroit's First Green Alley Demonstration Project	Midtown, Detroit, MI	completed
Atherton Square Revitalization	Atherton Square, City of Marietta, GA	incompleted
Eaca Pedestrian Alley (Cosmo Pedestrian Alley)	Cahuenga Corridor Street Market, Selma, Los Angeles, CA	completed
Alexander Leidesdorff	Pine Street, San Francisco, CA	completed
Hollywood Alley Retrofit Project	Los Angeles, CA	completed
The unpaved alley maintenance program	Lincoln, NE	incompleted
Sniffen Court	Murray Hill, Manhattan, New York	existing
20 Ft Wide	Austin, TX	incompleted
Laneways Business Development Program	City of Sydney	incompleted
Laneway Revitalization	City of Sydney	incompleted
In Between Two Worlds/Laneway Revitalization	Chinatown, City of Sydney	completed
Forgotten Songs	Angel Place, City of Sydney	completed
Vibrant Laneways Program	Brisbane	incompleted
Greening Melbourne's Laneways	Melbourne, Victoria	incompleted
Melbourne Revitalized Laneways	Melbourne, Victoria	completed
AC/DC Lane	Melbourne, Victoria	completed
Ruelle Vertes/Green Alleys	Montreal	incompleted
Laneway Housing	Vancouver	incompleted
Community Design Project	Toronto	incompleted
Umbrella Sky Project	Águeda	completed
the planned alley (Shiturae no roji)	Gion, Kyoto	existing
the planned alley (Shiturae no roji)	Kakurazaka, Tokyo	existing
Golden Gui	Shinjuku, Tokyo	existing
I kai alley (I kai Roji)	Osaka	existing
Fish Market	Kyoto	existing
Kamakura Roji Festival	Kamakura, Kanagawa	incompleted
Alley	Area	status
Avalon Green Alley Network	South Los Angeles, CA	incompleted
Luzerne-Glover alley	Baltimore-Linwood, Baltimore, MD	completed
Nord Alley	Pioneer Square, Seattle, WA	incompleted
Nord Alley	Pioneer Square, Seattle, WA	completed
Cass Farms Green Alley	Midtown, Detroit, MI	completed
McNeel Alley	Atherton Square, City of Marietta, GA	incompleted
EaCa Alley	Cahuenga Corridor Street Market, Selma, Los Angeles, CA	completed
Belden Place	Near the Chinatown San Francisco, LA	completed
Jack Kerouac Alley	Columbus & Broadway, Chinatown, San Francisco, LA, CA	completed
Alexander Leidesdorff alley	Pine Street, San Francisco, CA	completed
Hotelling Alley	San Francisco, CA	completed
Pirate's Alley	New Orleans, Los Angeles, CA	existing
Post Alley	City of Seattle, Seattle, WA	completed
Nestled in prosperous Murray Hill	Murray Hill, Manhattan, New York	existing
Commercial Alley	Lincoln, NE	incompleted
Residential Alley	Lincoln, NE	incompleted
Angel Place	City of Sydney	completed
Kimber Lane	Chinatown, City of Sydney	completed
	Angel Place, City of Sydney	completed
Hutton Lane	Brisbane	completed
Eagle Lane	Brisbane	completed
Burnett Lane	Brisbane	completed
ACDC Lane (AC/DC Lane) (formerly Corporation Lane)	Melbourne, Victoria	existing
O'Keefe laneway	Toronto	incompleted
Pontocho	Kyoto	existing
Nishi Hanami koji	Gion, Kyoto	existing
Kakurenbo Yokocho	Kakurazaka, Tokyo	existing
I kai Roji	Osaka	existing
Nishiki Market	Kyoto	existing

General Information		
Project	Land Use	Building Height
Green Alley Program in Los Angeles	n/a	n/a
South Los Angeles Green Alley Master Plan	Low Medium Residential, General Commercial	n/a
Green Alley Program	Residential	n/a
Activating Alleys for a Lively City	n/a	n/a
Baltimore's Alley Gating and Greening Program	Commercial, Industrial, Residential	n/a
Blue Alleys	High Density Residential, Open Land	n/a
n/a	Residential	n/a
Community Revitalization	Residential	n/a
Green Alleys competition	TDR	Current; 88'~96', Future Limit; 100'
Alley Network Project	TDR	Current; 88'~96', Future Limit; 100'
Detroit's First Green Alley Demonstration Project	Commercial and Office	1~3stories
Atherton Square Revitalization	City	1~3stories
Eaca Pedestrian Alley (Cosmo Pedestrian Alley)		1~4stories
Alexander Leidesdorff		High-rise buildings
Hollywood Alley Retrofit Project	Residential	1~2stories
The unpaved alley maintenance program	n/a	n/a
Sniffen Court		2~3stories
20 Ft Wide		n/a
Laneways Business Development Program		n/a
Laneway Revitalization		n/a
In Between Two Worlds/Laneway Revitalization		5~6 stories
Forgotten Songs		High-rise buildings
Vibrant Laneways Program	The City Centre	n/a
Greening Melbourne's Laneways	n/a	n/a
Melbourne Revitalized Laneways		n/a
AC/DC Lane		2~5stories
Ruelle Vertes/Green Alleys		n/a
Laneway Housing	Single Family	n/a
Community Design Project		1~5stories
Umbrella Sky Project	n/a	2~3stories
the planned alley (Shituraa no roji)		n/a
the planned alley (Shituraa no roji)		n/a
Golden Gui		2stories to medium rise buildings
I kai alley (I kai Roji)		2 stories
Fish Market		
Kamakura Roji Festival	Commercial, Residential	n/a
Alley	Land Use	Building Height
Avalon Green Alley Network	Low Medium Residential, General Commercial	n/a
Luzerne-Glover alley	High Density Residential	
Nord Alley	TDR	Current; 88'~96', Future Limit; 100'
Nord Alley	TDR	Current; 88'~96', Future Limit; 100'
Cass Farms Green Alley	Commercial and Office	1~3stories
McNeel Alley	City	1~3stories
EaCa Alley		1~4stories
Belden Place		n/a
Jack Kerouac Alley	Commercial	1~3stories
Alexander Leidesdorff alley		High-rise buildings
Hotaling Alley		2~3stories
Pirate's Alley		3stories
Post Alley		n/a
Nestled in prosperous Murray Hill		2~3stories
Commercial Alley		1~3stories
Residential Alley		1~3stories
Angel Place		High-rise buildings
Kimber Lane		5~6 stories
		High-rise buildings
Hutton Lane	The City Centre	High-rise buildings
Eagle Lane	The City Centre	High-rise buildings
Burnett Lane	The City Centre	High-rise, middle-rise buildings
ACDC Lane (AC/DC Lane) (formerly Corporation Lane)		2~5stories
O'Keefe laneway		1~5stories
Pontocho		1~3stories
Nishi Hanami koji		n/a
Kakurenbo Yokocho		n/a
I kai Roji		2 stories
Nishiki Market		

General Information	
Project	purpose
Green Alley Program in Los Angeles	SAF; ACT; SWM; UHI; GRE; TRA; ACT; CON; COM; EDU; PUB; UHI; HAB
South Los Angeles Green Alley Master Plan	SAF; ACT; SWM; BAF; GRE; TRA; LBS; CON; COM; EDU; COC; PUB; UHI; HAB; AIR
Green Alley Program	SAF; SWM; BAF; GRE; EDU; PUB; UHI; HAB; AIR; ENG
Activating Alleys for a Lively City	SAF, ACT, SWM, BAF, GRE, LBS; CON; COM; PUB; RET; HAB
Baltimore's Alley Gating and Greening Program	SAF; SWM; ACT; BAF; GRE; COM; COC; PUB
Blue Alleys	SAF; SWM; BAF; EDU
n/a	SAF
Community Revitalization	SAF; BAF; COM; COC
Green Alleys competition	SWM; BAF; GRE; TRA; COM; PUB
Alley Network Project	SAF; ACT; UNI; BAF; LBS; ART; COM; PUB; RET
Detroit's First Green Alley Demonstration Project	SAF; ACT; SWM; BAF; GRE; CON; COM; EDU; PUB; UHI; HAB; AIR
Atherton Square Revitalization	ACT; UNI; BAF; GRE; TRA; ART; CON; PUB
Eaca Pedestrian Alley (Cosmo Pedestrian Alley)	SAF; ACT; UNI; SWM; BAF; TRA; LBS; ART; CON; PUB; RET
Alexander Leidesdorff	SAF, ACT, BAF, TRA, LBS, PUB, RET
Hollywood Alley Retrofit Project	SWM; BFA
The unpaved alley maintenance program	BAF;
Sniffen Court	SAF, ACT, BAF, GRE, COM, COC, PUB
20 Ft Wide	SAF, ACT, BAF, ART, COM, EDU, PUB
Laneways Business Development Program	SAF; ACT; BAF; TRA; LBS; ART; CON; PUB; RET
Laneway Revitalization	SAF; ACT; BAF; TRA; LBS; ART; CON; PUB; RET
In Between Two Worlds/Laneway Revitalization	SAF; ACT; BAF; TRA; LBS; ART; CON; PUB; RET
Forgotten Songs	SAF, BAF, TRA, ART, EDU, PUB, HAB
Vibrant Laneways Program	SAF, ACT, BAF, TRA, LBS, ART, CON, COM, EDU, COC, PUB, RET
Greening Melbourne's Laneways	SWM; BAF; GRE; EDU; COC; HAB; AIR
Melbourne Revitalized Laneways	SAF; ACT; UNI; BAF; TRA; LBS; ART; CON; COM; PUB; RET
AC/DC Lane	SAF, ACT, BAF, LBS, ART, PUB, RET
Ruelle Vertes/Green Alleys	SAF, BAF, GRE, TRA, COM, EDU, COC, HAB
Laneway Housing	SAF, ACT, BAF, GRE, COM, EDU, COC, PUB, HAB, ENG
Community Design Project	SAF, ACT, BAF, TRA, LBS, CON, COC, PUB, RET
Umbrella Sky Project	ACT, BAF, ART
the planned alley (Shituraa no roji)	BAF, TRA, LBS, ART, COM, RET
the planned alley (Shituraa no roji)	BAF, TRA, LBS, ART, COM, RET
Golden Gui	ACT, LBS, CON, RET
I kai alley (I kai Roji)	SAF, ACT, BAF, COM, COC
Fish Market	BAF, TRA, LBS, CON, PUB, RET
Kamakura Roji Festival	ACT; BAF; LBS; ART; COM; COC; PUB; RET
Alley	purpose
Avalon Green Alley Network	SAF; ACT; SWM; BAF; GRE; TRA; LBS; CON; COM; EDU; COC; PUB; UHI; HAB; AIR
Luzerne-Glover alley	SAF; ACT; BAF; GRE; COM; COC; PUB
Nord Alley	SWM; BAF; GRE; TRA; COM; PUB
Nord Alley	SAF; ACT; UNI; BAF; LBS; ART; COM; PUB; RET
Cass Farms Green Alley	SAF; ACT; SWM; BAF; GRE; CON; COM; EDU; PUB; UHI; HAB; AIR
McNeel Alley	ACT; UNI; BAF; GRE; TRA; ART; CON; PUB
EaCa Alley	SAF; ACT; UNI; SWM; BAF; TRA; LBS; ART; CON; PUB; RET
Belden Place	SAF; ACT; SWM; BAF; TRA; LBS; CON; COC; PUB; RET
Jack Kerouac Alley	SAF; ACT; UNI; BAF; TRA; LBS; ART; CON; EDU; COC; PUB; AIR
Alexander Leidesdorff alley	SAF, ACT, BAF, TRA, LBS, PUB, RET
Hotaling Alley	SAF, ACT, BAF, LBS, ART, CON, PUB, RET
Pirate's Alley	SAF, ACT, BAF, TRA, LBS, ART, CON, EDU, PUB, RET
Post Alley	SAF, ACT, BAF, TRA, LBS, ART, CON, PUB, RET
Nestled in prosperous Murray Hill	SAF, ACT, BAF, GRE, COM, COC, PUB
Commercial Alley	SAF; ACT; SWM; BAF; GRE; TRA; LBS; PUB; HAB; AIR
Residential Alley	SAF; SWM; BAF; GRE; ART; CON; PUB; HAB
Angel Place	SAF; ACT; BAF; TRA; LBS; ART; CON; PUB; RET; HAB
Kimber Lane	SAF; ACT; BAF; TRA; LBS; ART; CON; PUB; RET
	SAF, BAF, TRA, ART, EDU, PUB, HAB
Hutton Lane	ACT, BAF, TRA, LBS, ART, CON, PUB
Eagle Lane	ACT, BAF, TRA, LBS, ART, CON, PUB
Burnett Lane	SAF, ACT, BAF, TRA, LBS, ART, CON, COM, EDU, PUB, RET
ACDC Lane (AC/DC Lane) (formerly Corporation Lane)	SAF, ACT, BAF, LBS, ART, PUB, RET
O'Keefe laneway	SAF, ACT, BAF, TRA, LBS, CON, COC, PUB, RET
Pontocho	ACT, BAF, TRA, LBS, ART, CON, PUB, RET
Nishi Hanami koji	BAF, TRA, LBS, ART, COM, RET
Kakurenbo Yokocho	BAF, TRA, LBS, ART, COM, RET
I kai Roji	SAF, ACT, BAF, COM, COC
Nishiki Market	BAF, TRA, LBS, CON, PUB, RET
purpose	
SAF=Enhance Safty	CON=Increase Connectivity between Local Destinations
ACT=Facilitate Active Recreation/Physical Activity	COM=Build or Enhance Community
SWM=Stromwater Management	EDU=Environmental Education
BAF=Beautification	COC=Empower Community Members to Change their Neighborhoods
GRE=Expand Green Space	PUB=Create Useable Public Space
TRA=Encourage or Facilitate Non-motorized Transportation (such as walking and biking)	RET=Extend Shops, Cafes, and Other Commercial Uses into Alley
LBS=Enhance Local Business	UHI=Urban Heat Island Mitigation
ART=Enhance Art and Culture	HAB=Habitat for Native Species
CON=Increase Connectivity between Local Destinations	AIR=Improve Air Quality
ART=Enhance Art and Culture	ENG=Energy Conservation

General Information			Type			
Project	Grid Pattern	Green Infrastructure	retails	Art	Events	maintenance
Green Alley Program in Los Angeles	Fragmented Parallel	Yes	No	No	Yes	Yes
South Los Angeles Green Alley Master Plan	Fragmented Parallel	Yes	No	Yes	No	No
Green Alley Program	n/a	Yes	No	No	No	Yes
Activating Alleys for a Lively City	Fragmented Parallel	Yes	Yes	Yes	Yes	Yes
Baltimore's Alley Gating and Greening Program	Fragmented Parallel	Yes	No	Yes	No	Yes
Blue Alleys	Fragmented Parallel	Yes	No	No	No	Yes
n/a	n/a	No	No	No	No	No
Community Revitalization	n/a	No	No	No	No	Yes
Green Alleys competition	Fragmented Parallel	Yes	No	No	No	No
Alley Network Project	Fragmented Parallel	No	Yes	Yes	Yes	No
Detroit's First Green Alley Demonstration Project	Fragmented Parallel	Yes	No	No	No	Yes
Atherton Square Revitalization	Fragmented Parallel	Yes	n/a	Yes	n/a	No
Eaca Pedestrian Alley (Cosmo Pedestrian Alley)	Fragmented Parallel	Yes	Yes	Yes	Yes	Yes
Alexander Leidesdorff	Fragmented Parallel	No	Yes	No	Yes	Yes
Hollywood Alley Retrofit Project	Fragmented Parallel	Yes	No	No	No	No
The unpaved alley maintenance program	Gridiron	No	No	No	No	No
Sniffen Court	Fragmented Parallel	No	No	No	No	No
20 Ft Wide	Gridiron	No	No	Yes	Yes	No
Laneways Business Development Program	Warped Parallel	No	Yes	No	No	No
Laneway Revitalization	Warped Parallel	Yes	Yes	Yes	Yes	No
In Between Two Worlds/Laneway Revitalization	Warped Parallel	No	No	Yes	No	No
Forgotten Songs	Fragmented Parallel	No	No	Yes	Yes	No
Vibrant Laneways Program	Gridiron	No	Yes	Yes	Yes	No
Greening Melbourne's Laneways	n/a	Yes	No	No	No	Yes
Melbourne Revitalized Laneways	Gridiron	No	Yes	Yes	Yes	No
AC/DC Lane	Gridiron	No	Yes	Yes	Yes	No
Ruelle Vertes/Green Alleys	Fragmented Parallel	Yes	No	No	No	No
Laneway Housing	n/a	Yes	No	No	No	Yes
Community Design Project	Fragmented Parallel	Yes	Yes	Yes	Yes	No
Umbrella Sky Project	Warped Parallel	No	No	Yes	Yes	No
the planned alley (Shituraa no roji)	Warped Parallel	No	Yes	No	No	Yes
the planned alley (Shituraa no roji)	Warped Parallel	No	Yes	No	No	Yes
Golden Gui	Warped Parallel	No	Yes	No	Yes	No
I kai alley (I kai Roji)	n/a	No	No	No	No	Yes
Fish Market	Fragmented Parallel	No	Yes	No	Yes	Yes
Kamakura Roji Festival	Warped Parallel	No	Yes	Yes	Yes	No
Alley	Grid Pattern	Green Infrastructure	retails	Art	Events	maintenance
Avalon Green Alley Network	Fragmented Parallel	Yes	No	Yes	No	No
Luzerne-Glover alley	Fragmented Parallel	No	No	No	No	Yes
Nord Alley	Fragmented Parallel	Yes	No	No	No	No
Nord Alley	Fragmented Parallel	No	Yes	Yes	Yes	No
Cass Farms Green Alley	Fragmented Parallel	Yes	No	No	No	Yes
McNeel Alley	Fragmented Parallel	Yes	n/a	Yes	n/a	No
EaCa Alley	Fragmented Parallel	Yes	Yes	Yes	Yes	Yes
Belden Place	Fragmented Parallel	Yes	Yes	No	Yes	Yes
Jack Kerouac Alley	Fragmented Parallel	No	Yes	Yes	Yes	Yes
Alexander Leidesdorff alley	Fragmented Parallel	No	Yes	No	Yes	Yes
Hotaling Alley	Fragmented Parallel	No	Yes	Yes	Yes	Yes
Pirate's Alley	Gridiron	No	Yes	Yes	Yes	No
Post Alley	Fragmented Parallel	No	Yes	Yes	Yes	No
Nestled in prosperous Murray Hill	Fragmented Parallel	No	No	No	No	No
Commercial Alley	Gridiron	Yes	No	No	Yes	No
Residential Alley	Gridiron	Yes	No	Yes	Yes	No
Angel Place	Fragmented Parallel	Yes	Yes	Yes	Yes	No
Kimber Lane	Warped Parallel	No	No	Yes	No	No
	Fragmented Parallel	No	No	Yes	Yes	No
Hutton Lane	Gridiron	No	No	Yes	Yes	No
Eagle Lane	Gridiron	No	No	Yes	Yes	No
Burnett Lane	Gridiron	No	Yes	Yes	Yes	No
ACDC Lane (AC/DC Lane) (formerly Corporation Lane)	Gridiron	No	Yes	Yes	Yes	No
O'Keefe laneway	Fragmented Parallel	Yes	Yes	Yes	Yes	No
Pontocho	Warped Parallel	No	Yes	Yes	No	Yes
Nishi Hanami koji	Warped Parallel	No	Yes	No	No	Yes
Kakurenbo Yokocho	Warped Parallel	No	Yes	No	No	Yes
I kai Roji	n/a	No	No	No	No	Yes
Nishiki Market	Fragmented Parallel	No	Yes	No	Yes	Yes

General Information	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Criteria 5	Criteria 6	Criteria 7
Project	Paving	Lighting	Canopies	Opening Façade	Identity	Furniture	Bollard
Green Alley Program in Los Angeles	Yes	Yes	No	No	No	Yes	No
South Los Angeles Green Alley Master Plan	Yes	Yes	No	No	Yes	No	No
Green Alley Program	Yes	Yes	No	No	Yes	No	No
Activating Alleys for a Lively City	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baltimore's Alley Gating and Greening Program	Yes	Yes	No	No	Yes	Yes	No
Blue Alleys	Yes	No	No	No	No	No	No
n/a	No	No	No	No	No	No	No
Community Revitalization	No	No	No	No	No	No	No
Green Alleys competition	n/a	n/a	n/a	n/a	Yes	n/a	n/a
Alley Network Project	Yes	Yes	No	Yes	Yes	T	No
Detroit's First Green Alley Demonstration Project	Yes	Yes	No	No	Yes	No	Yes
Atherton Square Revitalization	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Eaca Pedestrian Alley (Cosmo Pedestrian Alley)	Yes	Yes	T	Yes	Yes	Yes	No
Alexander Leidesdorff	Yes	Yes	No	Yes	Yes	T	No
Hollywood Alley Retrofit Project	Yes	No	No	No	No	No	No
The unpaved alley maintenance program	Yes	No	No	No	No	No	No
Sniffen Court	Yes	Yes	No	Yes	Yes	No	No
20 Ft Wide	No	Yes	T	No	No	T	No
Laneways Business Development Program	No	Yes	No	Yes	No	Yes	No
Laneway Revitalization	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In Between Two Worlds/Laneway Revitalization	No	Yes	No	No	Yes	No	No
Forgotten Songs	No	Yes	No	No	Yes	No	No
Vibrant Laneways Program	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Greening Melbourne's Laneways	No	No	No	No	No	No	No
Melbourne Revitalized Laneways	Yes	Yes	Yes	Yes	Yes	Yes	Yes
AC/DC Lane	No	No	No	No	Yes	No	No
Ruelle Vertes/Green Alleys	No	No	No	No	No	No	No
Laneway Housing	Yes	Yes	Yes	Yes	No	No	No
Community Design Project	No	Yes	n/a	Yes	Yes	n/a	n/a
Umbrella Sky Project	No	Yes	Yes	Yes	No	Yes	No
the planned alley (Shiturae no roji)	No	Yes	No	Yes	Yes	No	No
the planned alley (Shiturae no roji)	Yes	Yes	No	Yes	Yes	Yes	No
Golden Gui	No	Yes	Yes	Yes	Yes	No	No
I kai alley (I kai Roji)	No	No	No	No	Yes	No	No
Fish Market	Yes	Yes	Yes	Yes	Yes	No	No
Kamakura Roji Festival	No	No	No	Yes	No	No	No
Alley	Paving	Lighting	Canopies	Opening Façade	Identity	Furniture	Bollard
Avalon Green Alley Network	Yes	Yes	No	No	Yes	No	No
Luzerne-Glover alley	No	No	No	No	Yes	Yes	No
Nord Alley	n/a	n/a	n/a	n/a	Yes	n/a	n/a
Nord Alley	Yes	Yes	No	Yes	Yes	T	No
Cass Farms Green Alley	Yes	Yes	No	No	Yes	No	Yes
McNeel Alley	Yes	Yes	Yes	Yes	Yes	Yes	Yes
EaCa Alley	Yes	Yes	T	Yes	Yes	Yes	No
Belden Place	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Jack Kerouac Alley	Yes	Yes	No	No	Yes	No	Yes
Alexander Leidesdorff alley	Yes	Yes	No	Yes	Yes	T	No
Hotaling Alley	Yes	Yes	No	Yes	Yes	T	Yes
Pirate's Alley	Yes	Yes	Yes	Yes	Yes	Yes	No
Post Alley	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Nestled in prosperous Murray Hill	Yes	Yes	No	Yes	Yes	No	No
Commercial Alley	Yes	Yes	No	No	Yes	Yes	Yes
Residential Alley	Yes	No	No	No	Yes	No	No
Angel Place	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kimber Lane	No	Yes	No	No	Yes	No	No
	No	Yes	No	No	Yes	No	No
Hutton Lane	No	Yes	Yes	Yes	Yes	Yes	No
Eagle Lane	Yes	Yes	Yes	No	Yes	Yes	Yes
Burnett Lane	No	Yes	Yes	Yes	Yes	Yes	No
ACDC Lane (AC/DC Lane) (formerly Corporation Lane)	No	Yes	No	Yes	Yes	No	No
O'Keefe laneway	No	Yes	n/a	Yes	Yes	n/a	n/a
Pontocho	Yes	Yes	No	Yes	Yes	No	No
Nishi Hanami koji	No	Yes	No	Yes	Yes	No	No
Kakurenbo Yokocho	Yes	Yes	No	Yes	Yes	Yes	No
I kai Roji	No	No	No	No	Yes	No	No
Nishiki Market	Yes	Yes	Yes	Yes	Yes	No	No

General Information	Criteria 8	Criteria 9	Criteria 9	Criteria 10	Criteria 11	Criteria 12
Project	Water runoff	On-site water treatment	Steps	Colors	Setback	Building Height
Green Alley Program in Los Angeles	Yes	Yes	No	Yes	No	No
South Los Angeles Green Alley Master Plan	Yes	Yes	No	Yes	No	No
Green Alley Program	Yes	Yes	No	No	No	No
Activating Alleys for a Lively City	Yes	Yes	No	No	No	No
Baltimore's Alley Gating and Greening Program	Yes	Yes	No	Yes	No	No
Blue Alleys	Yes	Yes	No	No	No	No
n/a	No	No	No	No	No	No
Community Revitalization	No	No	No	No	No	No
Green Alleys competition	Yes	Yes	No	n/a	No	Yes
Alley Network Project	No	No	No	No	No	Yes
Detroit's First Green Alley Demonstration Project	Yes	Yes	No	Yes	No	No
Atherton Square Revitalization	No	No	Yes	Yes	No	No
Eaca Pedestrian Alley (Cosmo Pedestrian Alley)	Yes	Yes	No	No	No	No
Alexander Leidesdorff	No	No	No	No	No	No
Hollywood Alley Retrofit Project	Yes	Yes	No	No	No	No
The unpaved alley maintenance program	No	No	No	No	No	No
Sniffen Court	No	No	No	Yes	No	Yes
20 Ft Wide	No	No	T	T	No	No
Laneways Business Development Program	No	No	No	No	No	No
Laneway Revitalization	Yes	Yes	No	No	No	No
In Between Two Worlds/Laneway Revitalization	No	No	No	Yes	No	No
Forgotten Songs	No	No	No	No	No	No
Vibrant Laneways Program	Yes	No	Yes	Yes	No	No
Greening Melbourne's Laneways	No	No	No	No	No	No
Melbourne Revitalized Laneways	No	No	No	No	Yes	No
AC/DC Lane	No	No	No	No	No	No
Ruelle Vertes/Green Alleys	No	No	No	No	No	No
Laneway Housing	Yes	Yes	No	No	Yes	Yes
Community Design Project	n/a	n/a	n/a	No	No	No
Umbrella Sky Project	No	No	No	Yes	No	Yes
the planned alley (Shiturae no roji)	No	No	No	No	Yes	Yes
the planned alley (Shiturae no roji)	No	No	No	Yes	Yes	Yes
Golden Gui	Yes	No	Yes	No	Yes	Yes
I kai alley (I kai Roji)	No	No	No	No	Yes	Yes
Fish Market	No	No	No	Yes	Yes	Yes
Kamakura Roji Festival	No	No	No	No	No	No
Alley	Water runoff	On-site water treatment	Steps	Colors	Setback	Building Height
Avalon Green Alley Network	Yes	Yes	No	Yes	No	No
Luzerne-Glover alley	No	No	No	Yes	No	No
Nord Alley	Yes	Yes	No	n/a	No	Yes
Nord Alley	No	No	No	No	No	Yes
Cass Farms Green Alley	Yes	Yes	No	Yes	No	No
McNeel Alley	No	No	Yes	Yes	No	No
EaCa Alley	Yes	Yes	No	No	No	No
Belden Place	Yes	Yes	Yes	Yes	No	No
Jack Kerouac Alley	No	No	No	No	No	No
Alexander Leidesdorff alley	No	No	No	No	No	No
Hotaling Alley	No	No	No	No	No	No
Pirate's Alley	Yes	No	Yes	Yes	No	Yes
Post Alley	No	No	Yes	No	No	No
Nestled in prosperous Murray Hill	No	No	No	Yes	No	Yes
Commercial Alley	Yes	Yes	No	No	No	No
Residential Alley	Yes	Yes	No	No	No	No
Angel Place	Yes	Yes	No	No	No	No
Kimber Lane	No	No	No	Yes	No	No
	No	No	No	No	No	No
Hutton Lane	Yes	No	No	No	No	No
Eagle Lane	No	No	Yes	Yes	No	No
Burnett Lane	Yes	No	Yes	No	No	No
ACDC Lane (AC/DC Lane) (formerly Corporation Lane)	No	No	No	No	No	No
O'Keefe laneway	n/a	n/a	n/a	No	No	No
Pontocho	No	No	Yes	Yes	Yes	Yes
Nishi Hanami koji	No	No	No	No	Yes	Yes
Kakurenbo Yokocho	No	No	No	Yes	Yes	Yes
I kai Roji	No	No	No	No	Yes	Yes
Nishiki Market	No	No	No	Yes	Yes	Yes

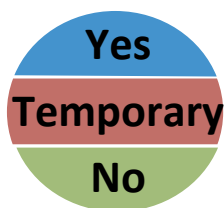
<i>General Information</i>	<i>Criteria 13</i>	<i>Criteria 14</i>	<i>Criteria 15</i>	<i>Criteria 16</i>
<i>Project</i>	<i>Lines</i>	<i>Trash removal/enclosure</i>	<i>Trees or Plants</i>	<i>Banning motor vehicles</i>
Green Alley Program in Los Angeles	Yes	Yes	Yes	Yes
South Los Angeles Green Alley Master Plan	Yes	No	Yes	No
Green Alley Program	No	Yes	Yes	No
Activating Alleys for a Lively City	No	Yes	Yes	T
Baltimore's Alley Gating and Greening Program	No	Yes	Yes	T
Blue Alleys	No	No	Yes	No
n/a	No	No	No	No
Community Revitalization	No	No	No	No
Green Alleys competition	n/a	n/a	n/a	n/a
Alley Network Project	No	Yes	Yes	Yes
Detroit's First Green Alley Demonstration Project	Yes	Yes	Yes	T
Atherton Square Revitalization	No	Yes	Yes	No
Eaca Pedestrian Alley (Cosmo Pedestrian Alley)	Yes	Yes	Yes	Yes
Alexander Leidesdorff	Yes	No	No	No
Hollywood Alley Retrofit Project	No	No	No	No
The unpaved alley maintenance program	No	No	No	No
Sniffen Court	No	Yes	Yes	Yes
20 Ft Wide	T	No	No	T
Laneways Business Development Program	No	No	No	No
Laneway Revitalization	No	No	No	Yes
In Between Two Worlds/Laneway Revitalization	No	No	No	No
Forgotten Songs	No	Yes	No	Yes
Vibrant Laneways Program	Yes	Yes	Yes	Yes
Greening Melbourne's Laneways	No	No	Yes	No
Melbourne Revitalized Laneways	No	Yes	No	Yes
AC/DC Lane	No	No	No	No
Ruelle Vertes/Green Alleys	No	Yes	Yes	Yes
Laneway Housing	Yes	No	Yes	No
Community Design Project	n/a	Yes	Yes	Yes
Umbrella Sky Project	Yes	No	No	Yes
the planned alley (Shituraa no roji)	No	Yes	No	Yes
the planned alley (Shituraa no roji)	No	Yes	No	Yes
Golden Gui	Yes	No	No	Yes
I kai alley (I kai Roji)	No	Yes	No	Yes
Fish Market	Yes	Yes	No	Yes
Kamakura Roji Festival	No	No	No	No
<i>Alley</i>	<i>Lines</i>	<i>Trash removal/enclosure</i>	<i>Trees or Plants</i>	<i>Banning motor vehicles</i>
Avalon Green Alley Network	Yes	No	Yes	No
Luzerne-Glover alley	No	No	Yes	T
Nord Alley	n/a	n/a	n/a	n/a
Nord Alley	No	Yes	Yes	Yes
Cass Farms Green Alley	Yes	Yes	Yes	T
McNeel Alley	No	Yes	Yes	No
EaCa Alley	Yes	Yes	Yes	Yes
Belden Place	No	No	Yes	Yes
Jack Kerouac Alley	No	Yes	No	Yes
Alexander Leidesdorff alley	Yes	No	No	No
Hotaling Alley	Yes	No	Yes	Yes
Pirate's Alley	No	Yes	Yes	Yes
Post Alley	No	Yes	Yes	T
Nestled in prosperous Murray Hill	No	Yes	Yes	Yes
Commercial Alley	Yes	No	Yes	No
Residential Alley	Yes	Yes	Yes	No
Angel Place	No	No	No	Yes
Kimber Lane	No	No	No	No
	No	Yes	No	Yes
Hutton Lane	Yes	n/a	No	No
Eagle Lane	No	n/a	Yes	Yes
Burnett Lane	Yes	n/a	No	Yes
ACDC Lane (AC/DC Lane) (formerly Corporation Lane)	No	No	No	No
O'Keefe laneway	n/a	Yes	Yes	Yes
Pontocho	Yes	Yes	No	Yes
Nishi Hanami koji	No	Yes	No	Yes
Kakurenbo Yokochō	No	Yes	No	Yes
I kai Roji	No	Yes	No	Yes
Nishiki Market	Yes	Yes	No	Yes

<i>General Information</i>	<i>Criteria 17</i>	<i>Criteria 18</i>	<i>Criteria 19</i>	<i>Criteria 20</i>
<i>Project</i>	<i>Cultural Involvement</i>	<i>Vendor</i>	<i>Recycling</i>	<i>Gathering places or centers</i>
Green Alley Program in Los Angeles	No	No	Yes	Yes
South Los Angeles Green Alley Master Plan	No	T	No	No
Green Alley Program	No	No	Yes	No
Activating Alleys for a Lively City	No	No	No	Yes
Baltimore's Alley Gating and Greening Program	No	No	No	Yes
Blue Alleys	No	No	No	No
n/a	Yes	No	No	No
Community Revitalization	No	No	No	No
Green Alleys competition	No	No	n/a	n/a
Alley Network Project	Yes	T	Yes	Yes
Detroit's First Green Alley Demonstration Project	No	No	Yes	Yes
Atherton Square Revitalization	No	No	Yes	Yes
Eaca Pedestrian Alley (Cosmo Pedestrian Alley)	Yes	No	Yes	Yes
Alexander Leidesdorff	Yes	No	No	No
Hollywood Alley Retrofit Project	No	No	No	No
The unpaved alley maintenance program	No	No	No	No
Sniffen Court	Yes	No	No	Yes
20 Ft Wide	No	No	No	T
Laneways Business Development Program	No	No	No	No
Laneway Revitalization	No	Yes	No	Yes
In Between Two Worlds/Laneway Revitalization	Yes	No	No	No
Forgotten Songs	No	No	No	No
Vibrant Laneways Program	Yes	No	No	Yes
Greening Melbourne's Laneways	No	No	No	No
Melbourne Revitalized Laneways	No	No	n/a	Yes
AC/DC Lane	Yes	No	No	No
Ruelle Vertes/Green Alleys	No	No	No	No
Laneway Housing	No	No	No	No
Community Design Project	Yes	n/a	No	No
Umbrella Sky Project	No	No	No	No
the planned alley (Shituraa no roji)	Yes	No	No	No
the planned alley (Shituraa no roji)	Yes	No	No	No
Golden Gui	Yes	No	Yes	No
I kai alley (I kai Roji)	Yes	No	No	Yes
Fish Market	Yes	No	No	Yes
Kamakura Roji Festival	Yes	Yes	No	Yes
<i>Alley</i>	<i>Cultural Involvement</i>	<i>Vendor</i>	<i>Recycling</i>	<i>Gathering places or centers</i>
Avalon Green Alley Network	No	T	No	No
Luzerne-Glover alley	No	No	No	Yes
Nord Alley	No	No	n/a	n/a
Nord Alley	Yes	T	Yes	Yes
Cass Farms Green Alley	No	No	Yes	Yes
McNeel Alley	No	No	Yes	Yes
EaCa Alley	Yes	No	Yes	Yes
Belden Place	No	No	No	Yes
Jack Kerouac Alley	Yes	No	No	No
Alexander Leidesdorff alley	Yes	No	No	No
Hotaling Alley	No	No	No	No
Pirate's Alley	Yes	Yes	No	Yes
Post Alley	No	No	No	Yes
Nestled in prosperous Murray Hill	Yes	No	No	Yes
Commercial Alley	No	No	Yes	No
Residential Alley	No	No	Yes	No
Angel Place	No	No	No	Yes
Kimber Lane	Yes	No	No	No
	No	No	No	No
Hutton Lane	Yes	No	No	Yes
Eagle Lane	Yes	No	No	Yes
Burnett Lane	Yes	No	No	Yes
ACDC Lane (AC/DC Lane) (formerly Corporation Lane)	Yes	No	No	No
O'Keefe laneway	Yes	n/a	No	No
Pontocho	Yes	No	No	No
Nishi Hanami koji	Yes	No	No	No
Kakurenbo Yokocho	Yes	No	No	No
I kai Roji	Yes	No	No	Yes
Nishiki Market	Yes	No	No	Yes

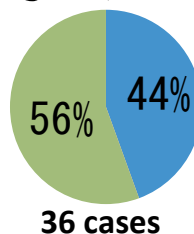
<i>General Information</i>	<i>Criteria 21</i>	<i>Criteria 22</i>	<i>Criteria 23</i>	<i>Appendix</i>
<i>Project</i>	<i>Network for pedestrians and bicyclists</i>	<i>noise control</i>	<i>Recycled Materials</i>	
Green Alley Program in Los Angeles	Yes	Yes	Yes	D-16
South Los Angeles Green Alley Master Plan	Yes	No	Yes	D-2
Green Alley Program	No	No	Yes	
Activating Alleys for a Lively City	Yes	No	No	D-18
Baltimore's Alley Gating and Greening Program	No	Yes	Yes	D-14
Blue Alleys	No	No	No	D-15
n/a	No	No	No	
Community Revitalization	No	No	No	
Green Alleys competition	Yes	n/a	n/a	D-9
Alley Network Project	Yes	No	No	D-9
Detroit's First Green Alley Demonstration Project	Yes	Yes	No	D-5
Atherton Square Revitalization	Yes	No	No	D-1
Eaca Pedestrian Alley (Cosmo Pedestrian Alley)	Yes	No	No	D-6
Alexander Leidesdorff	No	No	No	
Hollywood Alley Retrofit Project	No	No	No	D-17
The unpaved alley maintenance program	No	No	No	
Sniffen Court	No	No	No	D-23
20 Ft Wide	No	No	No	
Laneways Business Development Program	No	No	No	D-20
Laneway Revitalization	Yes	No	No	
In Between Two Worlds/Laneway Revitalization	Yes	No	No	
Forgotten Songs	Yes	No	No	
Vibrant Laneways Program	Yes	No	No	
Greening Melbourne's Laneways	No	No	No	
Melbourne Revitalized Laneways	Yes	No	No	D-19
AC/DC Lane	No	No	No	D-10
Ruelle Vertes/Green Alleys	No	No	No	
Laneway Housing	No	No	No	
Community Design Project	Yes	No	No	
Umbrella Sky Project	No	No	No	
the planned alley (Shituraa no roji)	Yes	No	No	D-21
the planned alley (Shituraa no roji)	Yes	No	No	D-22
Golden Gui	Yes	No	No	
I kai alley (I kai Roji)	No	No	No	
Fish Market	Yes	No	No	
Kamakura Roji Festival	Yes	No	No	
<i>Alley</i>	<i>Network for pedestrians and bicyclists</i>	<i>noise control</i>	<i>Recycled Materials</i>	
Avalon Green Alley Network	Yes	No	Yes	D-13
Luzerne-Glover alley	No	Yes	No	D-2
Nord Alley	Yes	n/a	n/a	D-9
Nord Alley	Yes	No	No	D-9
Cass Farms Green Alley	Yes	Yes	No	D-5
McNeel Alley	Yes	No	No	D-1
EaCa Alley	Yes	No	No	D-6
Belden Place	Yes	No	No	D-4
Jack Kerouac Alley	Yes	No	No	D-3
Alexander Leidesdorff alley	No	No	No	
Hotaling Alley	Yes	No	No	
Pirate's Alley	Yes	No	No	
Post Alley	Yes	Yes	No	
Nestled in prosperous Murray Hill	No	No	No	
Commercial Alley	No	No	No	D-7
Residential Alley	Yes	No	No	D-8
Angel Place	Yes	No	No	
Kimber Lane	Yes	No	No	
	Yes	No	No	
Hutton Lane	Yes	No	No	
Eagle Lane	Yes	No	No	
Burnett Lane	Yes	No	No	
ACDC Lane (AC/DC Lane) (formerly Corporation Lane)	No	No	No	D-10
O'Keefe laneway	Yes	No	No	
Pontocho	No	No	No	D-11
Nishi Hanami koji	Yes	No	No	
Kakurenbo Yokocho	Yes	No	No	D-12
I kai Roji	No	No	No	
Nishiki Market	Yes	No	No	

APPENDIX C: Case Study Analysis;

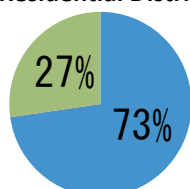
Appendix C-1: Green Infrastructure (Projects)

Green Infrastructure (Project)

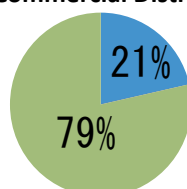
Total

**District**

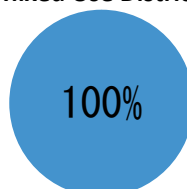
Residential District



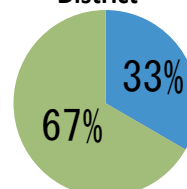
Commercial District



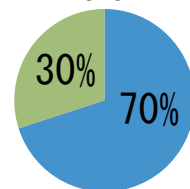
Mixed Use District



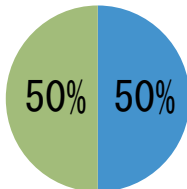
Arts and Cultural/Historical District

**Year**

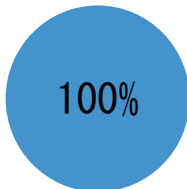
2010~



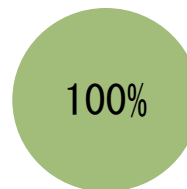
2000~2009



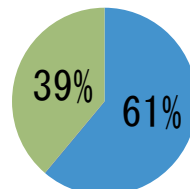
1990~1999



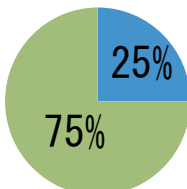
~1989

**Country**

The U.S.



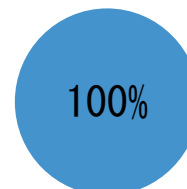
Australia



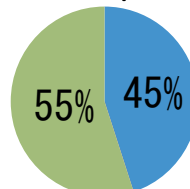
Japan



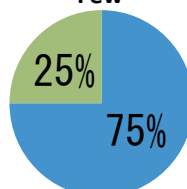
Canada

**Size of Projects (Multiple, Few, Single)**

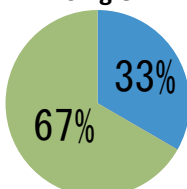
Multiple



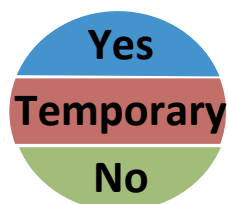
Few



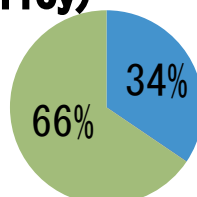
Single



Appendix C-2: Green Infrastructure (Alleys)

Green Infrastructure (Alley)

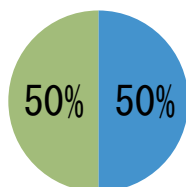
Total



29 cases

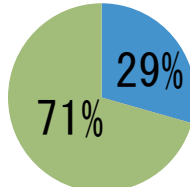
District

Residential District



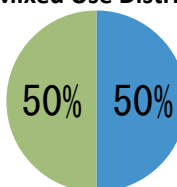
4 cases

Commercial District



17 cases

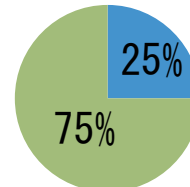
Mixed Use District



4 cases

Arts and Cultural/Historical

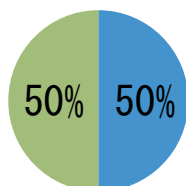
District



4 cases

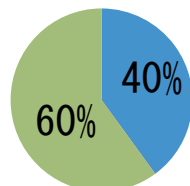
Year

2010~



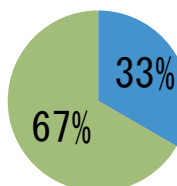
10 cases

2000~2009



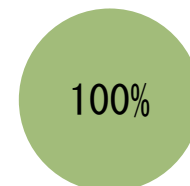
5 cases

1990~1999



3 cases

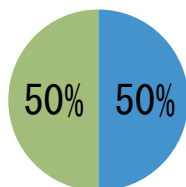
~1989



7 cases

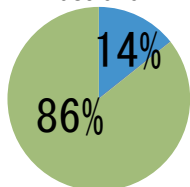
Country

The U.S.



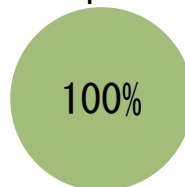
16 cases

Australia



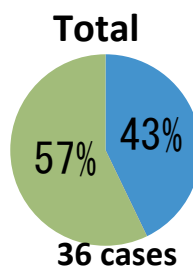
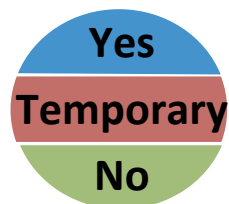
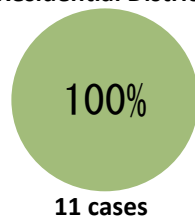
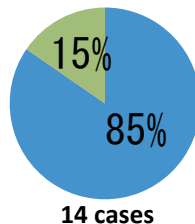
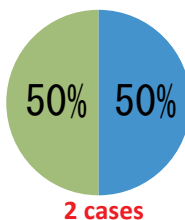
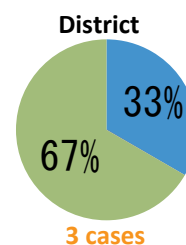
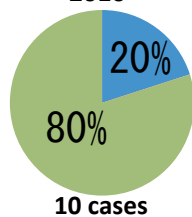
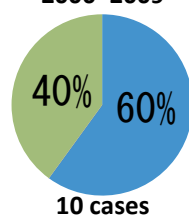
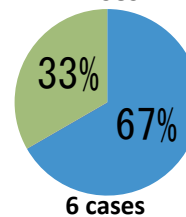
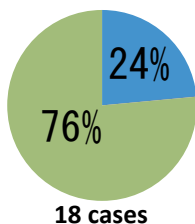
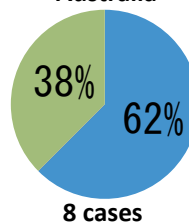
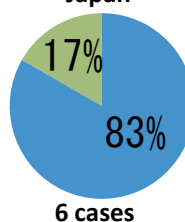
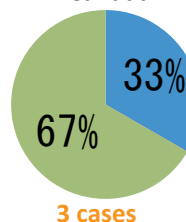
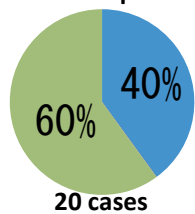
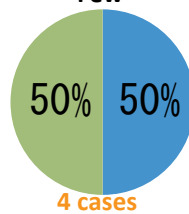
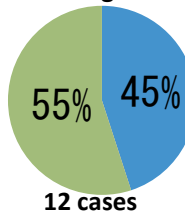
7 cases

Japan

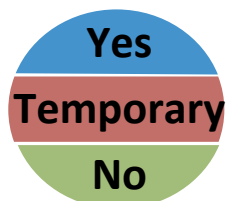
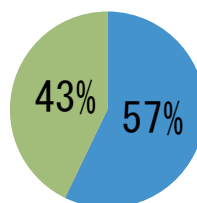


5 cases

Appendix C-3: Retails (Projects)

Retails (Project)**District****Residential District****Commercial District****Mixed Use District****Arts and Cultural/Historical District****Year****2010~****2000~2009****1990~1999****~1989****Country****The U.S.****Australia****Japan****Canada****Size of Projects (Multiple, Few, Single)****Multiple****Few****Single**

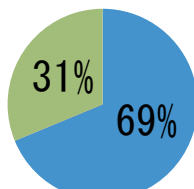
Appendix C-4: Retails (Alleys)

Retails (Alley)**Total**

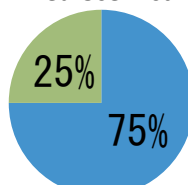
29 cases

District**Residential District**

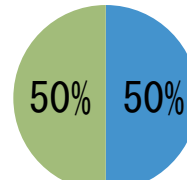
4 cases

Commercial District

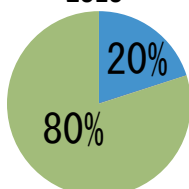
17 cases

Mixed Use District

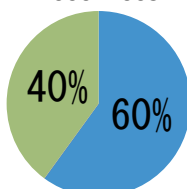
4 cases

Arts and Cultural/Historical**District**

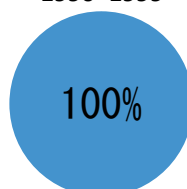
4 cases

Year**2010~**

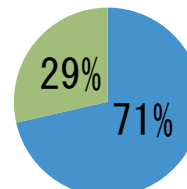
10 cases

2000~2009

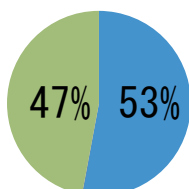
5 cases

1990~1999

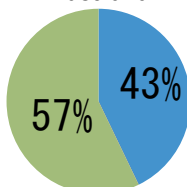
3 cases

~1989

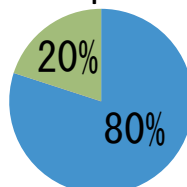
7 cases

Country**The U.S.**

16 cases

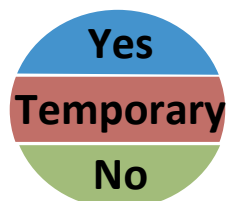
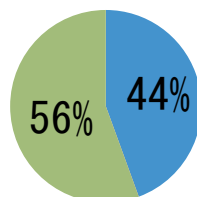
Australia

7 cases

Japan

5 cases

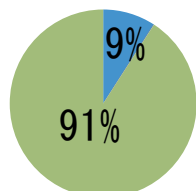
Appendix C-5: Art (Projects)

Art (Project)**Total**

36 cases

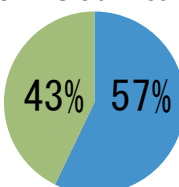
District

Residential District



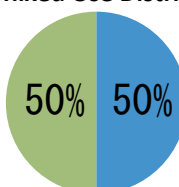
11 cases

Commercial District



14 cases

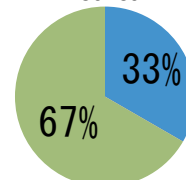
Mixed Use District



2 cases

Arts and Cultural/Historical

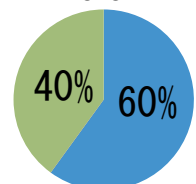
District



3 cases

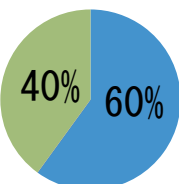
Year

2010~



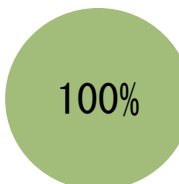
10 cases

2000~2009



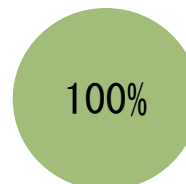
10 cases

1990~1999



1 cases

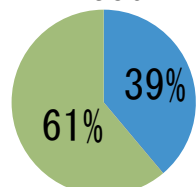
~1989



6 cases

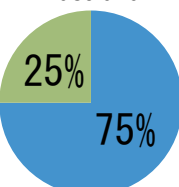
Country

The U.S.



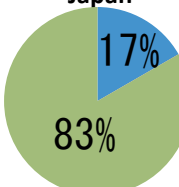
18 cases

Australia



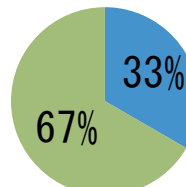
8 cases

Japan



6 cases

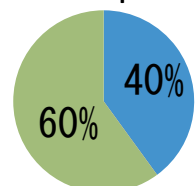
Canada



3 cases

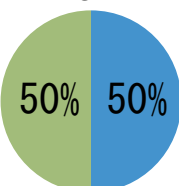
Size of Projects (Multiple, Few, Single)

Multiple



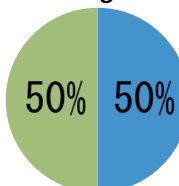
20 cases

Few



4 cases

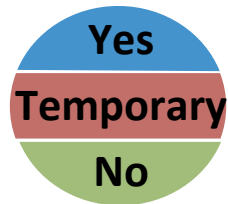
Single



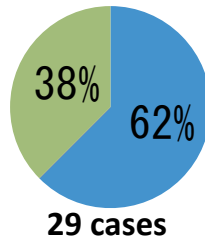
12 cases

Appendix C-6: Art (Alleys)

Art (Alley)

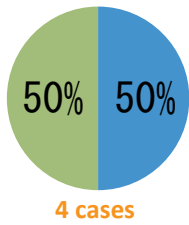


Total

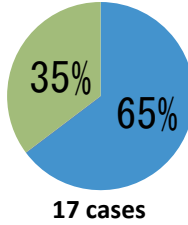


District

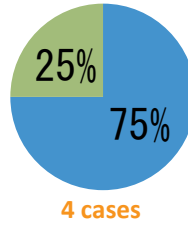
Residential District



Commercial District

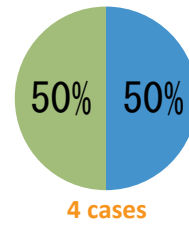


Mixed Use District



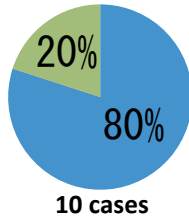
Arts and Cultural/Historical District

District

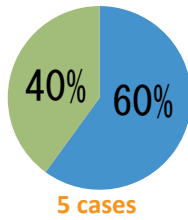


Year

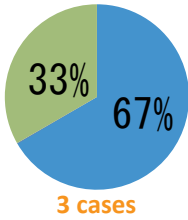
2010~



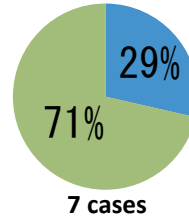
2000~2009



1990~1999

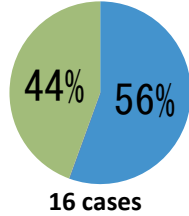


~1989

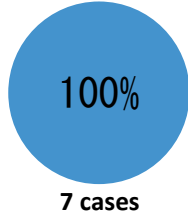


Country

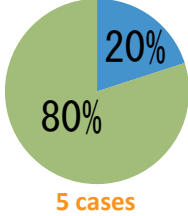
The U.S.



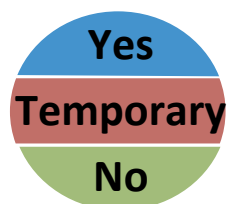
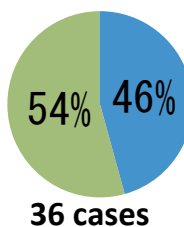
Australia



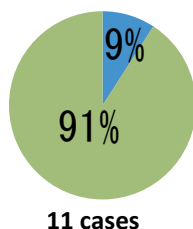
Japan



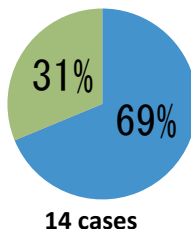
Appendix C-7: Events (Projects)

Events (Project)**Total****District**

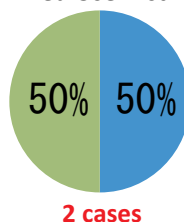
Residential District



Commercial District

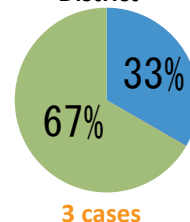


Mixed Use District

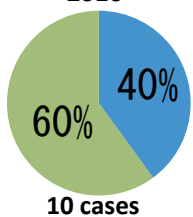


Arts and Cultural/Historical

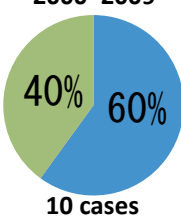
District

**Year**

2010~



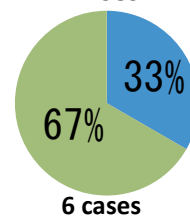
2000~2009



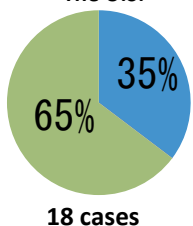
1990~1999



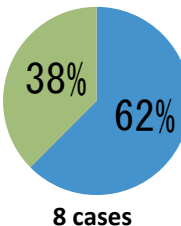
~1989

**Country**

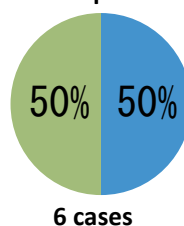
The U.S.



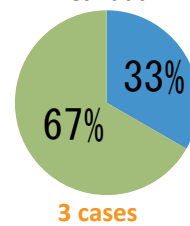
Australia



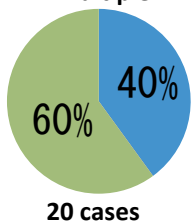
Japan



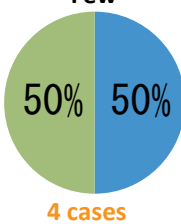
Canada

**Size of Projects (Multiple, Few, Single)**

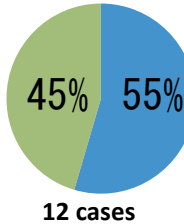
Multiple



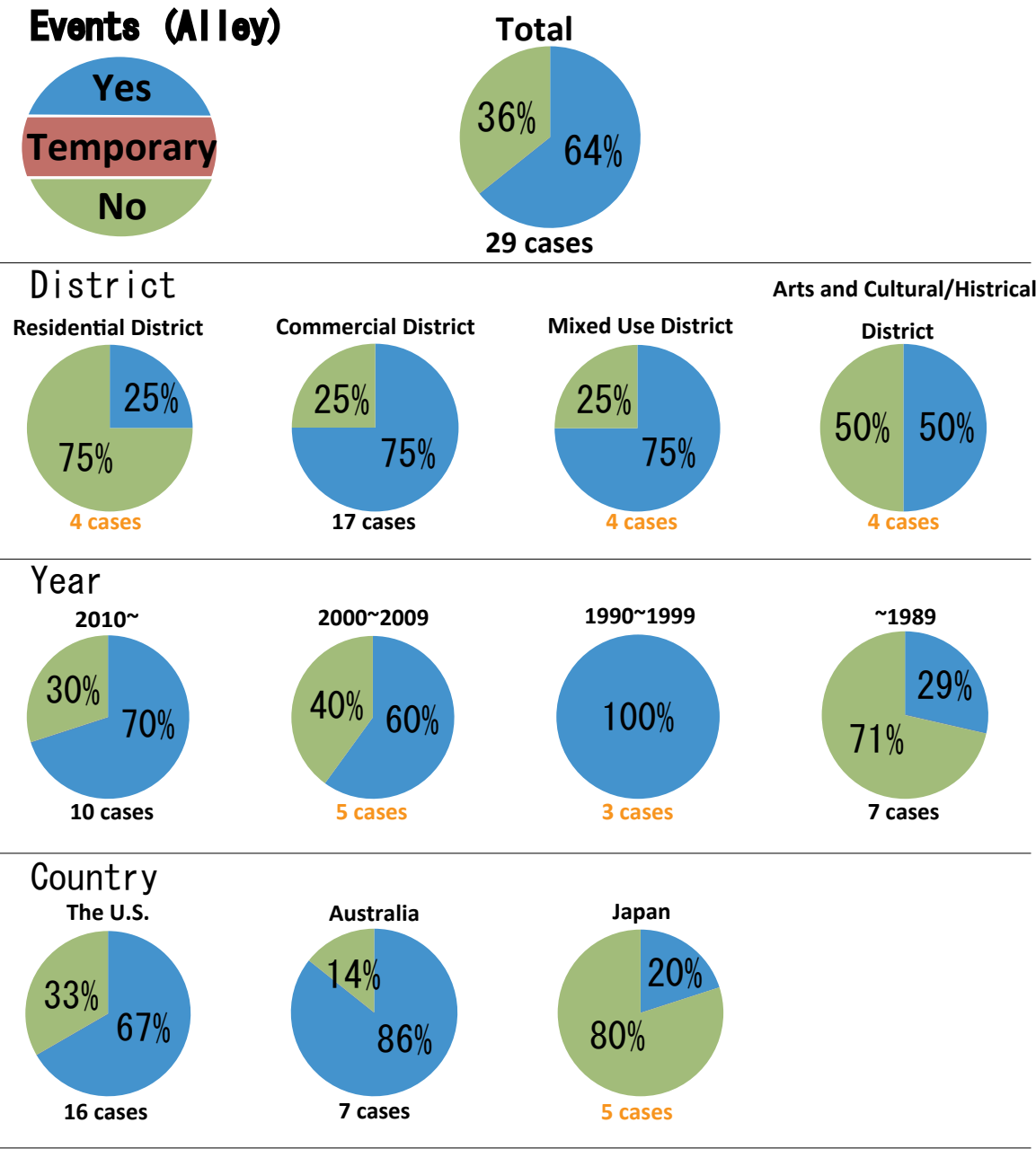
Few



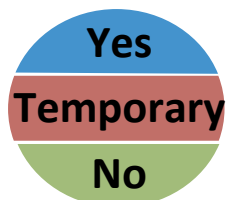
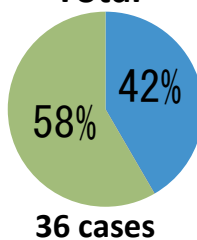
Single



Appendix C-8: Events (Alleys)



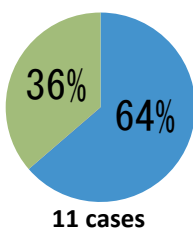
Appendix C-9: Maintenance (Projects)

Maintenance (Project)**Total**

36 cases

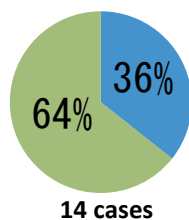
District

Residential District



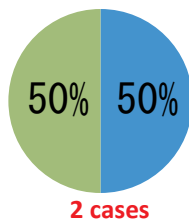
11 cases

Commercial District



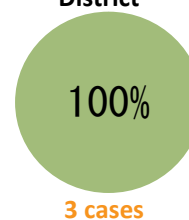
14 cases

Mixed Use District



2 cases

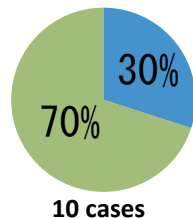
Arts and Cultural/Historical District



3 cases

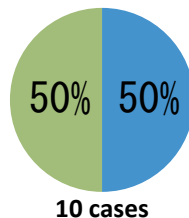
Year

2010~



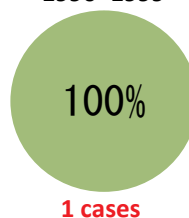
10 cases

2000~2009



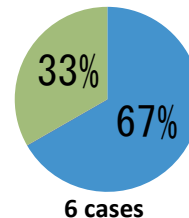
10 cases

1990~1999



1 cases

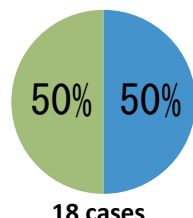
~1989



6 cases

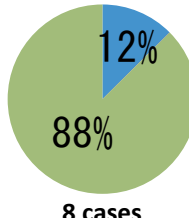
Country

The U.S.



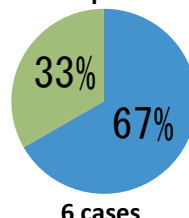
18 cases

Australia



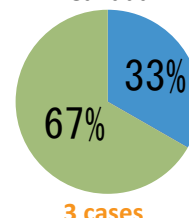
8 cases

Japan



6 cases

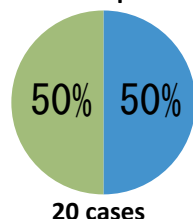
Canada



3 cases

Size of Projects (Multiple, Few, Single)

Multiple



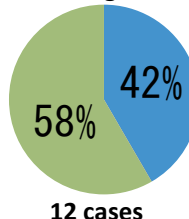
20 cases

Few



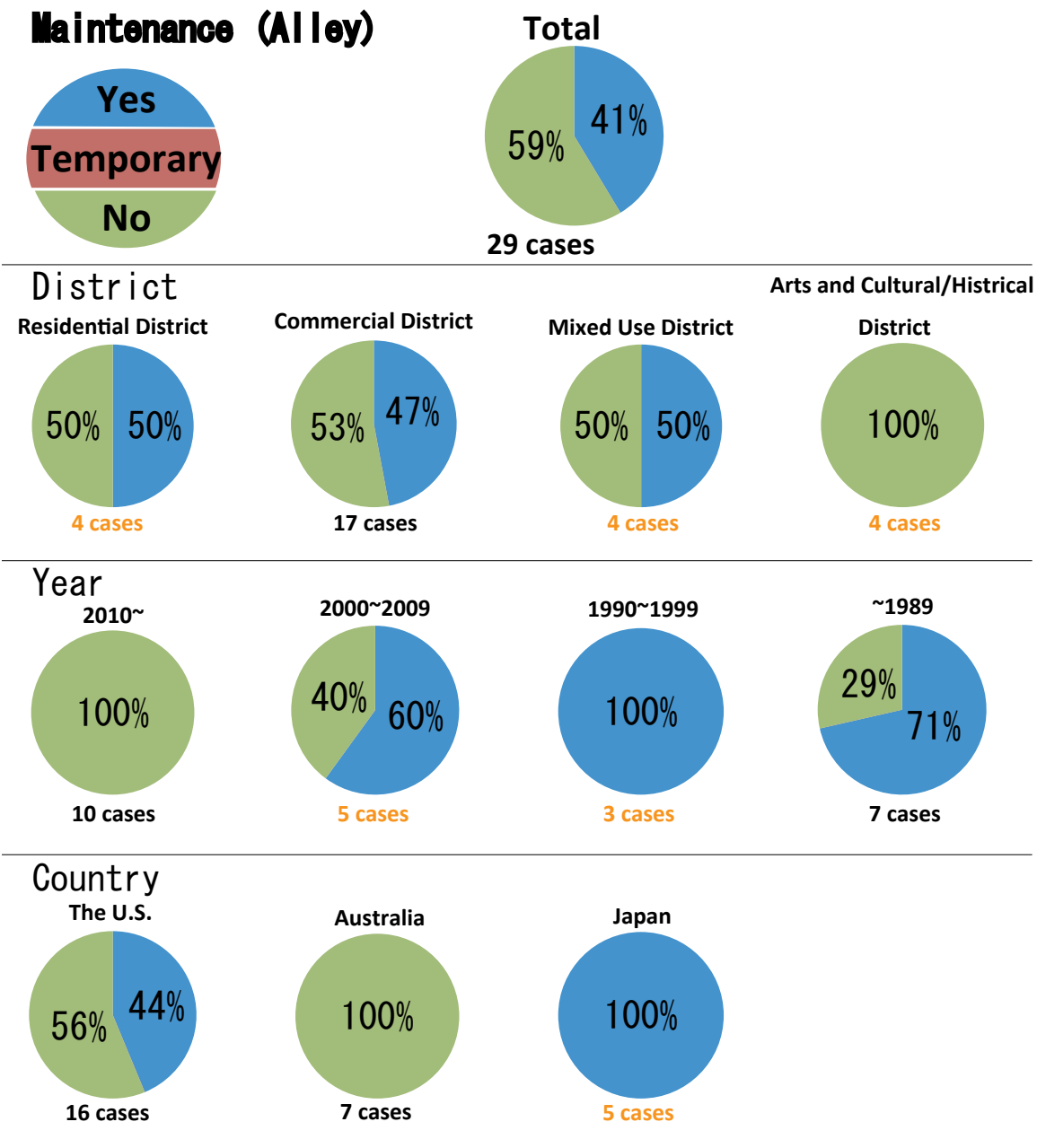
4 cases

Single

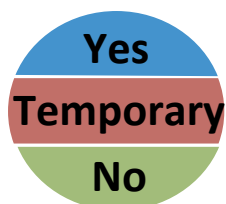
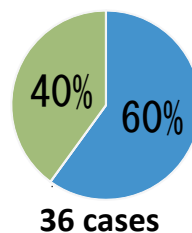
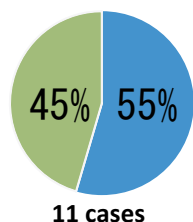
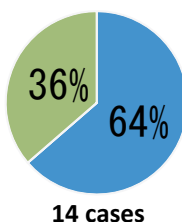
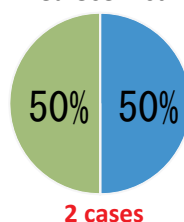
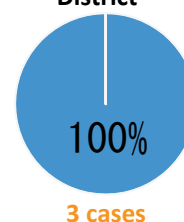
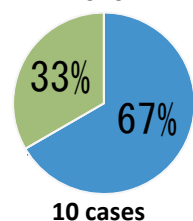
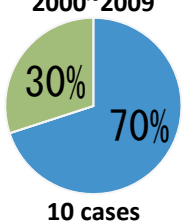
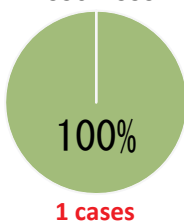
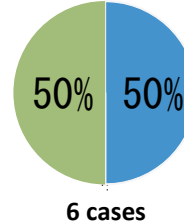
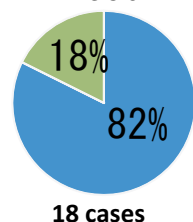
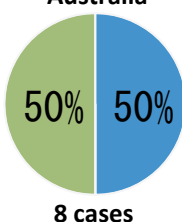
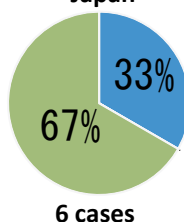
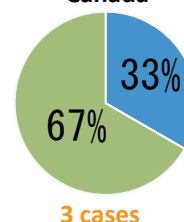
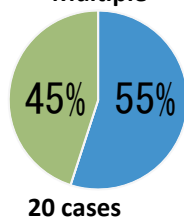
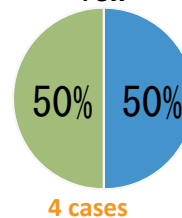
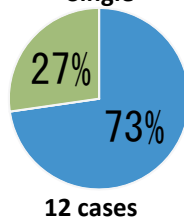


12 cases

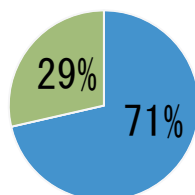
Appendix C-10: Maintenance (Alleys)



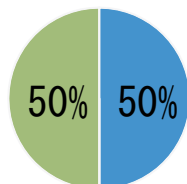
Appendix C-11: Paving (Projects)

Paving (Project)**Total****District****Residential District****Commercial District****Mixed Use District****Arts and Cultural/Historical****District****Year****2010~****2000~2009****1990~1999****~1989****Country****The U.S.****Australia****Japan****Canada****Size of Projects (Multiple, Few, Single)****Multiple****Few****Single**

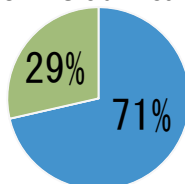
Appendix C-12: Paving (Alleys)

Paving (Alley)**Total**

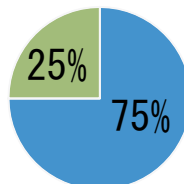
29 cases

District**Residential District**

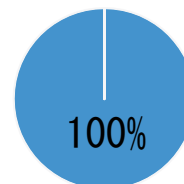
4 cases

Commercial District

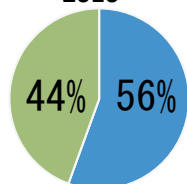
17 cases

Mixed Use District

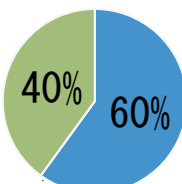
4 cases

Arts and Cultural/Historical District

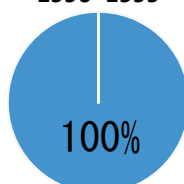
4 cases

Year**2010~**

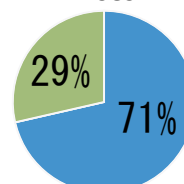
10 cases

2000~2009

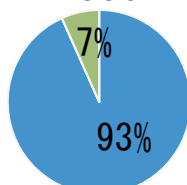
5 cases

1990~1999

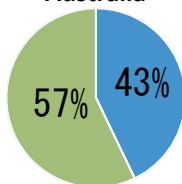
3 cases

~1989

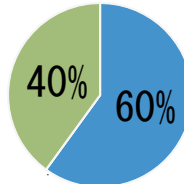
7 cases

Country**The U.S.**

16 cases

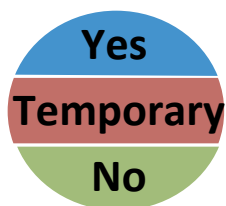
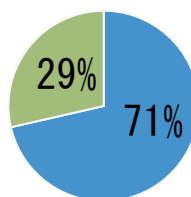
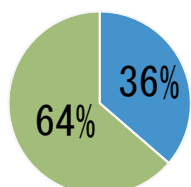
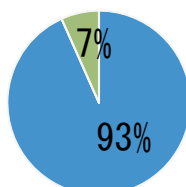
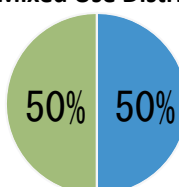
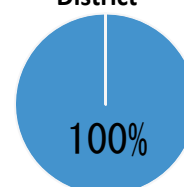
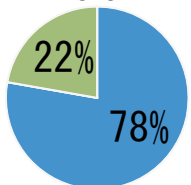
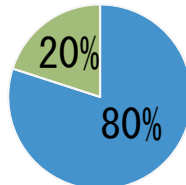
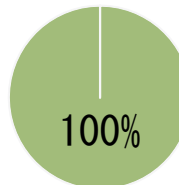
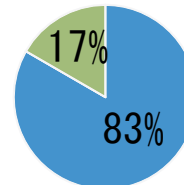
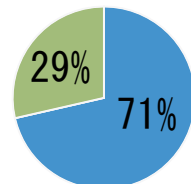
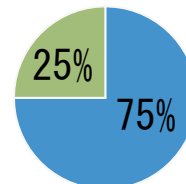
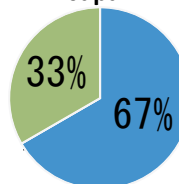
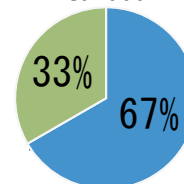
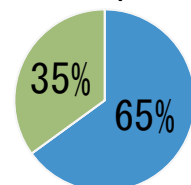
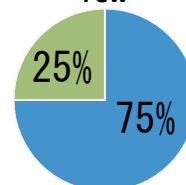
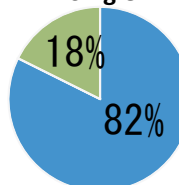
Australia

7 cases

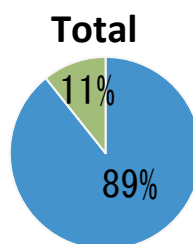
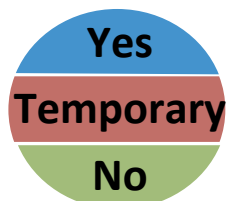
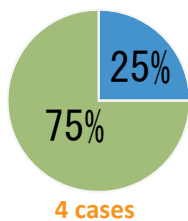
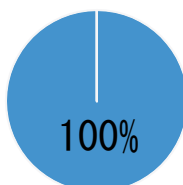
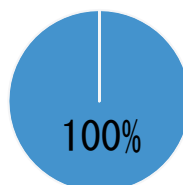
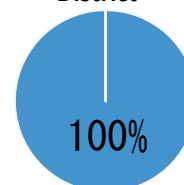
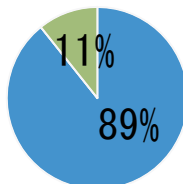
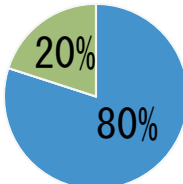
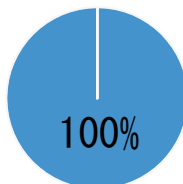
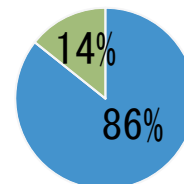
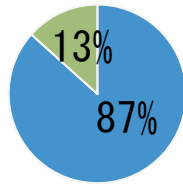
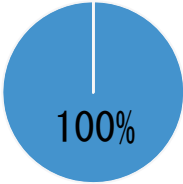
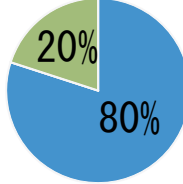
Japan

5 cases

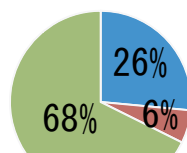
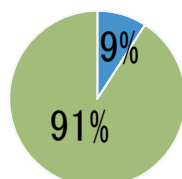
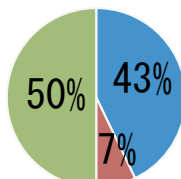
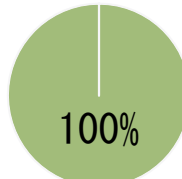
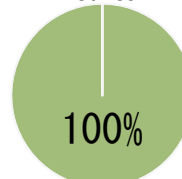
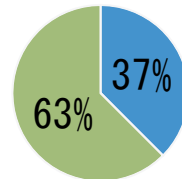
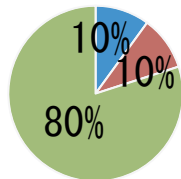
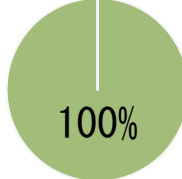
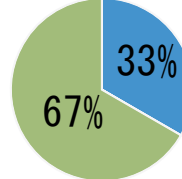
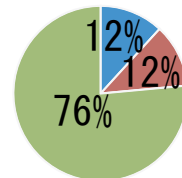
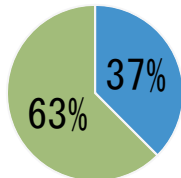
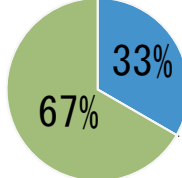
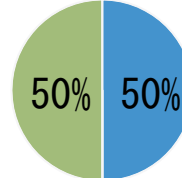
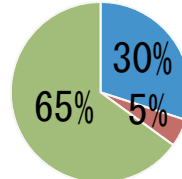
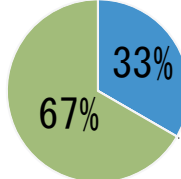
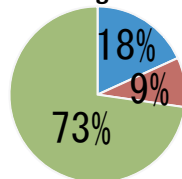
Appendix C-13: Lighting (Projects)

Lighting (Project)**Total****36 cases****District****Residential District****11 cases****Commercial District****14 cases****Mixed Use District****2 cases****Arts and Cultural/Historical****District****3 cases****Year****2010~****10 cases****2000~2009****10 cases****1990~1999****1 cases****~1989****6 cases****Country****The U.S.****18 cases****Australia****8 cases****Japan****6 cases****Canada****3 cases****Size of Projects (Multiple, Few, Single)****Multiple****20 cases****Few****4 cases****Single****12 cases**

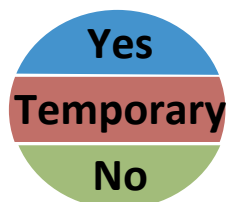
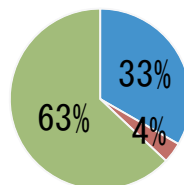
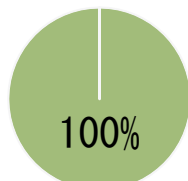
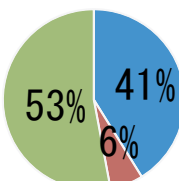
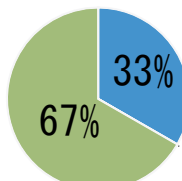
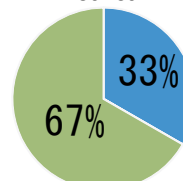
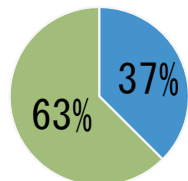
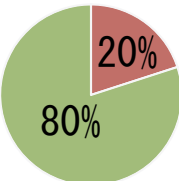
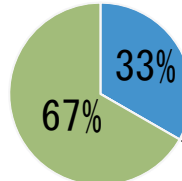
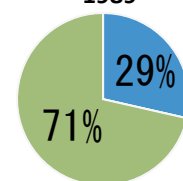
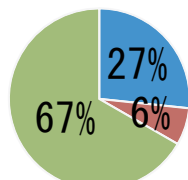
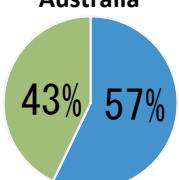
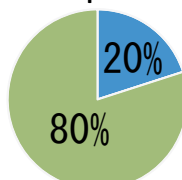
Appendix C-14: Lighting (Alleys)

Lighting (Alley)**29 cases****District****Residential District****4 cases****Commercial District****17 cases****Mixed Use District****4 cases****Arts and Cultural/Historical****District****4 cases****Year****2010~****10 cases****2000~2009****5 cases****1990~1999****3 cases****~1989****7 cases****Country****The U.S.****16 cases****Australia****7 cases****Japan****5 cases**

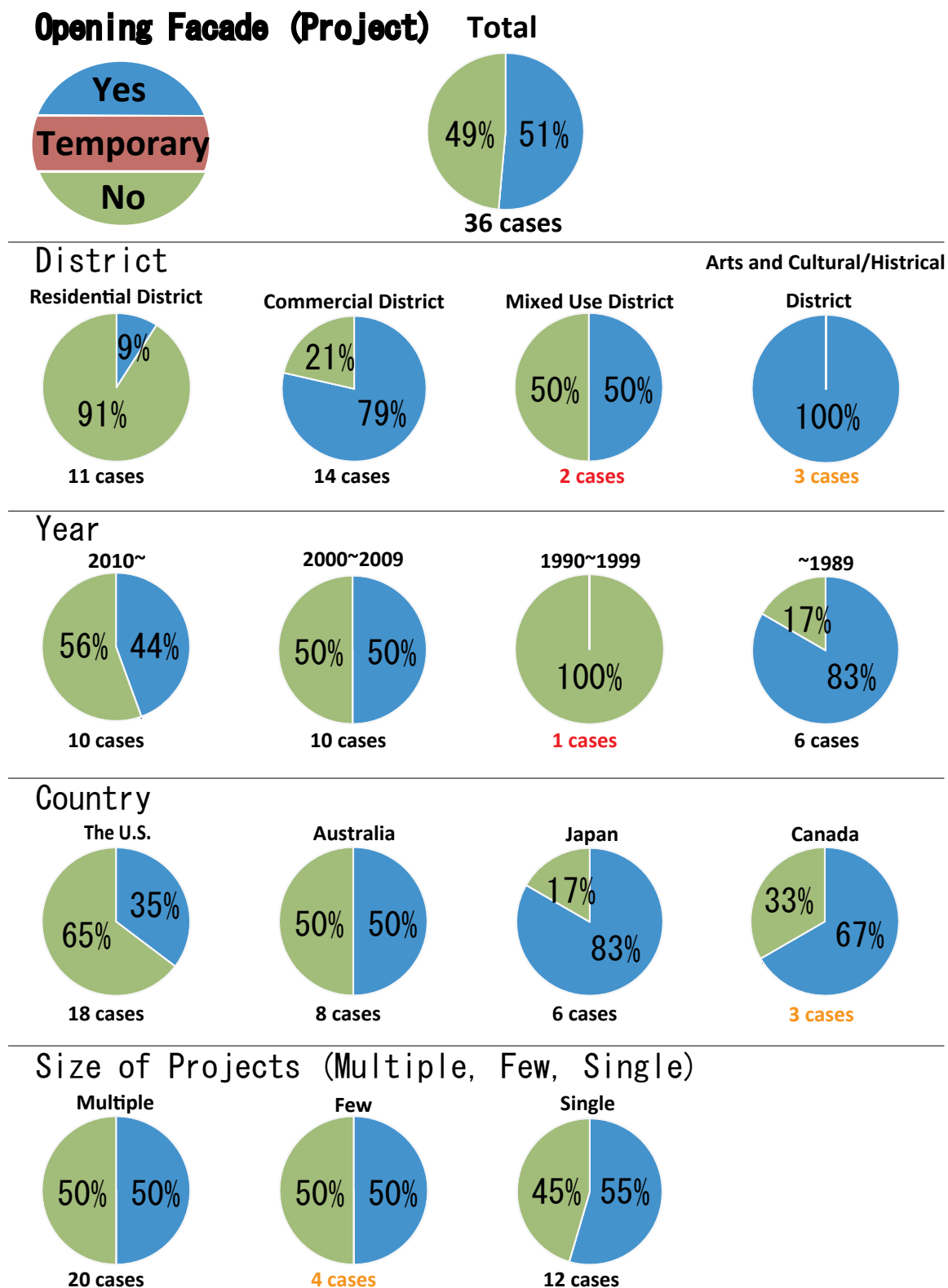
Appendix C-15: Canopies (Projects)

Canopies (Project)**Total****36 cases****District****Residential District****11 cases****Commercial District****14 cases****Mixed Use District****2 cases****Arts and Cultural/Historical District****3 cases****Year****2010~****10 cases****2000~2009****10 cases****1990~1999****1 cases****~1989****6 cases****Country****The U.S.****18 cases****Australia****8 cases****Japan****6 cases****Canada****3 cases****Size of Projects (Multiple, Few, Single)****Multiple****20 cases****Few****4 cases****Single****12 cases**

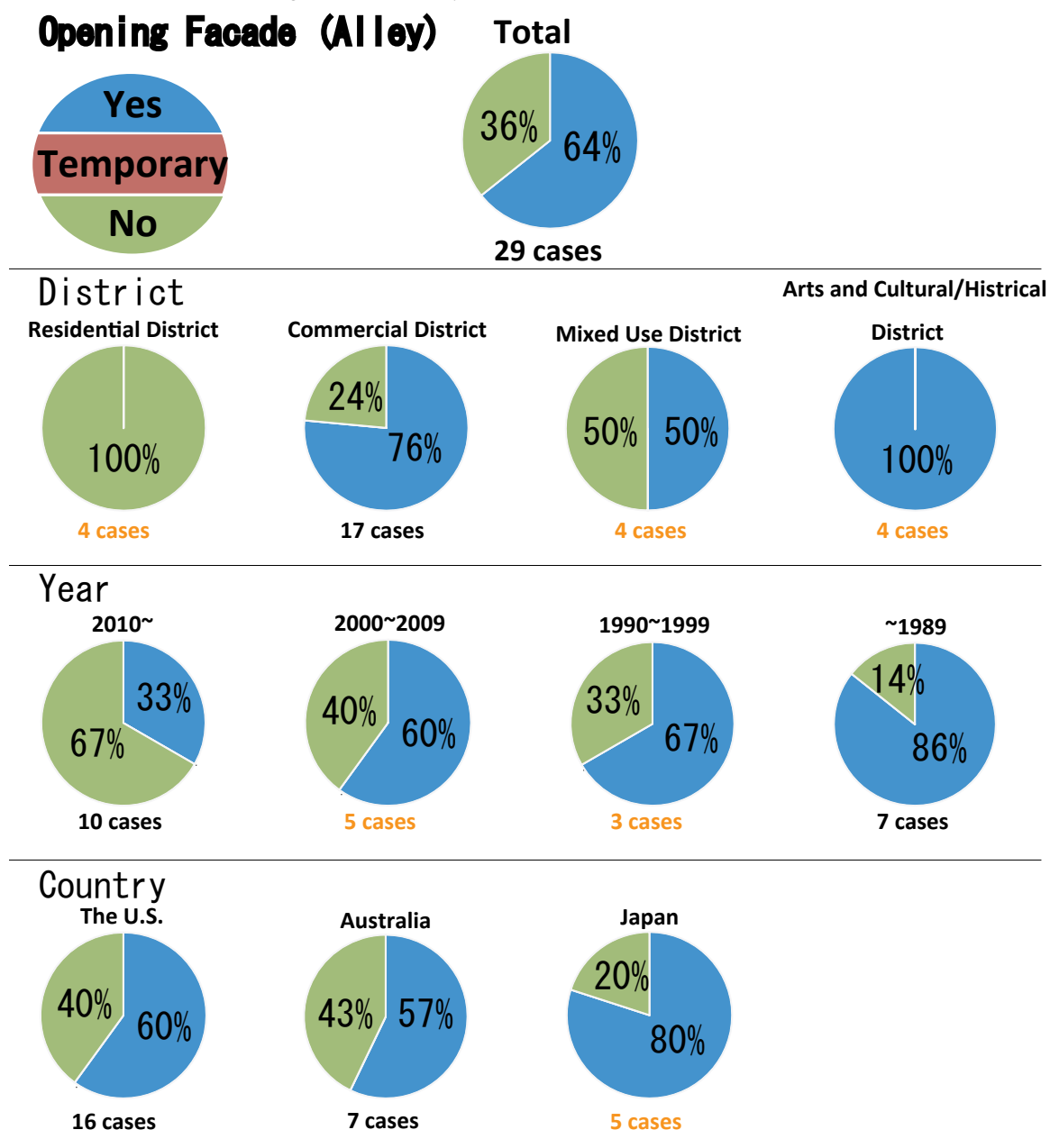
Appendix C-16: Canopies (Alleys)

Canopies (Alley)**Total****29 cases****District****Residential District****4 cases****Commercial District****17 cases****Mixed Use District****4 cases****Arts and Cultural/Historical District****District****4 cases****Year****2010~****10 cases****2000~2009****5 cases****1990~1999****3 cases****~1989****7 cases****Country****The U.S.****16 cases****Australia****7 cases****Japan****5 cases**

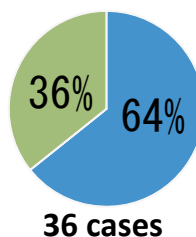
Appendix C-17: Opening Facade (Projects)



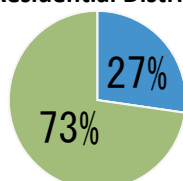
Appendix C-18: Opening Facade (Alleys)



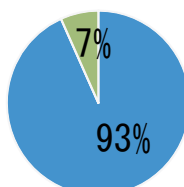
Appendix C-19: Identity (Projects)

Identity (Project)**Total**

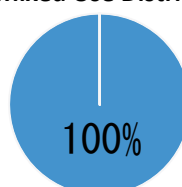
36 cases

District**Residential District**

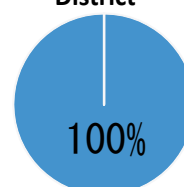
11 cases

Commercial District

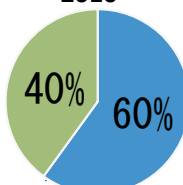
14 cases

Mixed Use District

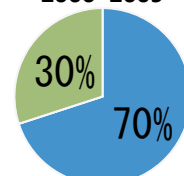
2 cases

Arts and Cultural/Historical District

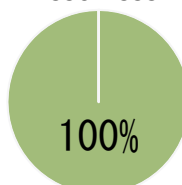
3 cases

Year**2010~**

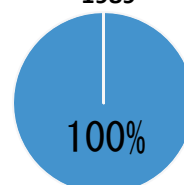
10 cases

2000~2009

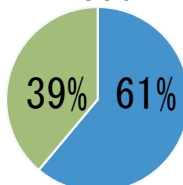
10 cases

1990~1999

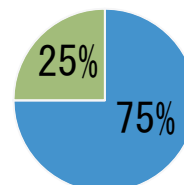
1 cases

~1989

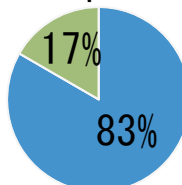
6 cases

Country**The U.S.**

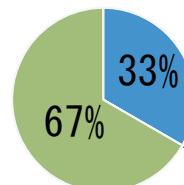
18 cases

Australia

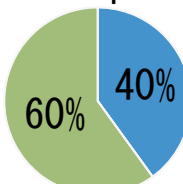
8 cases

Japan

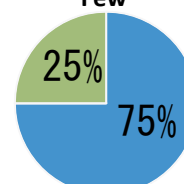
6 cases

Canada

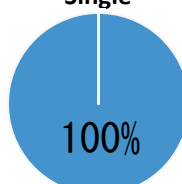
3 cases

Size of Projects (Multiple, Few, Single)**Multiple**

20 cases

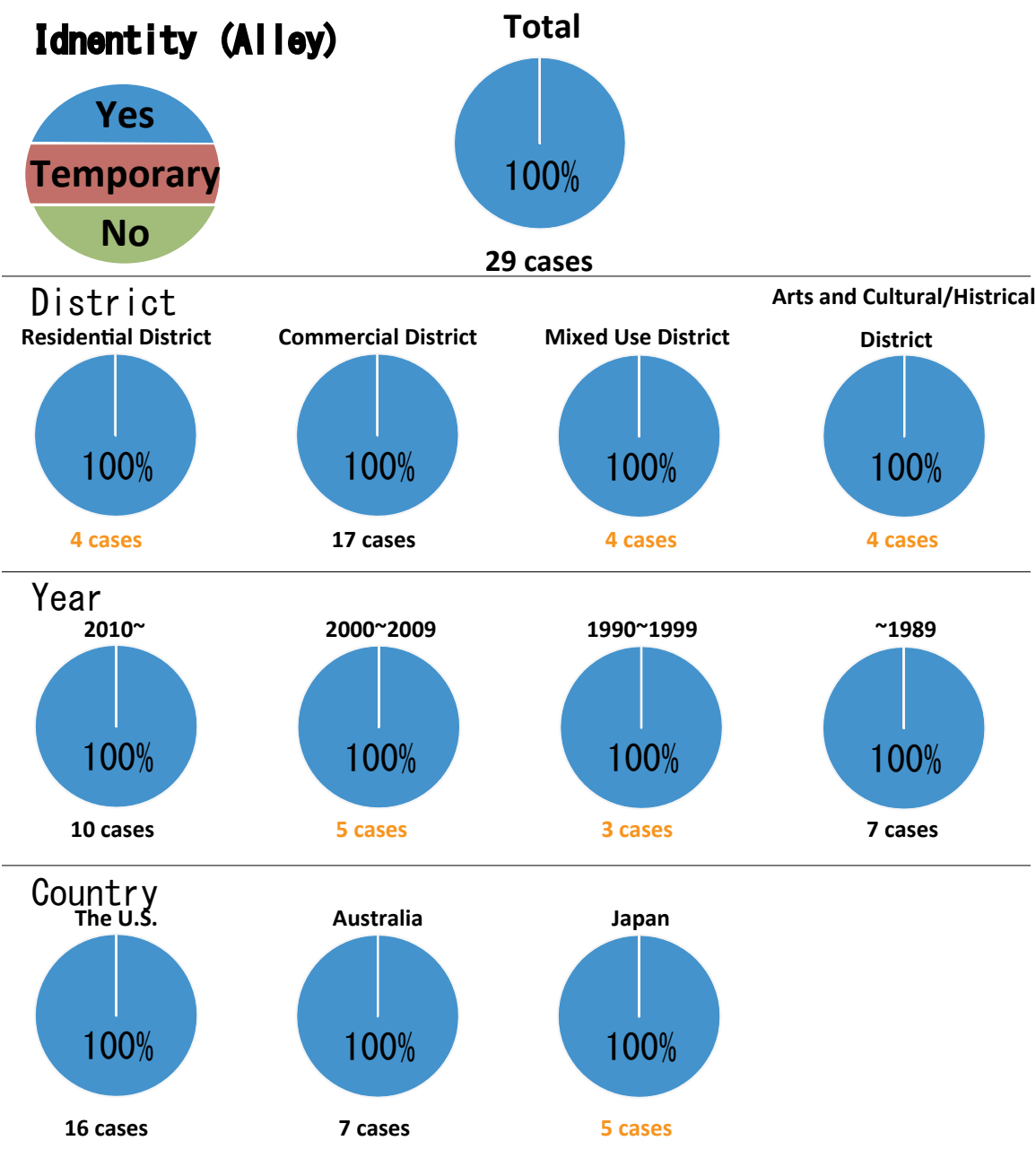
Few

4 cases

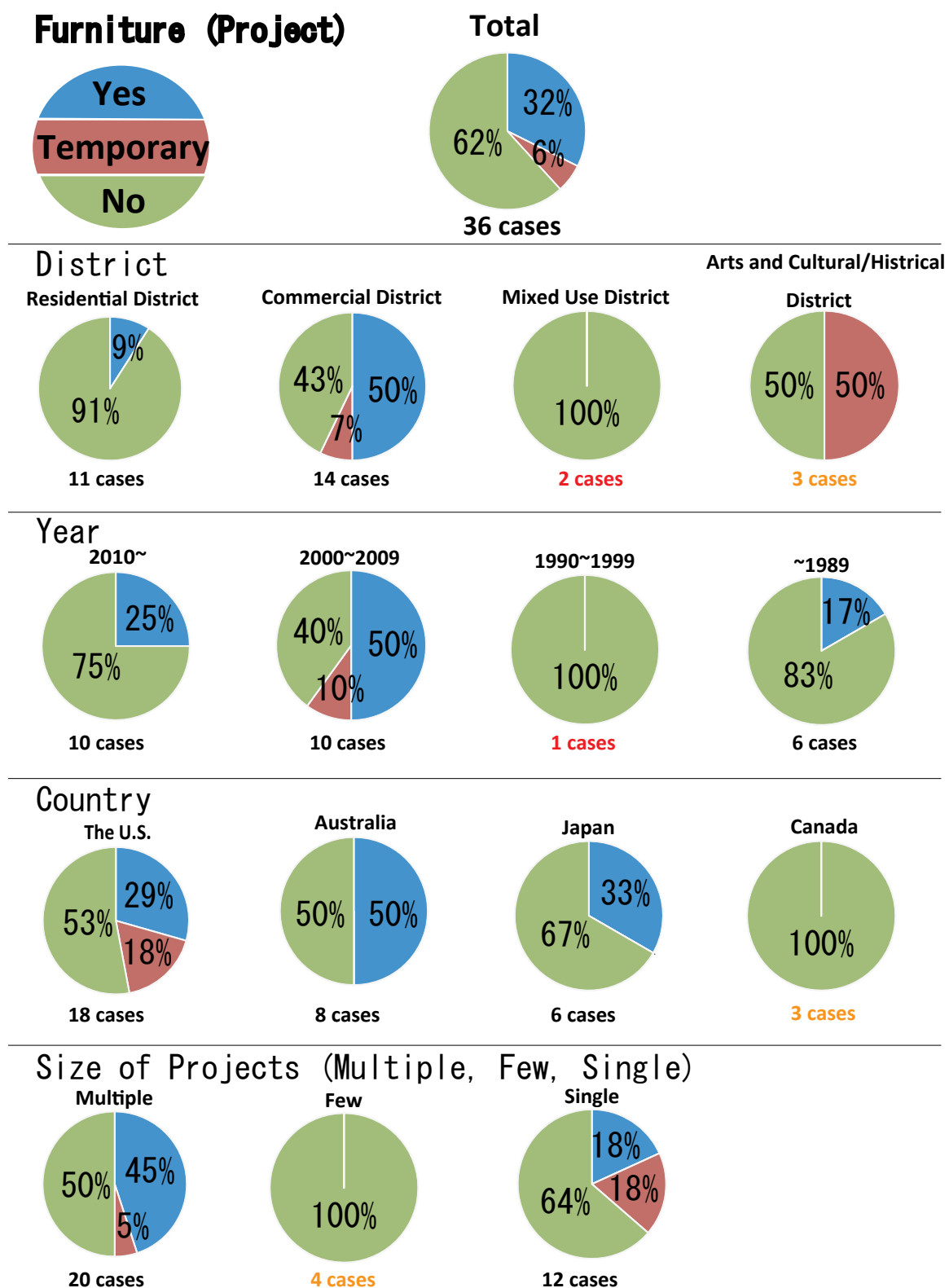
Single

12 cases

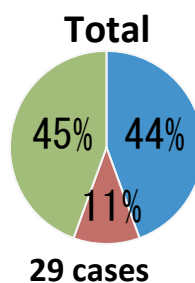
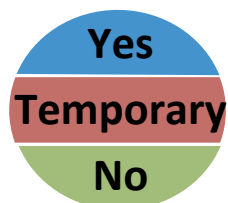
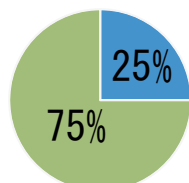
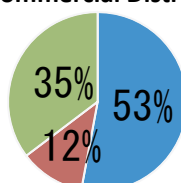
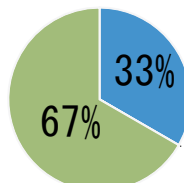
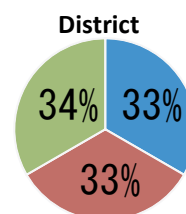
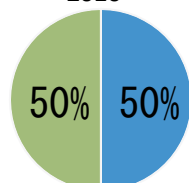
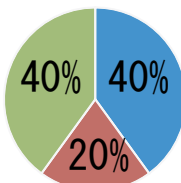
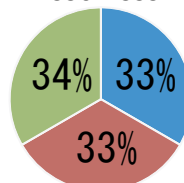
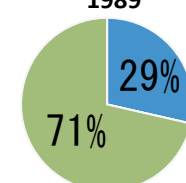
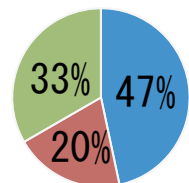
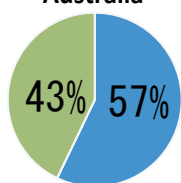
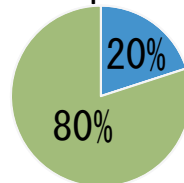
Appendix C-20: Identity (Alleys)



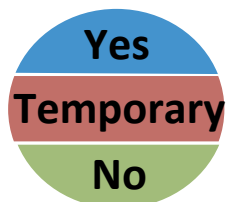
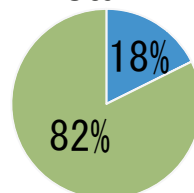
Appendix C-21: Furniture (Projects)



Appendix C-22: Furniture (Alleys)

Furniture (Alley)**District****Residential District****Commercial District****Mixed Use District****Arts and Cultural/Historical District****Year****2010~****2000~2009****1990~1999****~1989****Country****The U.S.****Australia****Japan**

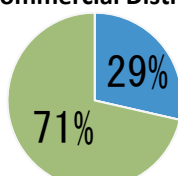
Appendix C-23: Bollard (Projects)

Bollard (Project)**Total**

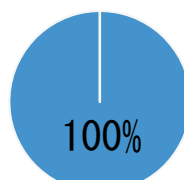
36 cases

District**Residential District**

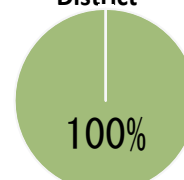
11 cases

Commercial District

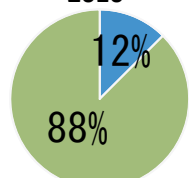
14 cases

Mixed Use District

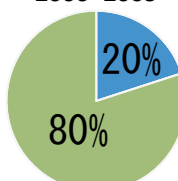
2 cases

Arts and Cultural/Historical District

3 cases

Year**2010~**

10 cases

2000~2009

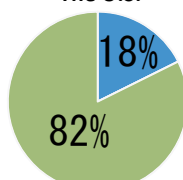
10 cases

1990~1999

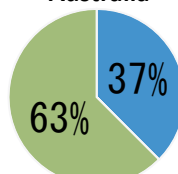
1 cases

~1989

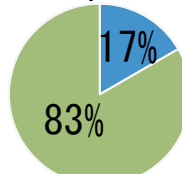
6 cases

Country**The U.S.**

18 cases

Australia

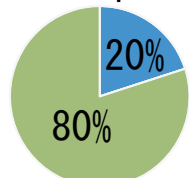
8 cases

Japan

6 cases

Canada

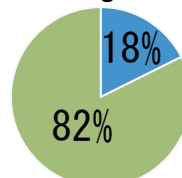
3 cases

Size of Projects (Multiple, Few, Single)**Multiple**

20 cases

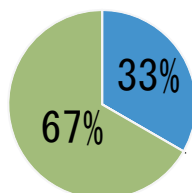
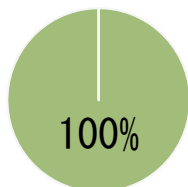
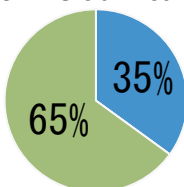
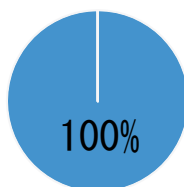
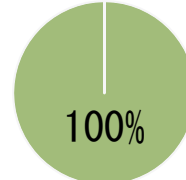
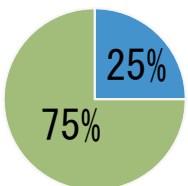
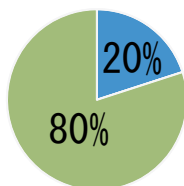
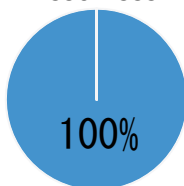
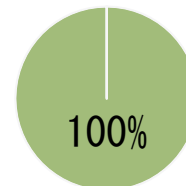
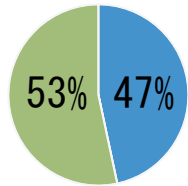
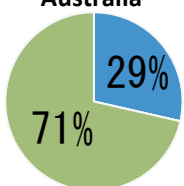
Few

4 cases

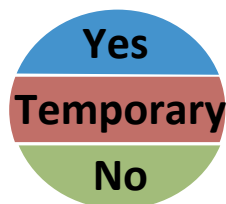
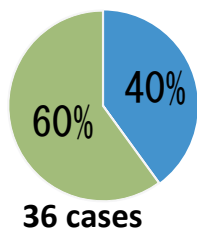
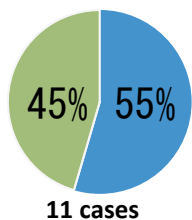
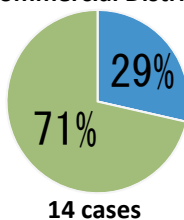
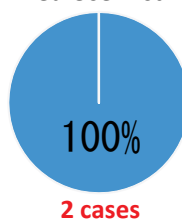
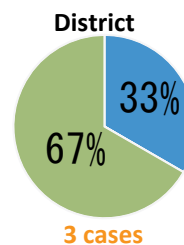
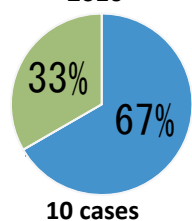
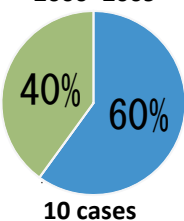
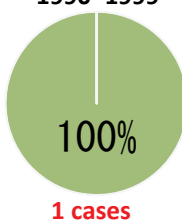
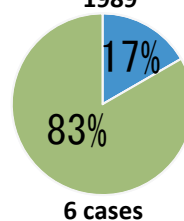
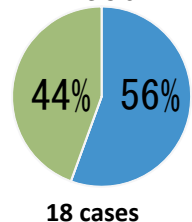
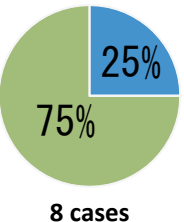
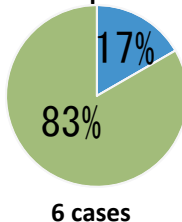
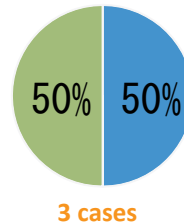
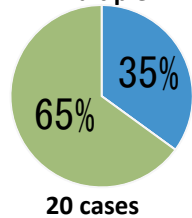
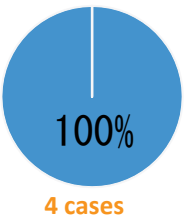
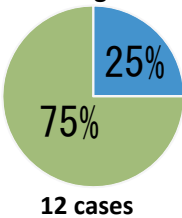
Single

12 cases

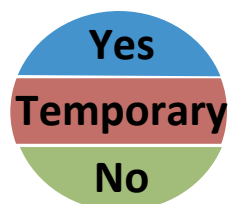
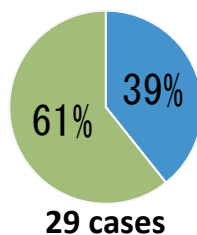
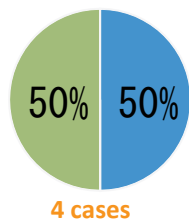
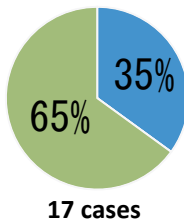
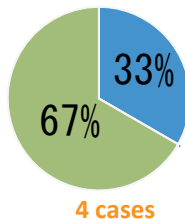
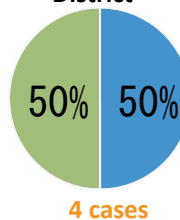
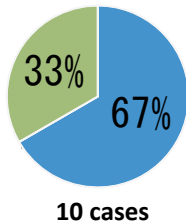
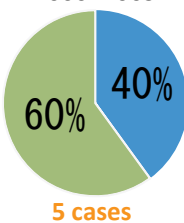
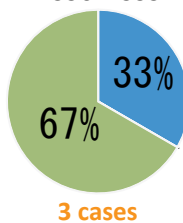
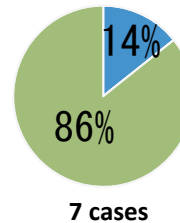
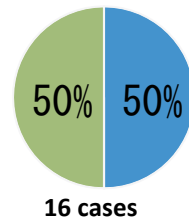
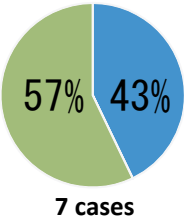
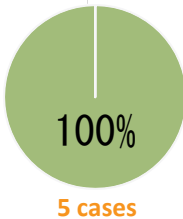
Appendix C-24: Bollard (Alleys)

Bollard (Alley)**Total****29 cases****District****Residential District****4 cases****Commercial District****17 cases****Mixed Use District****4 cases****Arts and Cultural/Historical****District****4 cases****Year****2010~****10 cases****2000~2009****5 cases****1990~1999****3 cases****~1989****7 cases****Country****The U.S.****16 cases****Australia****7 cases****Japan****5 cases**

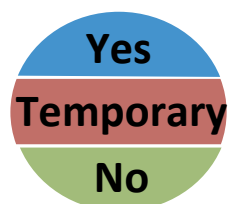
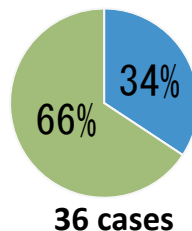
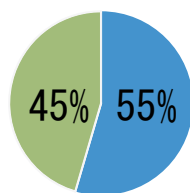
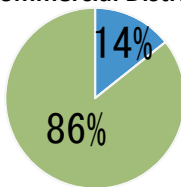
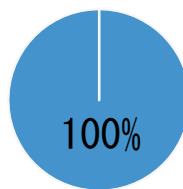
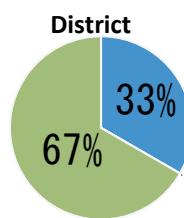
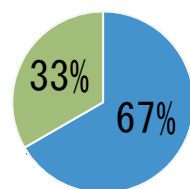
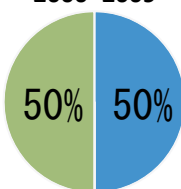
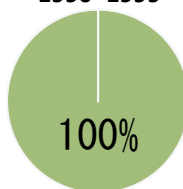
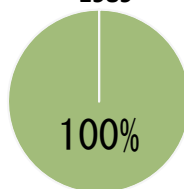
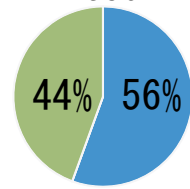
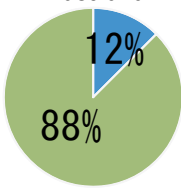
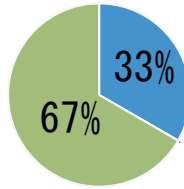
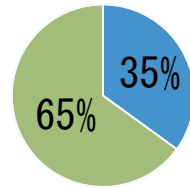
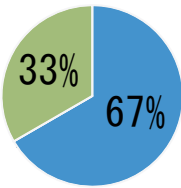
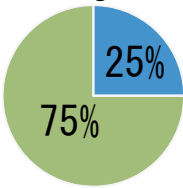
Appendix C-25: Water Runoff (Projects)

Water runoff (Project)**Total****District****Residential District****Commercial District****Mixed Use District****Arts and Cultural/Historical District****Year****2010~****2000~2009****1990~1999****~1989****Country****The U.S.****Australia****Japan****Canada****Size of Projects (Multiple, Few, Single)****Multiple****Few****Single**

Appendix C-26: Water Runoff (Alleys)

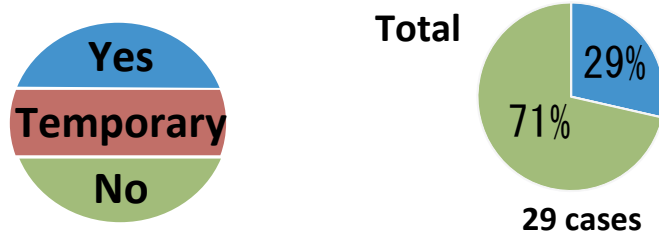
Water runoff (Alley)**Total****District****Residential District****Commercial District****Mixed Use District****Arts and Cultural/Historical District****Year****2010~****2000~2009****1990~1999****~1989****Country****The U.S.****Australia****Japan**

Appendix C-27: On-site Water Treatment (Projects)

On-site water treatment (Project)**Total****36 cases****District****Residential District****11 cases****Commercial District****14 cases****Mixed Use District****2 cases****Arts and Cultural/Historical District****3 cases****Year****2010~****10 cases****2000~2009****10 cases****1990~1999****1 cases****~1989****6 cases****Country****The U.S.****18 cases****Australia****8 cases****Japan****6 cases****Canada****3 cases****Size of Projects (Multiple, Few, Single)****Multiple****20 cases****Few****4 cases****Single****12 cases**

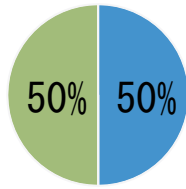
Appendix C-28: On-site Water Treatment (Alleys)

On-site water treatment (Alley)

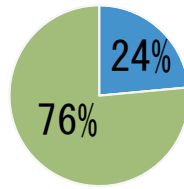


District

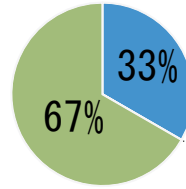
Residential District



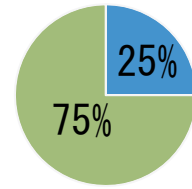
Commercial District



Mixed Use District

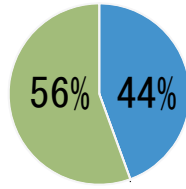


Arts and Cultural/Historical District

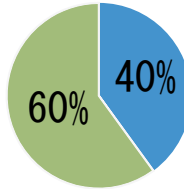


Year

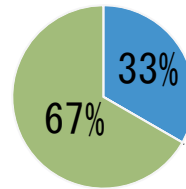
2010~



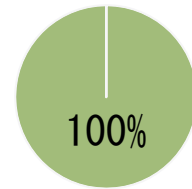
2000~2009



1990~1999

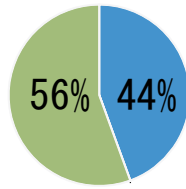


~1989

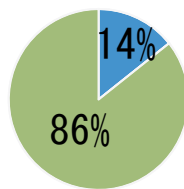


Country

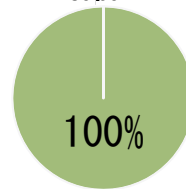
The U.S.



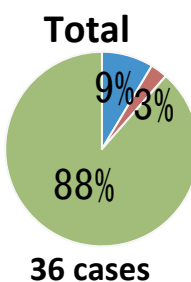
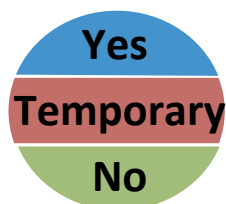
Australia



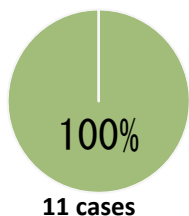
Japan



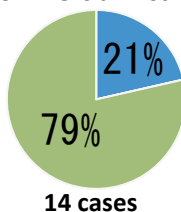
Appendix C-29: Steps (Projects)

Steps (Project)**District**

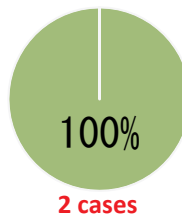
Residential District



Commercial District



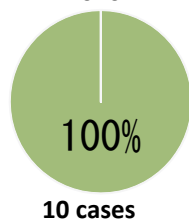
Mixed Use District



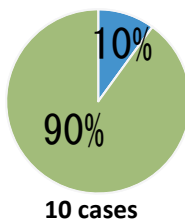
Arts and Cultural/Historical District

**Year**

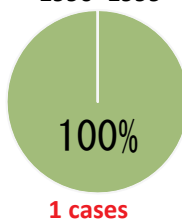
2010~



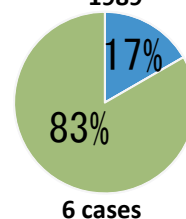
2000~2009



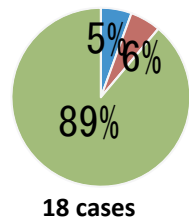
1990~1999



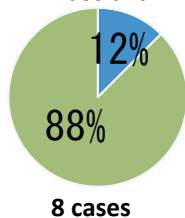
~1989

**Country**

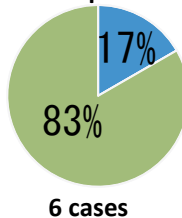
The U.S.



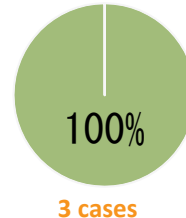
Australia



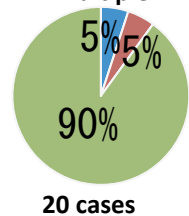
Japan



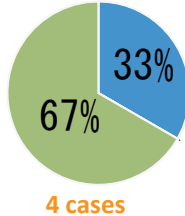
Canada

**Size of Projects (Multiple, Few, Single)**

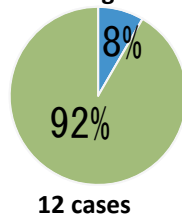
Multiple



Few

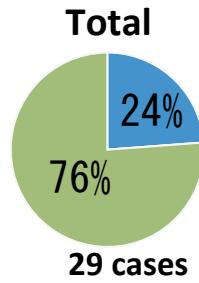
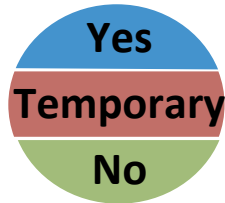


Single



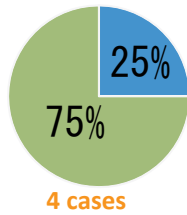
Appendix C-30: Steps (Alleys)

Setback (Alley)

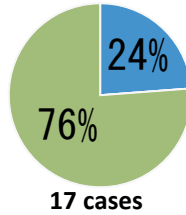


District

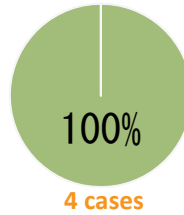
Residential District



Commercial District



Mixed Use District

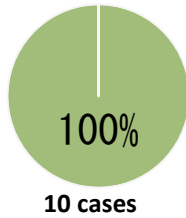


Arts and Cultural/Historical District

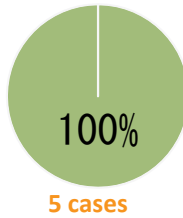


Year

2010~



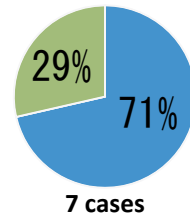
2000~2009



1990~1999

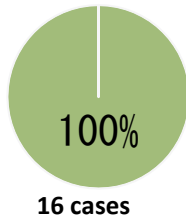


~1989

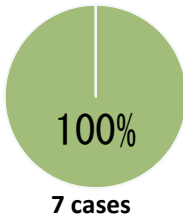


Country

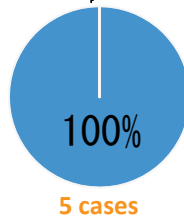
The U.S.



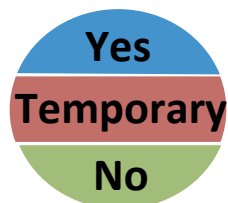
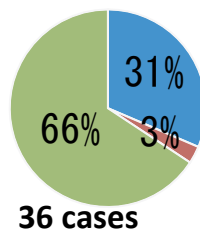
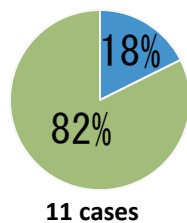
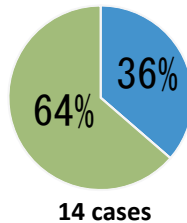
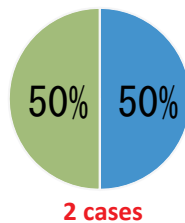
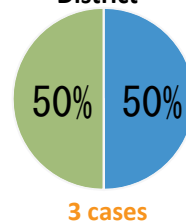
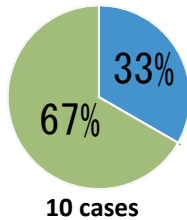
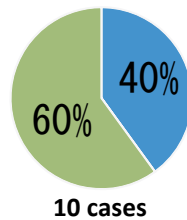
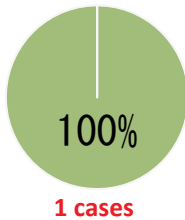
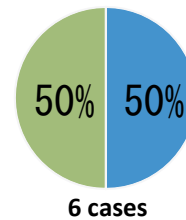
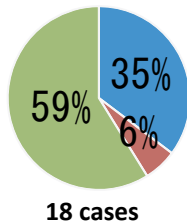
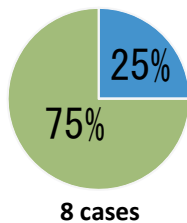
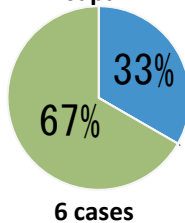
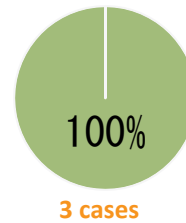
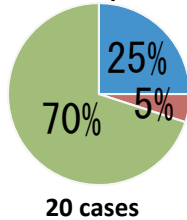
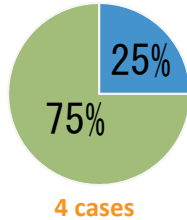
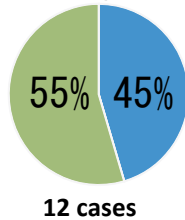
Australia



Japan

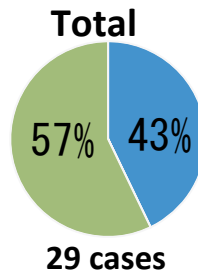
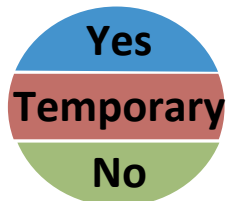


Appendix C-31: Colors (Projects)

Colors (Project)**Total****District****Residential District****Commercial District****Mixed Use District****Arts and Cultural/Historical District****Year****2010~****2000~2009****1990~1999****~1989****Country****The U.S.****Australia****Japan****Canada****Size of Projects (Multiple, Few, Single)****Multiple****Few****Single**

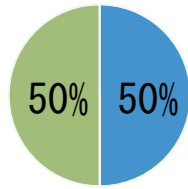
Appendix C-32: Colors (Alleys)

Colors (Alley)



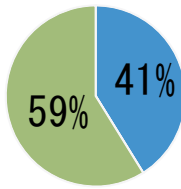
District

Residential District



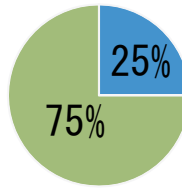
4 cases

Commercial District



17 cases

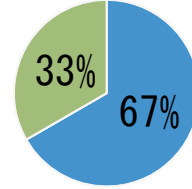
Mixed Use District



4 cases

Arts and Cultural/Historical

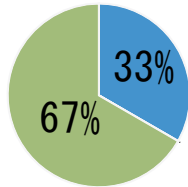
District



4 cases

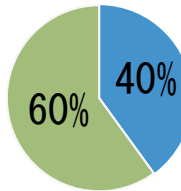
Year

2010~



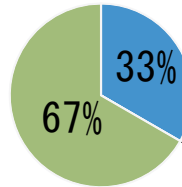
10 cases

2000~2009



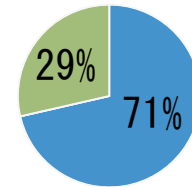
5 cases

1990~1999



3 cases

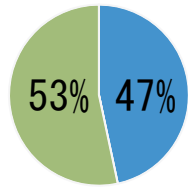
~1989



7 cases

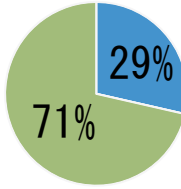
Country

The U.S.



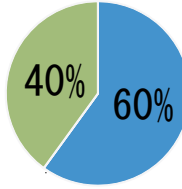
16 cases

Australia



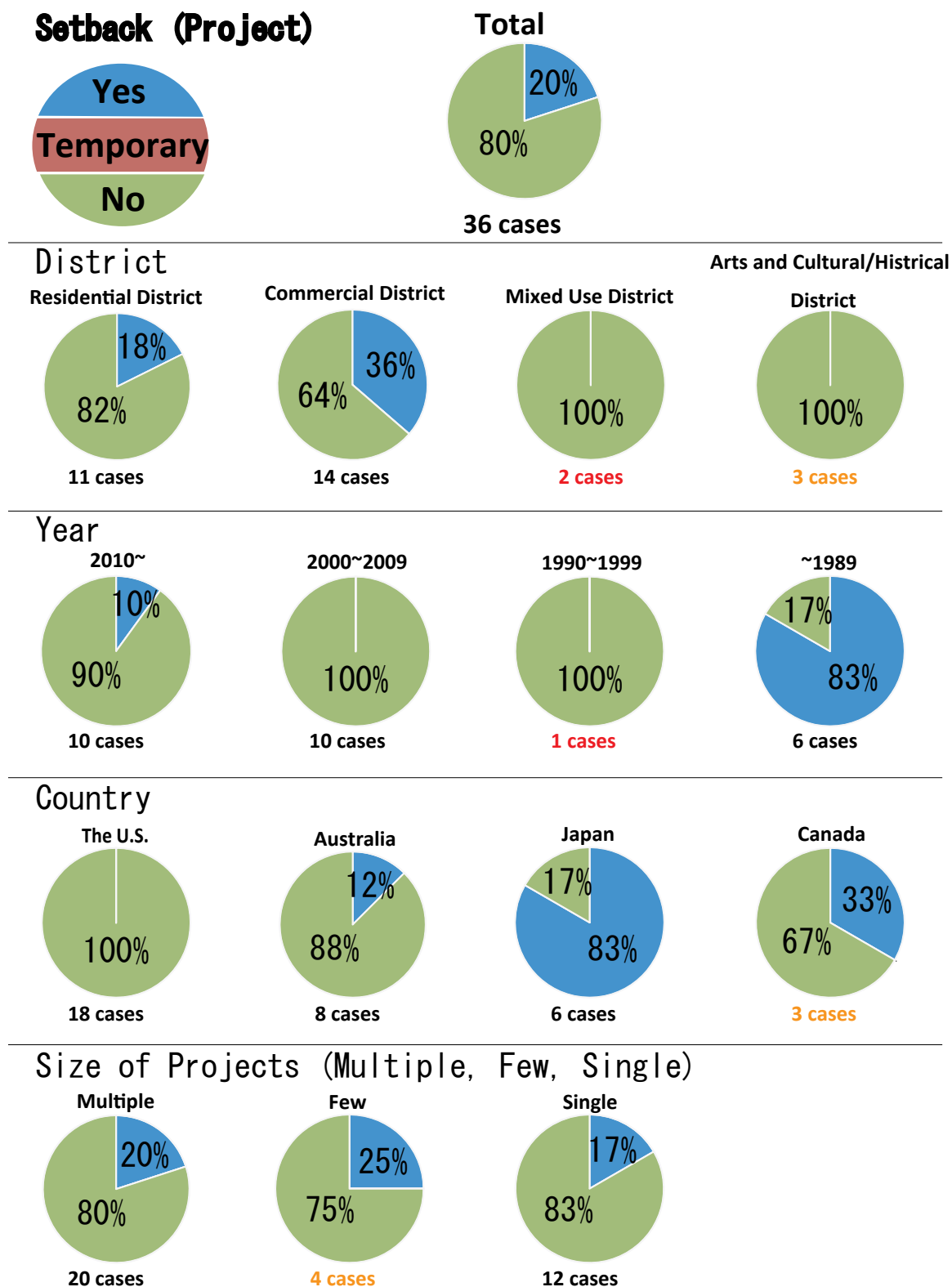
7 cases

Japan

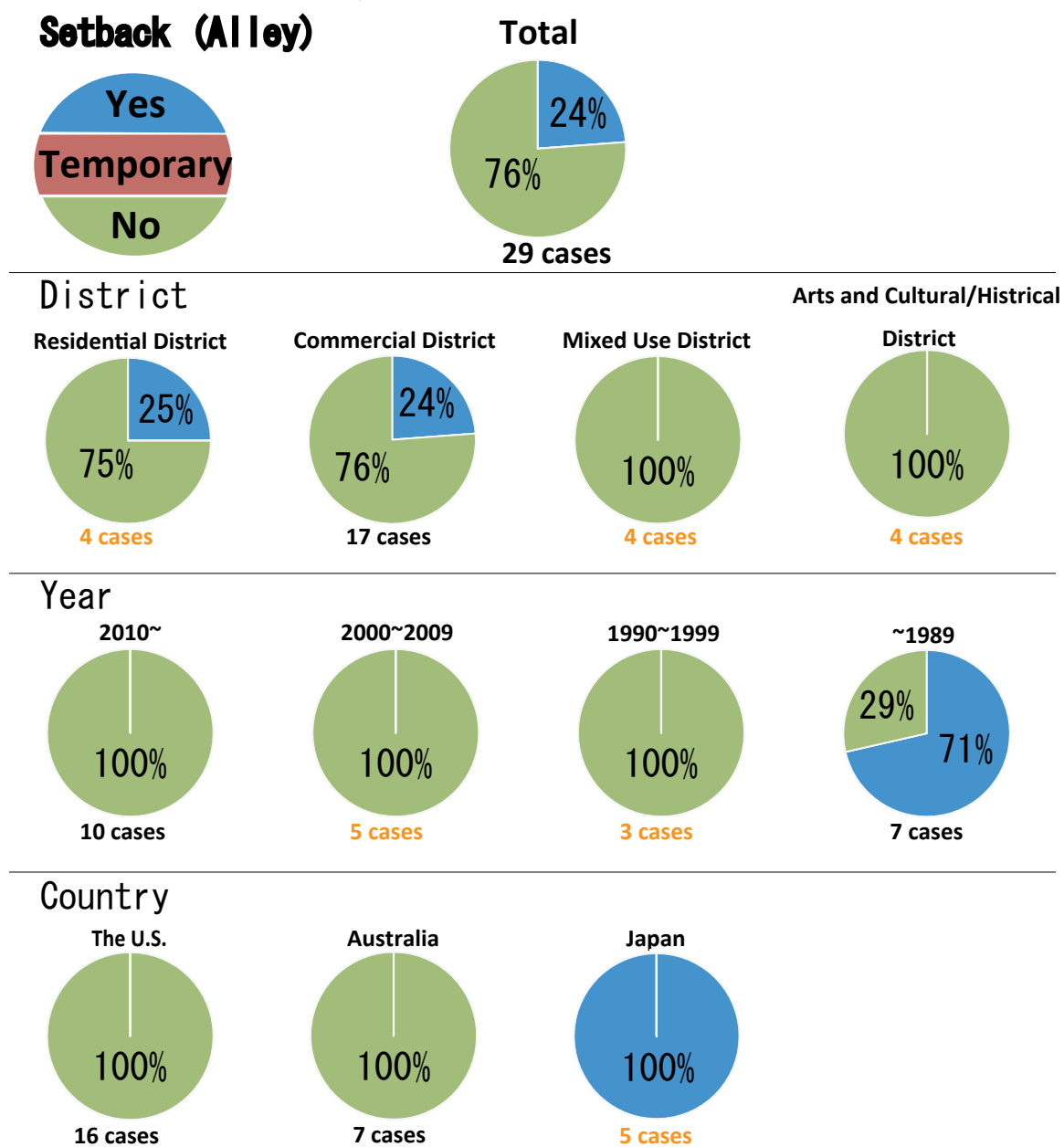


5 cases

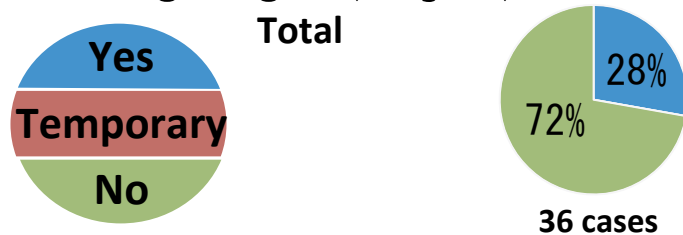
Appendix C-33: Setback (Projects)



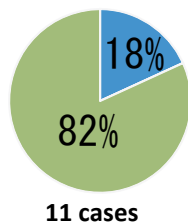
Appendix C-34: Setback (Alleys)



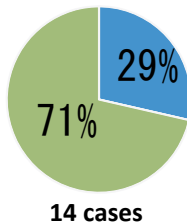
Appendix C-35: Building Height (Projects)

Building Height (Project)**District**

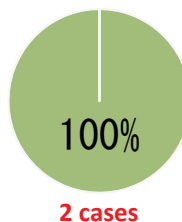
Residential District



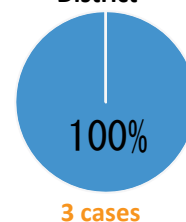
Commercial District



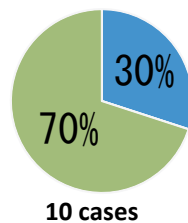
Mixed Use District



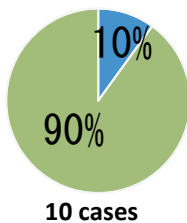
Arts and Cultural/Historical District

**Year**

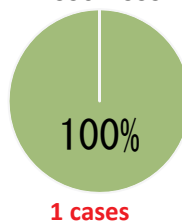
2010~



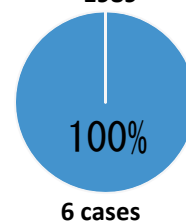
2000~2009



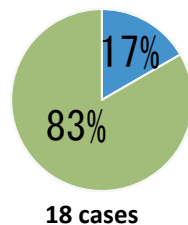
1990~1999



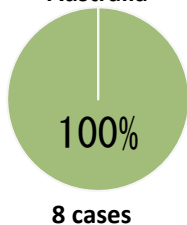
~1989

**Country**

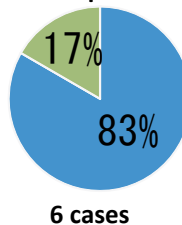
The U.S.



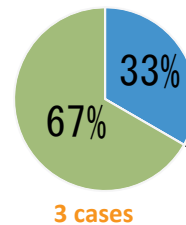
Australia



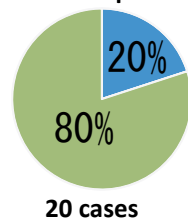
Japan



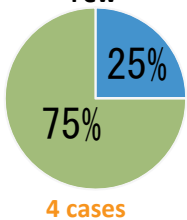
Canada

**Size of Projects (Multiple, Few, Single)**

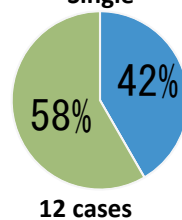
Multiple



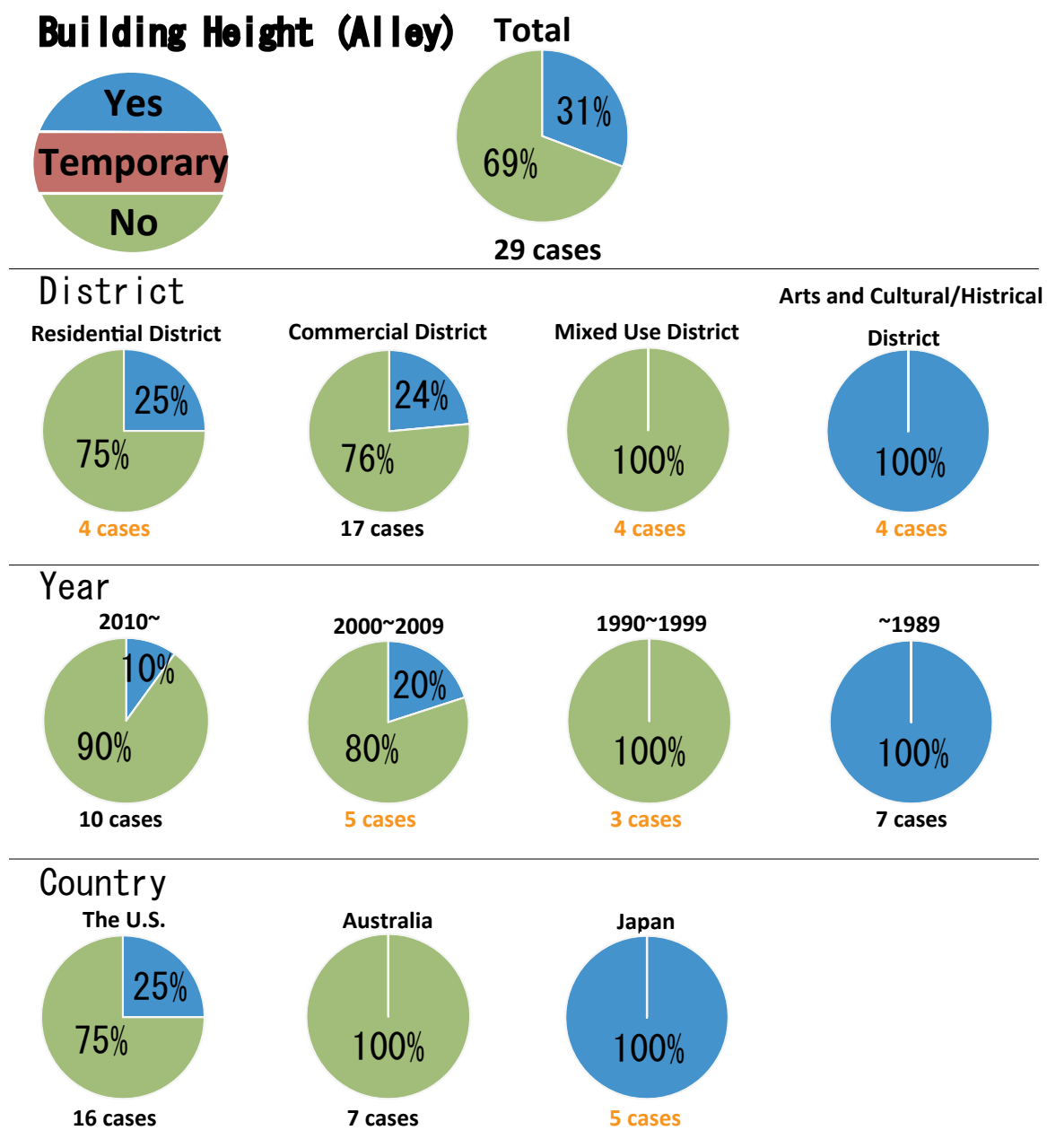
Few



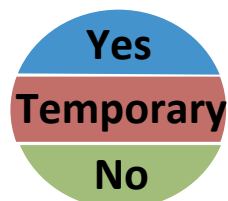
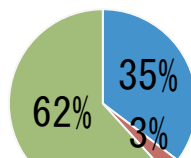
Single



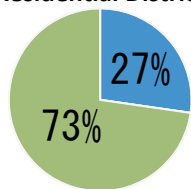
Appendix C-36: Building Height (Alleys)



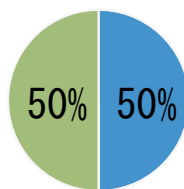
Appendix C-37: Lines (Projects)

Lines (Project)**Total**

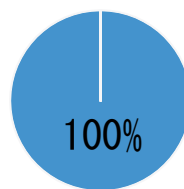
36 cases

District**Residential District**

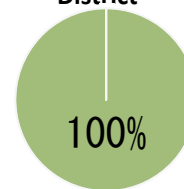
11 cases

Commercial District

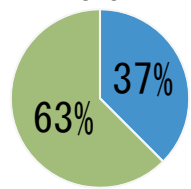
14 cases

Mixed Use District

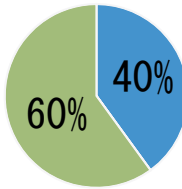
2 cases

Arts and Cultural/Historical District

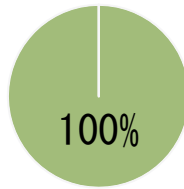
3 cases

Year**2010~**

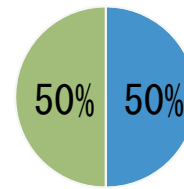
10 cases

2000~2009

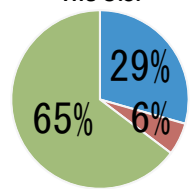
10 cases

1990~1999

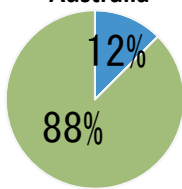
1 cases

~1989

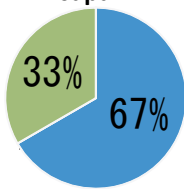
6 cases

Country**The U.S.**

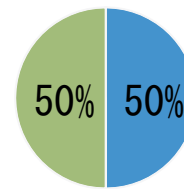
18 cases

Australia

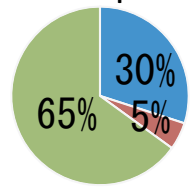
8 cases

Japan

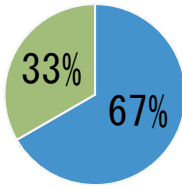
6 cases

Canada

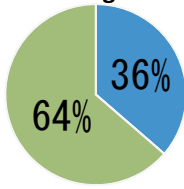
3 cases

Size of Projects (Multiple, Few, Single)**Multiple**

20 cases

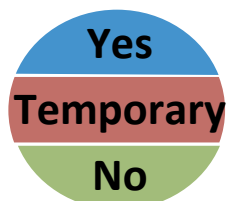
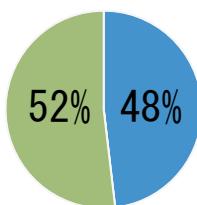
Few

4 cases

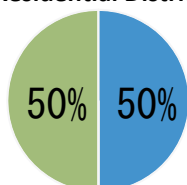
Single

12 cases

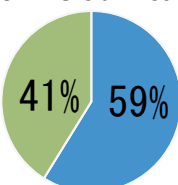
Appendix C-38: Lines (Alleys)

Lines (Alley)**Total**

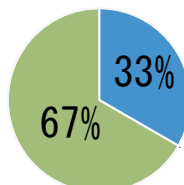
29 cases

District**Residential District**

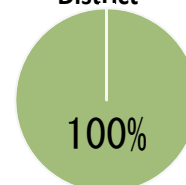
4 cases

Commercial District

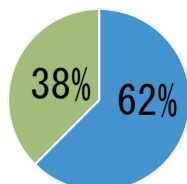
17 cases

Mixed Use District

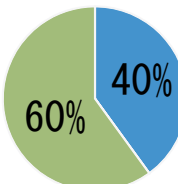
4 cases

Arts and Cultural/Historical**District**

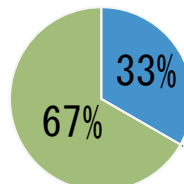
4 cases

Year**2010~**

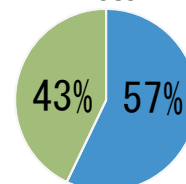
10 cases

2000~2009

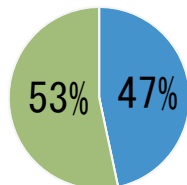
5 cases

1990~1999

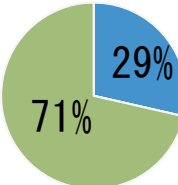
3 cases

~1989

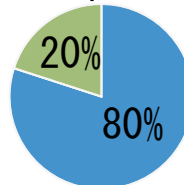
7 cases

Country**The U.S.**

16 cases

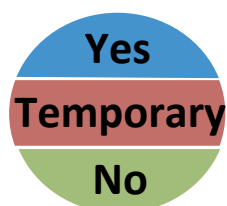
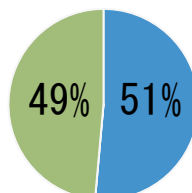
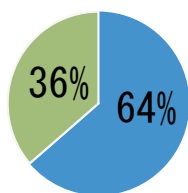
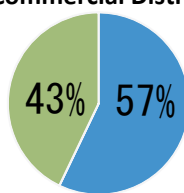
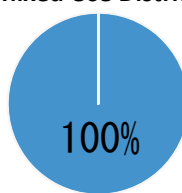
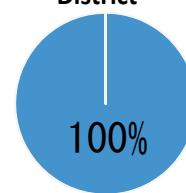
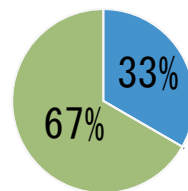
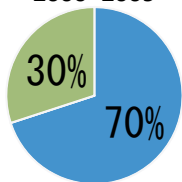
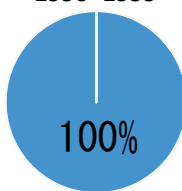
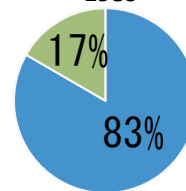
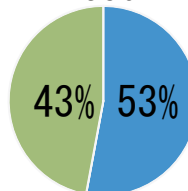
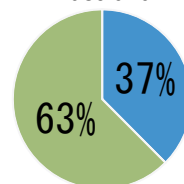
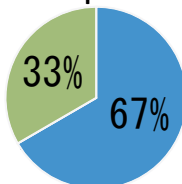
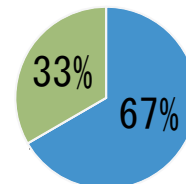
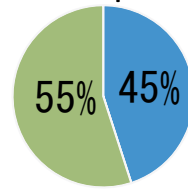
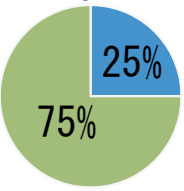
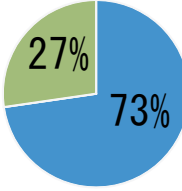
Australia

7 cases

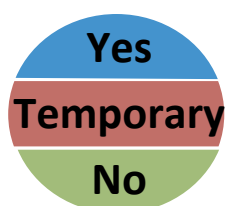
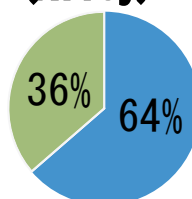
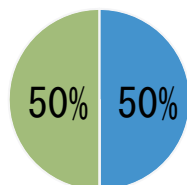
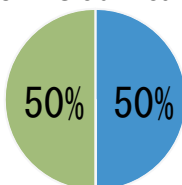
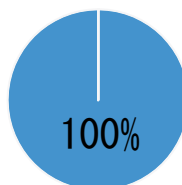
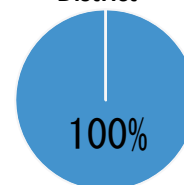
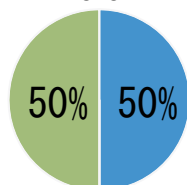
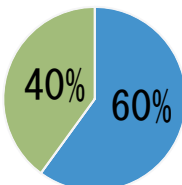
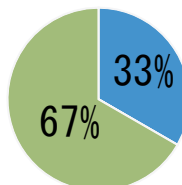
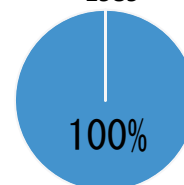
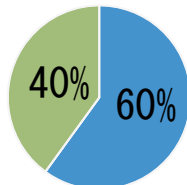
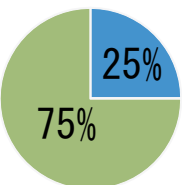
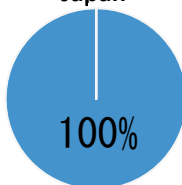
Japan

5 cases

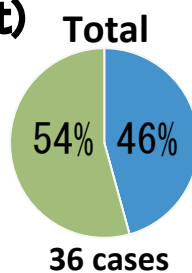
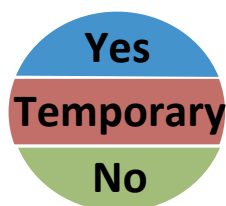
Appendix C-39: Trash Removal/Enclosure (Projects)

Trash removal/enclosure (Project)**Total****36 cases****District****Residential District****11 cases****Commercial District****14 cases****Mixed Use District****2 cases****Arts and Cultural/Historical****District****3 cases****Year****2010~****10 cases****2000~2009****10 cases****1990~1999****1 cases****~1989****6 cases****Country****The U.S.****18 cases****Australia****8 cases****Japan****6 cases****Canada****3 cases****Size of Projects (Multiple, Few, Single)****Multiple****20 cases****Few****4 cases****Single****12 cases**

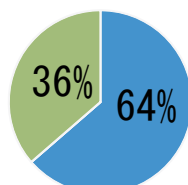
Appendix C-40: Trash Removal/Enclosure

Trash removal/enclosure (Alley)**Total****29 cases****District****Residential District****4 cases****Commercial District****17 cases****Mixed Use District****4 cases****Arts and Cultural/Historical****District****4 cases****Year****2010~****10 cases****2000~2009****5 cases****1990~1999****3 cases****~1989****7 cases****Country****The U.S.****16 cases****Australia****7 cases****Japan****5 cases**

Appendix C-41: Trees or Plants (Projects)

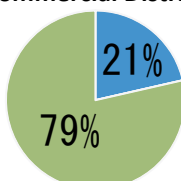
Trees or plants (Project)**District**

Residential District



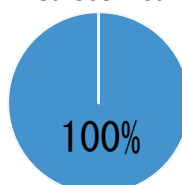
11 cases

Commercial District



14 cases

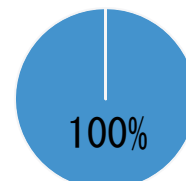
Mixed Use District



2 cases

Arts and Cultural/Historical

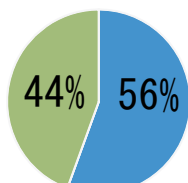
District



3 cases

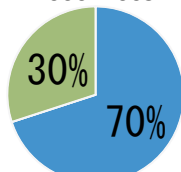
Year

2010~



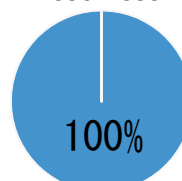
10 cases

2000~2009



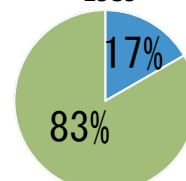
10 cases

1990~1999



1 cases

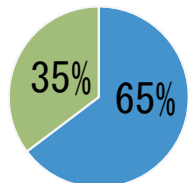
~1989



6 cases

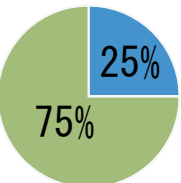
Country

The U.S.



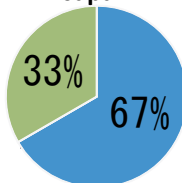
18 cases

Australia



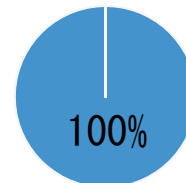
8 cases

Japan



6 cases

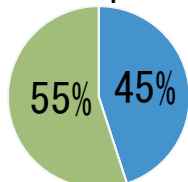
Canada



3 cases

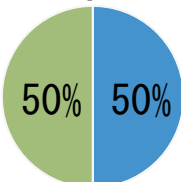
Size of Projects (Multiple, Few, Single)

Multiple



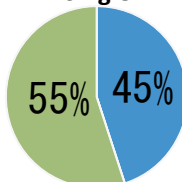
20 cases

Few



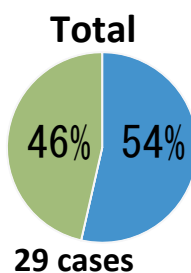
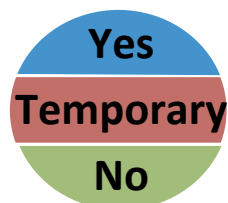
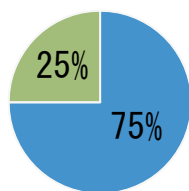
4 cases

Single

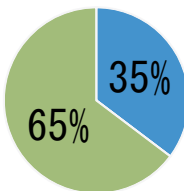


12 cases

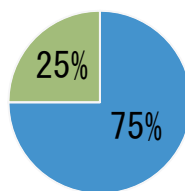
Appendix C-42: Trees or Plants (Alleys)

Trees or plants (Alley)**District****Residential District**

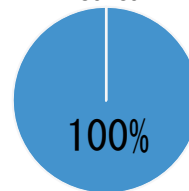
4 cases

Commercial District

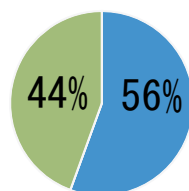
17 cases

Mixed Use District

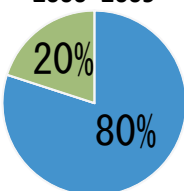
4 cases

Arts and Cultural/Historical District

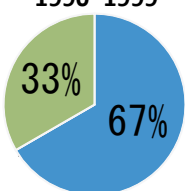
4 cases

Year**2010~**

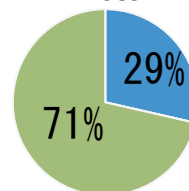
10 cases

2000~2009

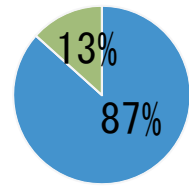
5 cases

1990~1999

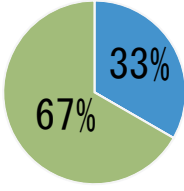
3 cases

~1989

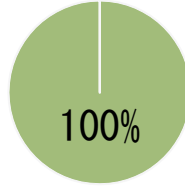
7 cases

Country**The U.S.**

16 cases

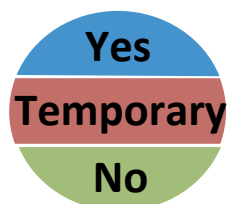
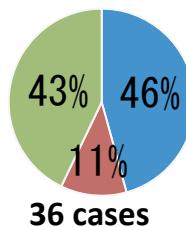
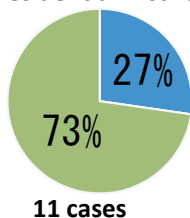
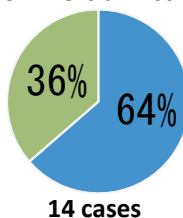
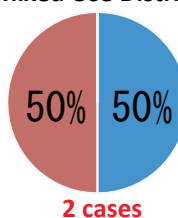
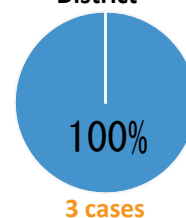
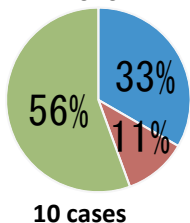
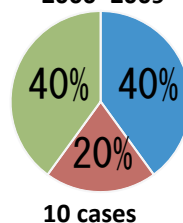
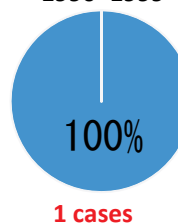
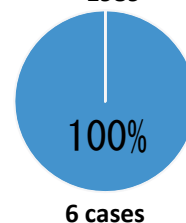
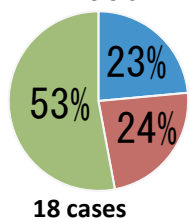
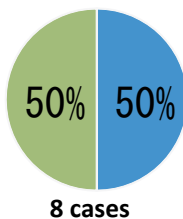
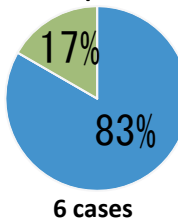
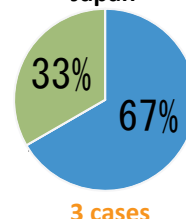
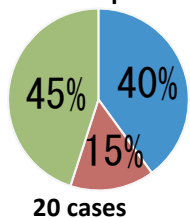
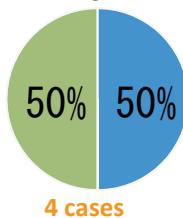
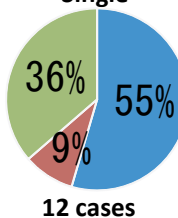
Australia

7 cases

Japan

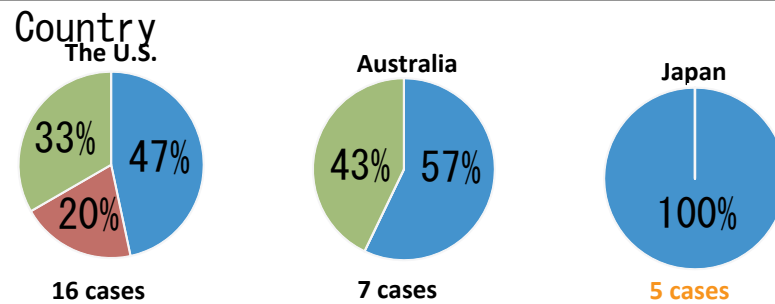
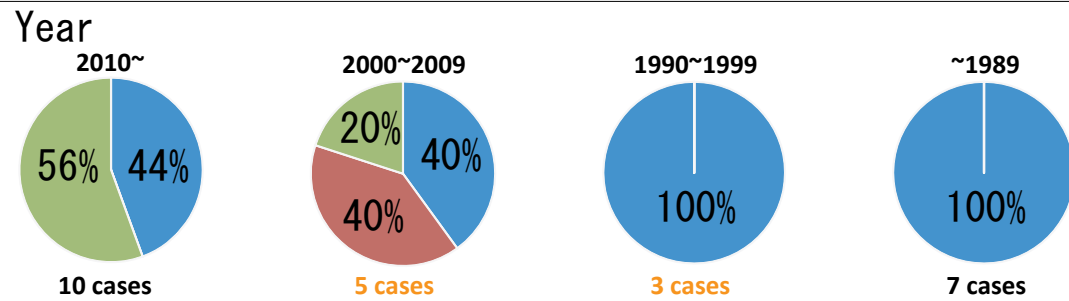
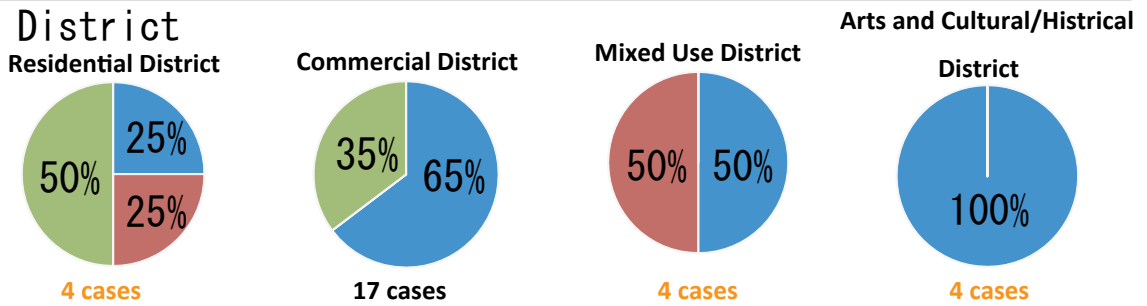
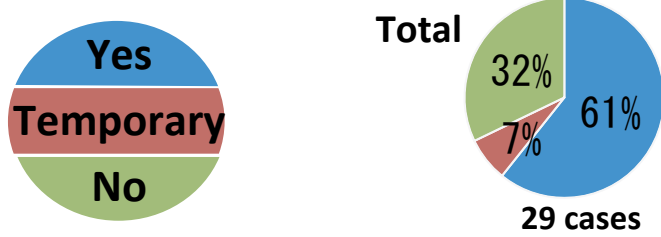
5 cases

Appendix C-43: Banning Motor Vehicles (Projects)

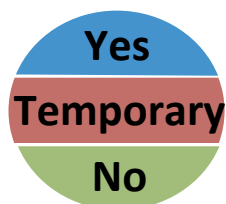
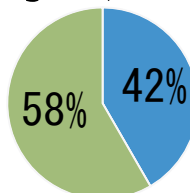
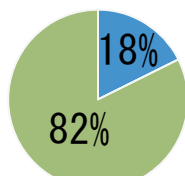
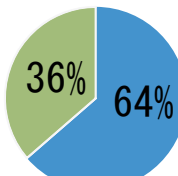
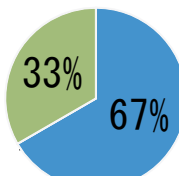
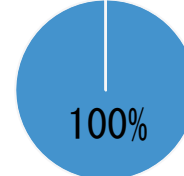
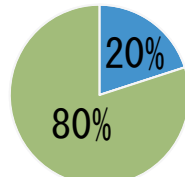
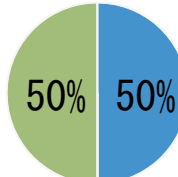
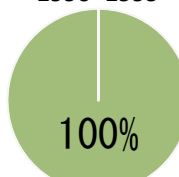
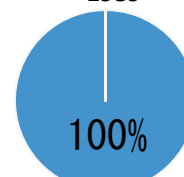
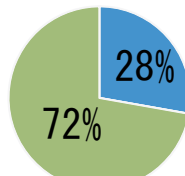
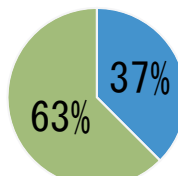
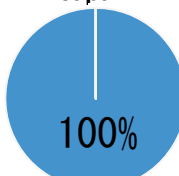
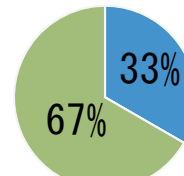
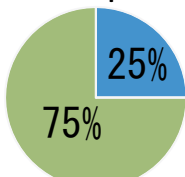
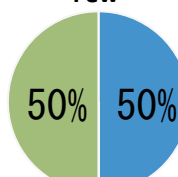
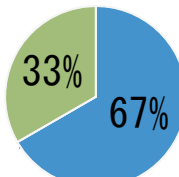
Banning motor vehicles (Project)**Total****District****Residential District****Commercial District****Mixed Use District****Arts and Cultural/Historical****District****Year****2010~****2000~2009****1990~1999****~1989****Country****The U.S.****Australia****Japan****Japan****Size of Projects (Multiple, Few, Single)****Multiple****Few****Single**

Appendix C-44: Banning Motor Vehicles (Alleys)

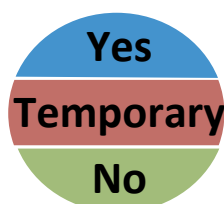
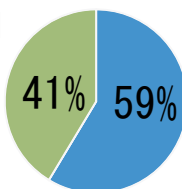
Banning motor vehicles (Alley)



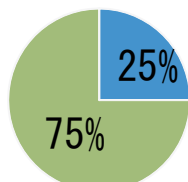
Appendix C-45: Cultural Involvement (Projects)

Cultural involvement (Project)**Total****36 cases****District****Residential District****11 cases****Commercial District****14 cases****Mixed Use District****2 cases****Arts and Cultural/Historical****District****3 cases****Year****2010~****10 cases****2000~2009****10 cases****1990~1999****1 cases****~1989****6 cases****Country****The U.S.****18 cases****Australia****8 cases****Japan****6 cases****Canada****3 cases****Size of Projects (Multiple, Few, Single)****Multiple****20 cases****Few****4 cases****Single****12 cases**

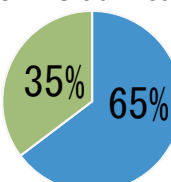
Appendix C-46: Cultural Involvement (Alleys)

Cultural involvement (Alley)**Total****29 cases****District**

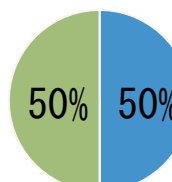
Residential District

**4 cases**

Commercial District

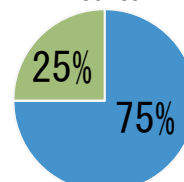
**17 cases**

Mixed Use District

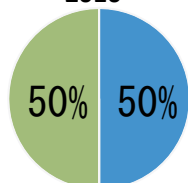
**4 cases**

Arts and Cultural/Historical

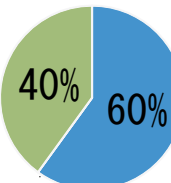
District

**4 cases****Year**

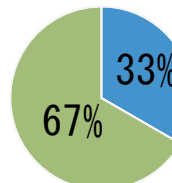
2010~

**10 cases**

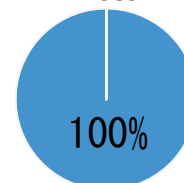
2000~2009

**5 cases**

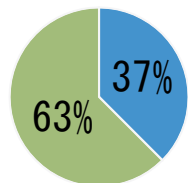
1990~1999

**3 cases**

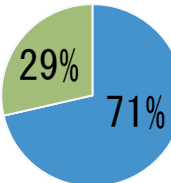
~1989

**7 cases****Country**

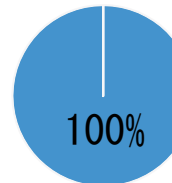
The U.S.

**16 cases**

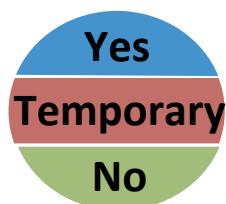
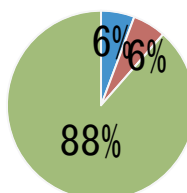
Australia

**7 cases**

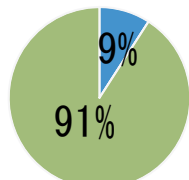
Japan

**5 cases**

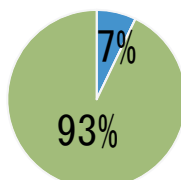
Appendix C-47: Vendor (Projects)

Vendor (Project)**Total**

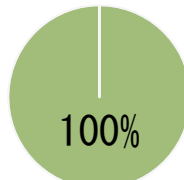
36 cases

District**Residential District**

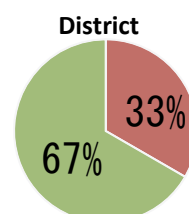
11 cases

Commercial District

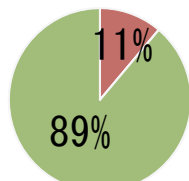
14 cases

Mixed Use District

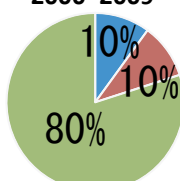
2 cases

Arts and Cultural/Historical District

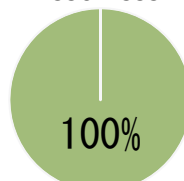
3 cases

Year**2010~**

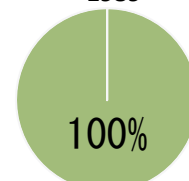
10 cases

2000~2009

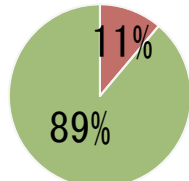
10 cases

1990~1999

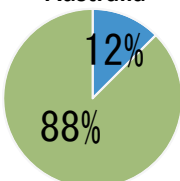
1 cases

~1989

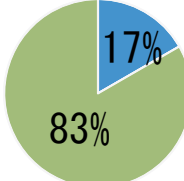
6 cases

Country**The U.S.**

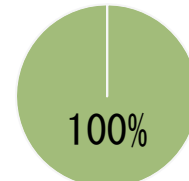
18 cases

Australia

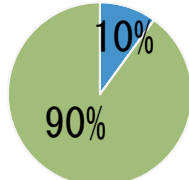
8 cases

Japan

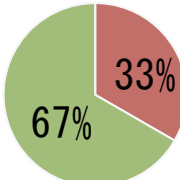
6 cases

Canada

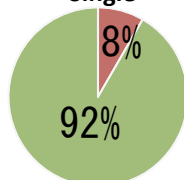
3 cases

Size of Projects (Multiple, Few, Single)**Multiple**

20 cases

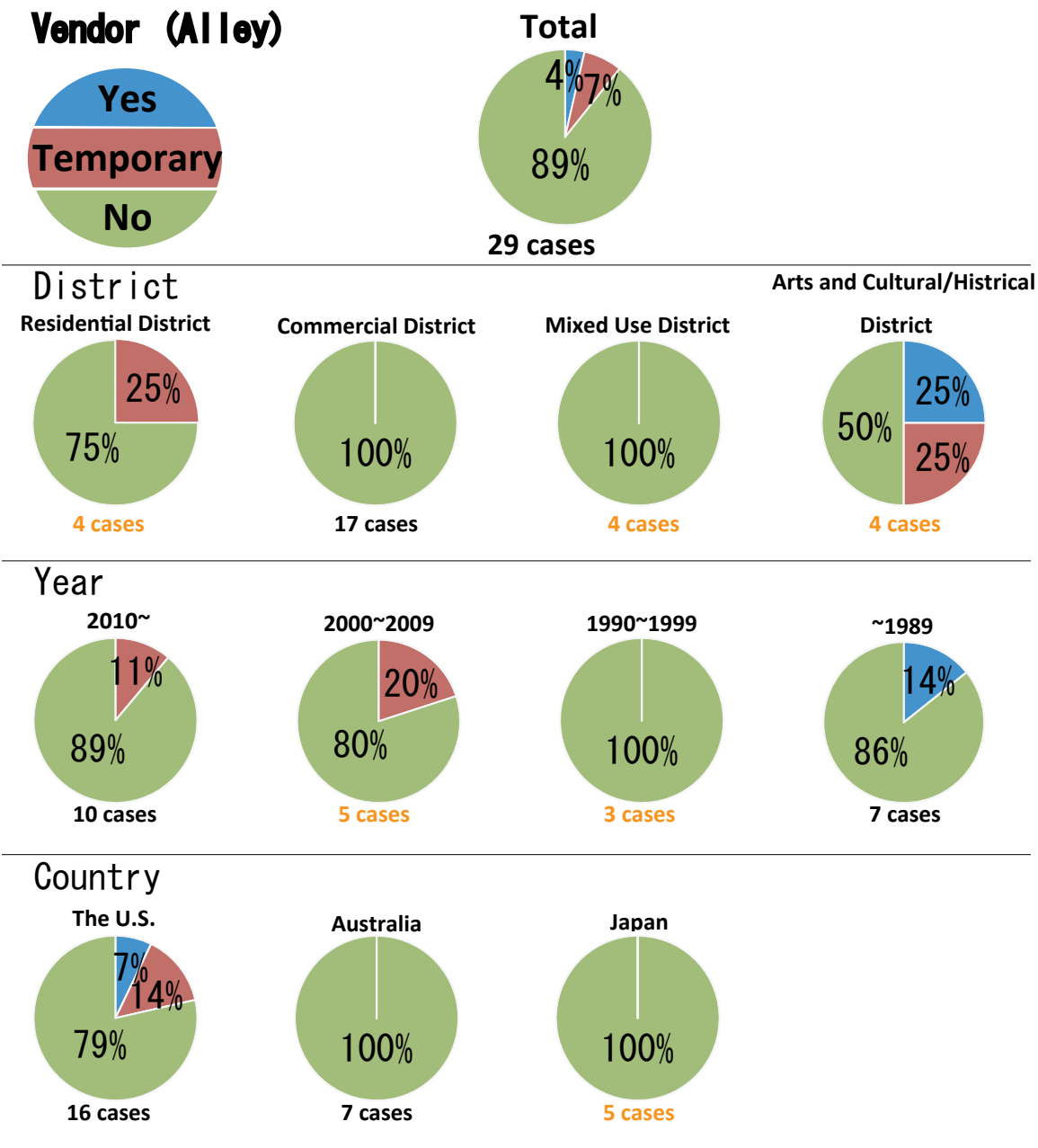
Few

4 cases

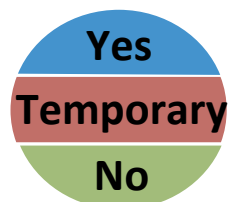
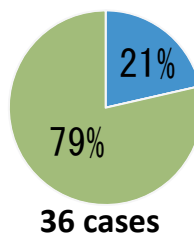
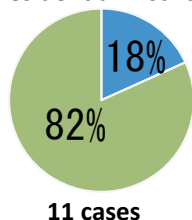
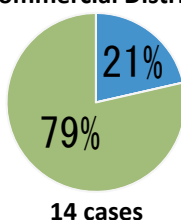
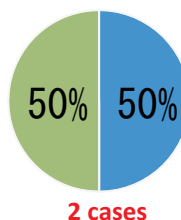
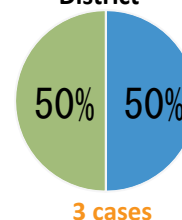
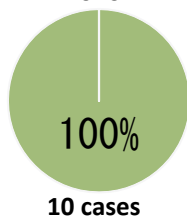
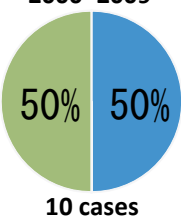
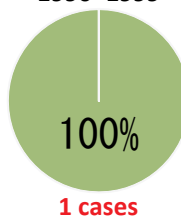
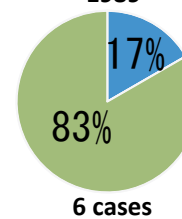
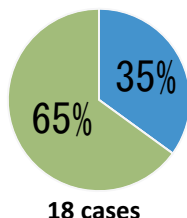
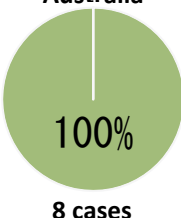
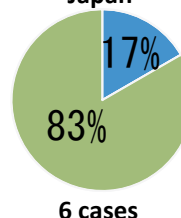
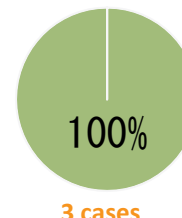
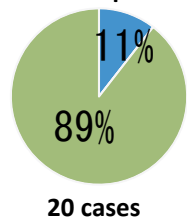
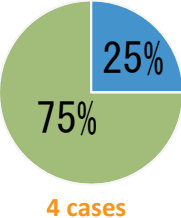
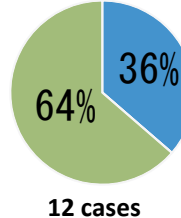
Single

12 cases

Appendix C-48: Vendor (Alleys)

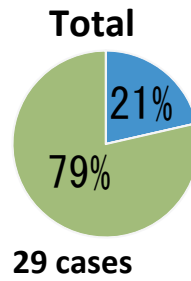
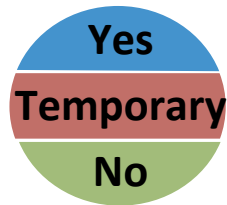


Appendix C-49: Recycling (Projects)

Recycling (Project)**Total****36 cases****District****Residential District****11 cases****Commercial District****14 cases****Mixed Use District****2 cases****Arts and Cultural/Historical District****3 cases****Year****2010~****10 cases****2000~2009****10 cases****1990~1999****1 cases****~1989****6 cases****Country****The U.S.****18 cases****Australia****8 cases****Japan****6 cases****Canada****3 cases****Size of Projects (Multiple, Few, Single)****Multiple****20 cases****Few****4 cases****Single****12 cases**

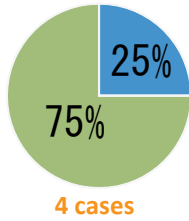
Appendix C-50: Recycling

Recycling (Alley)

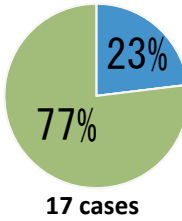


District

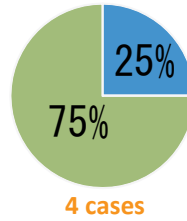
Residential District



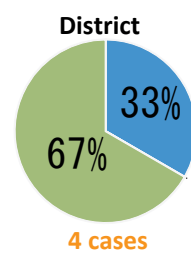
Commercial District



Mixed Use District

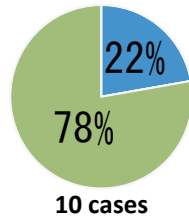


Arts and Cultural/Historical District

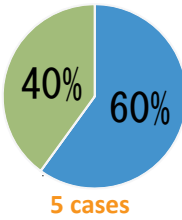


Year

2010~



2000~2009



1990~1999

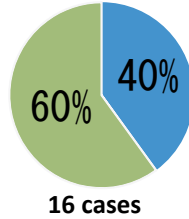


~1989

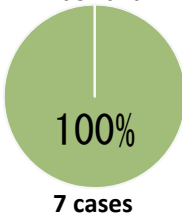


Country

The U.S.



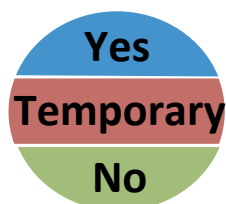
Australia



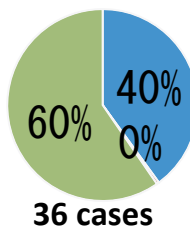
Japan



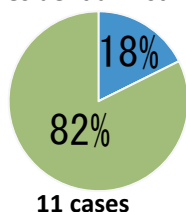
Appendix C-51: Gathering Places or Centers (Projects)

Gathering places or centers (Project)

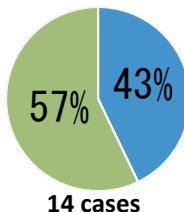
Total

**District**

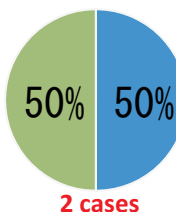
Residential District



Commercial District

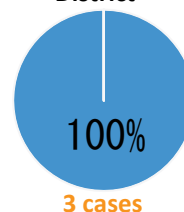


Mixed Use District

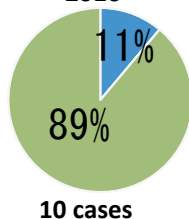


Arts and Cultural/Historical

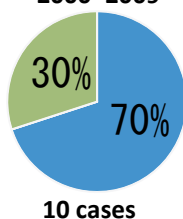
District

**Year**

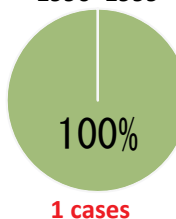
2010~



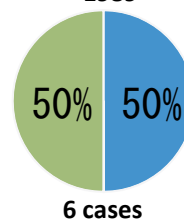
2000~2009



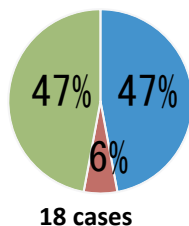
1990~1999



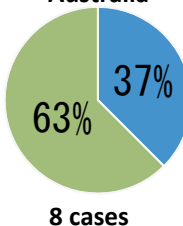
~1989

**Country**

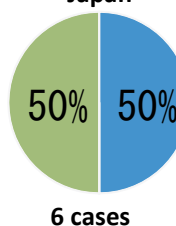
The U.S.



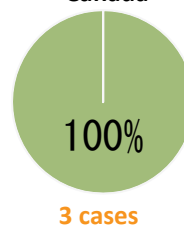
Australia



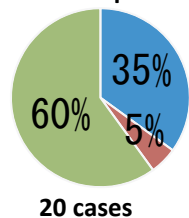
Japan



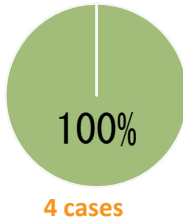
Canada

**Size of Projects (Multiple, Few, Single)**

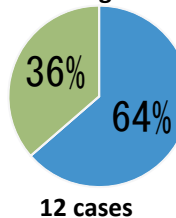
Multiple



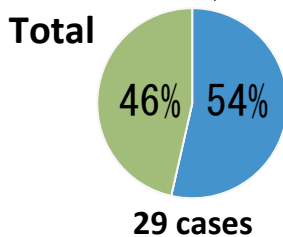
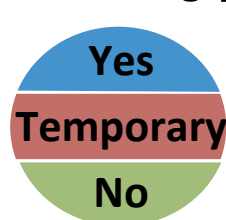
Few



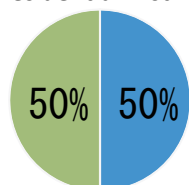
Single



Appendix C-52: Gathering Places or Centers (Alleys)

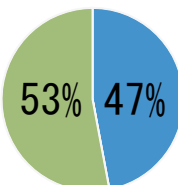
Gathering places or centers (Alley)**District**

Residential District



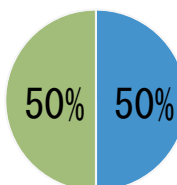
4 cases

Commercial District



17 cases

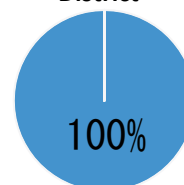
Mixed Use District



4 cases

Arts and Cultural/Historical

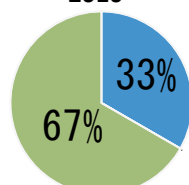
District



4 cases

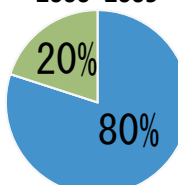
Year

2010~



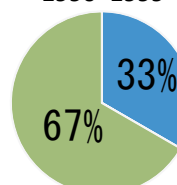
10 cases

2000~2009



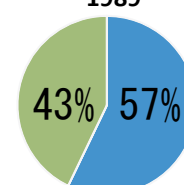
5 cases

1990~1999



3 cases

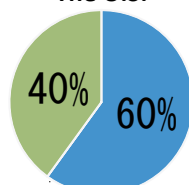
~1989



7 cases

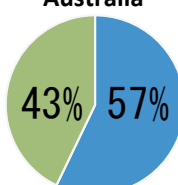
Country

The U.S.



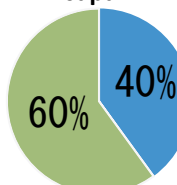
16 cases

Australia



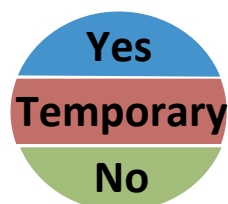
7 cases

Japan

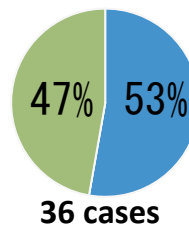


5 cases

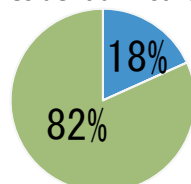
Appendix C-53: Network for Pedestrians and Bicyclists (Projects)

Network for pedestrians and bicyclists (Project)

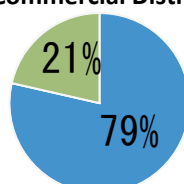
Total

**District**

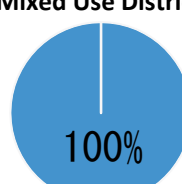
Residential District



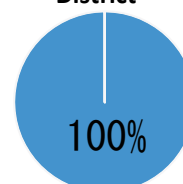
Commercial District



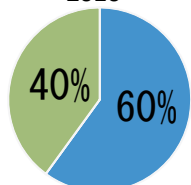
Mixed Use District



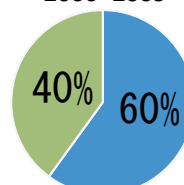
Arts and Cultural/Historical District

**Year**

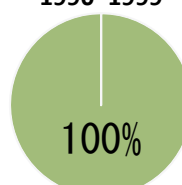
2010~



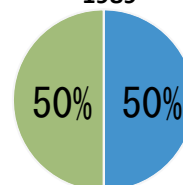
2000~2009



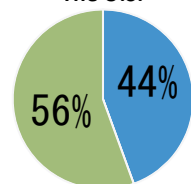
1990~1999



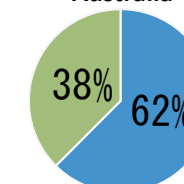
~1989

**Country**

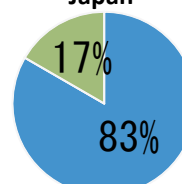
The U.S.



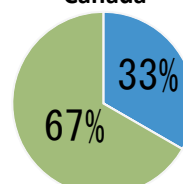
Australia



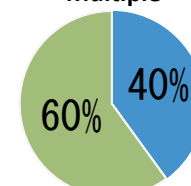
Japan



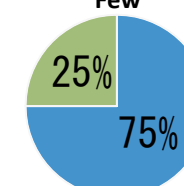
Canada

**Size of Projects (Multiple, Few, Single)**

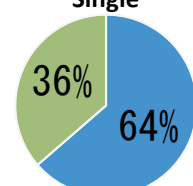
Multiple



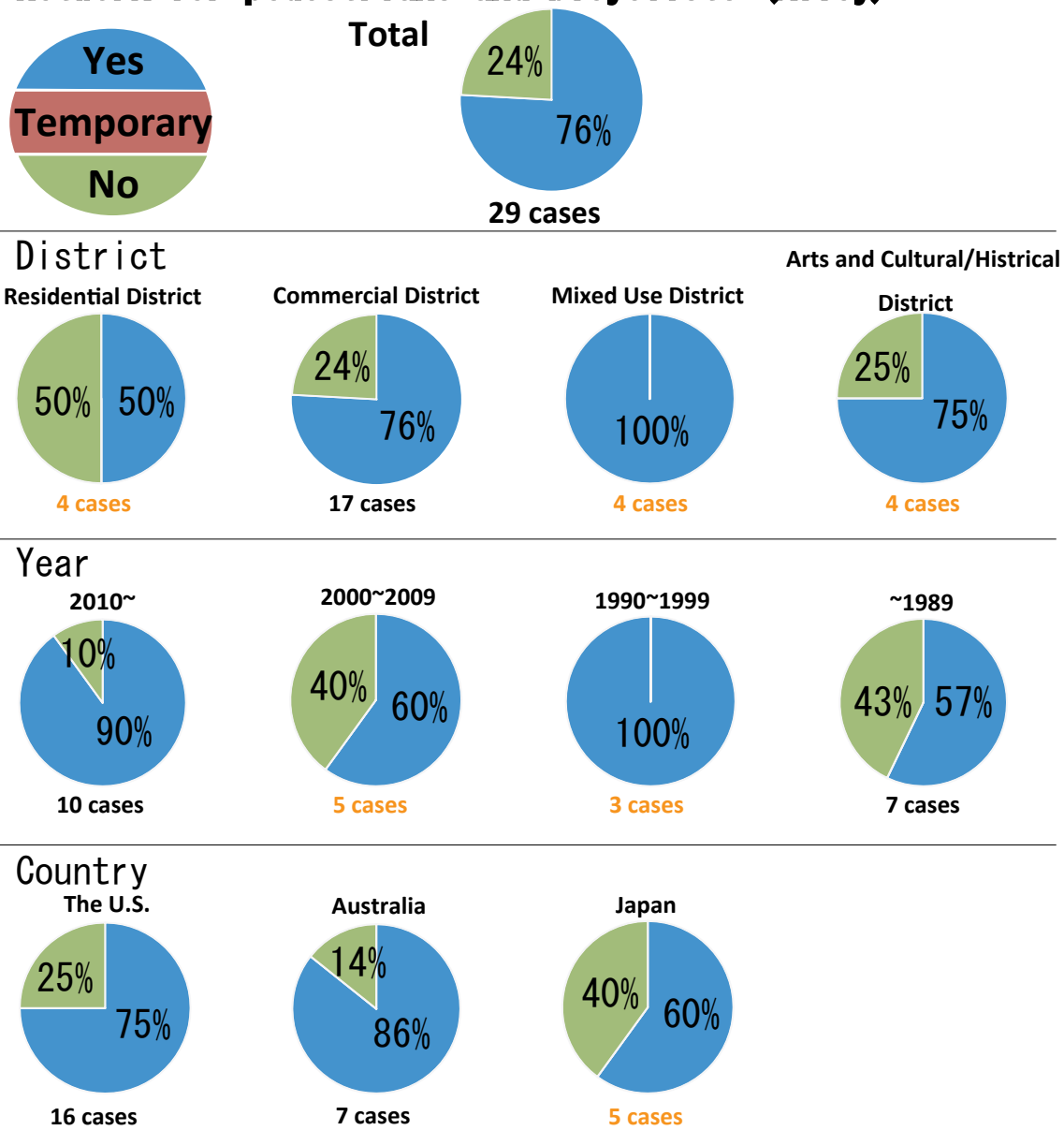
Few



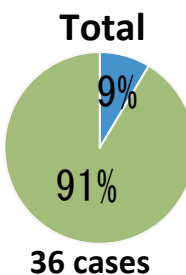
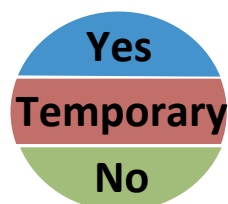
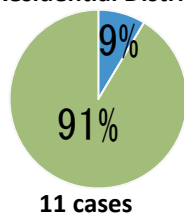
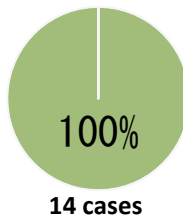
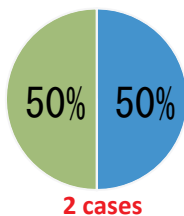
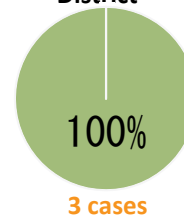
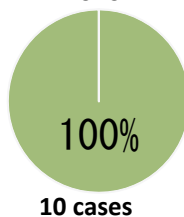
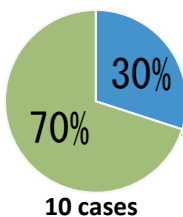
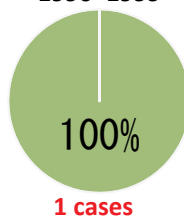
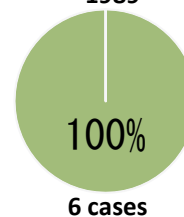
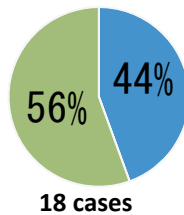
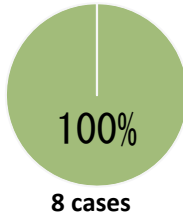
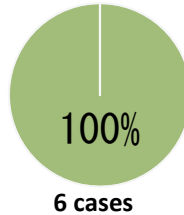
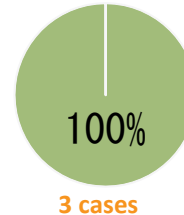
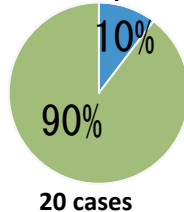
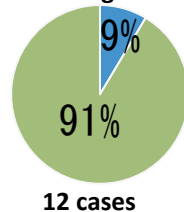
Single



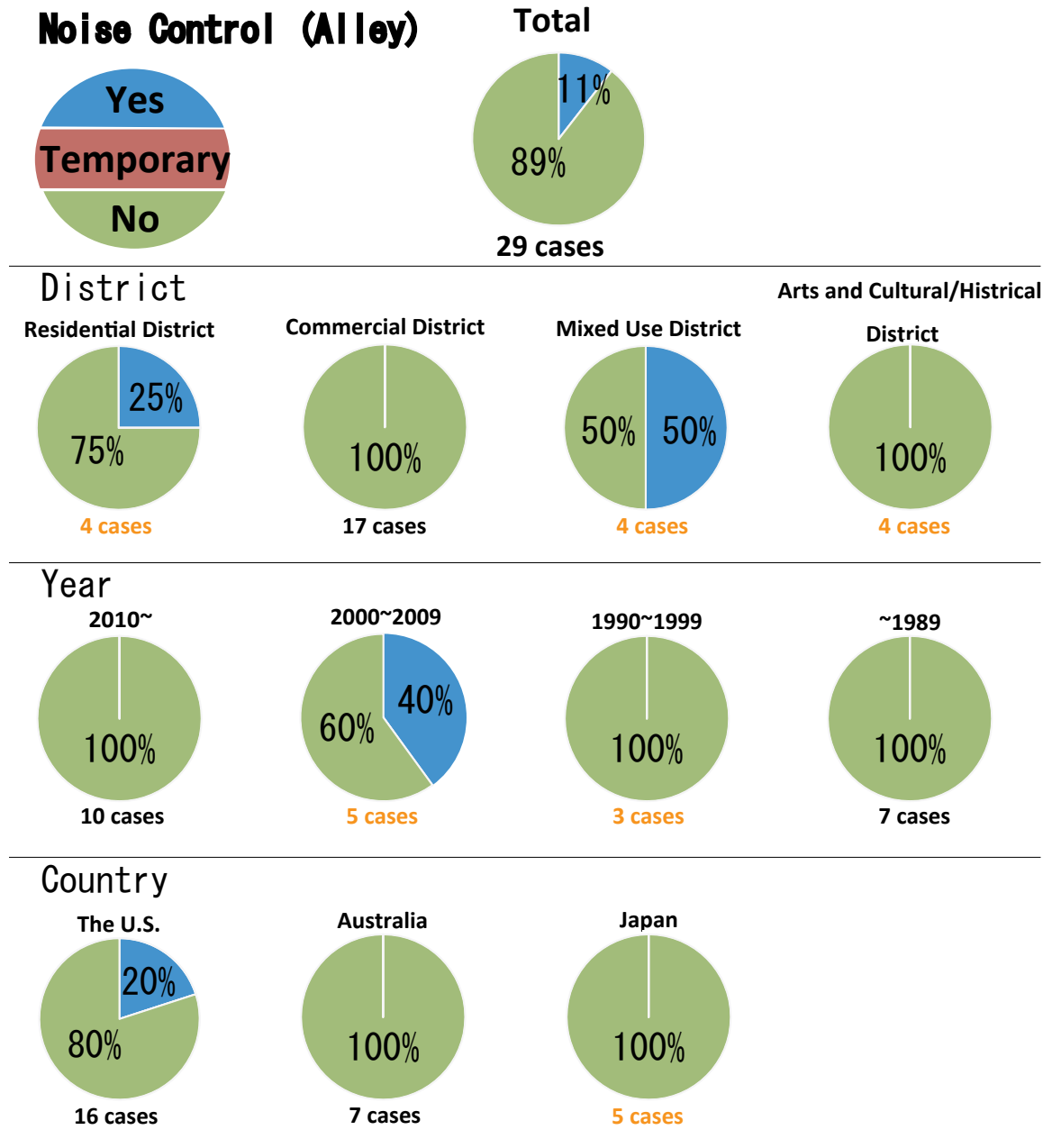
Appendix C-54: Network for Pedestrians and Bicyclists (Alleys)

Network for pedestrians and bicyclists (Alley)

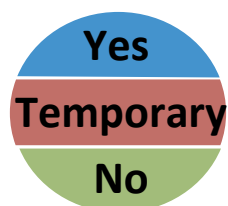
Appendix C-55: Noise Control (Projects)

Noise Control (Project)**District****Residential District****Commercial District****Mixed Use District****Arts and Cultural/Historical District****Year****2010~****2000~2009****1990~1999****~1989****Country****The U.S.****Australia****Japan****Canada****Size of Projects (Multiple, Few, Single)****Multiple****Few****Single**

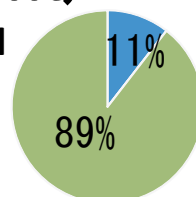
Appendix C-56: Noise Control (Alleys)



Appendix C-57: Recycled Materials (Projects)

Recycled Materials (Project)

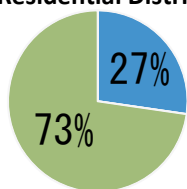
Total



36 cases

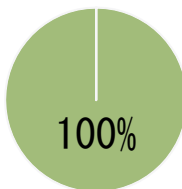
District

Residential District



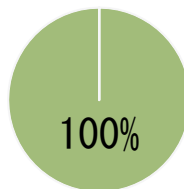
11 cases

Commercial District



14 cases

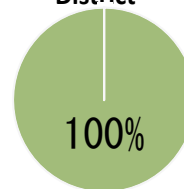
Mixed Use District



2 cases

Arts and Cultural/Historical

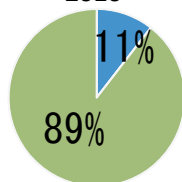
District



3 cases

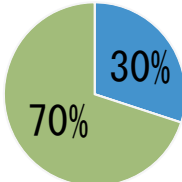
Year

2010~



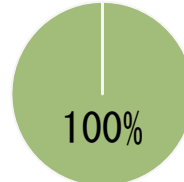
10 cases

2000~2009



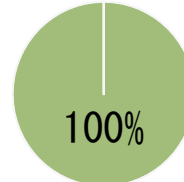
10 cases

1990~1999



1 cases

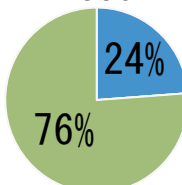
~1989



6 cases

Country

The U.S.



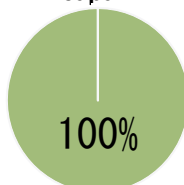
18 cases

Australia



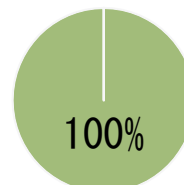
8 cases

Japan



6 cases

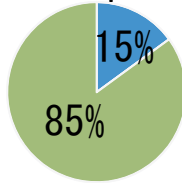
Canada



3 cases

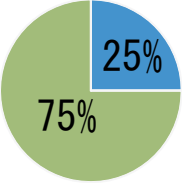
Size of Projects (Multiple, Few, Single)

Multiple



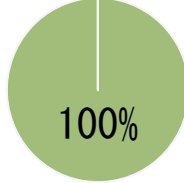
20 cases

Few



4 cases

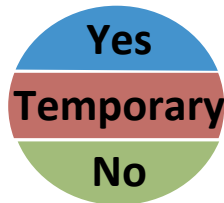
Single



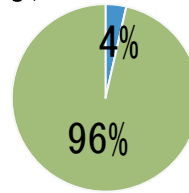
12 cases

Appendix C-58: Recycled Materials (Alleys)

Recycled Materials (Alley)



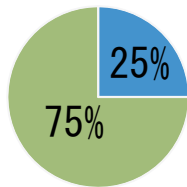
Total



29 cases

District

Residential District



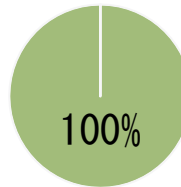
4 cases

Commercial District



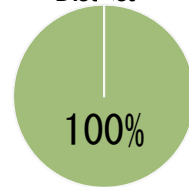
17 cases

Mixed Use District



4 cases

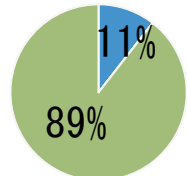
Arts and Cultural/Historical District



4 cases

Year

2010~



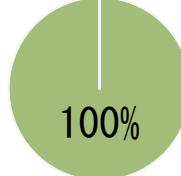
10 cases

2000~2009



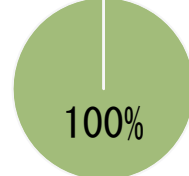
5 cases

1990~1999



3 cases

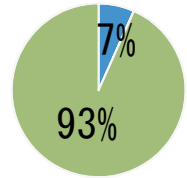
~1989



7 cases

Country

The U.S.



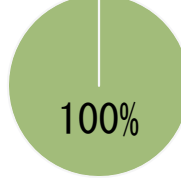
16 cases

Australia



7 cases

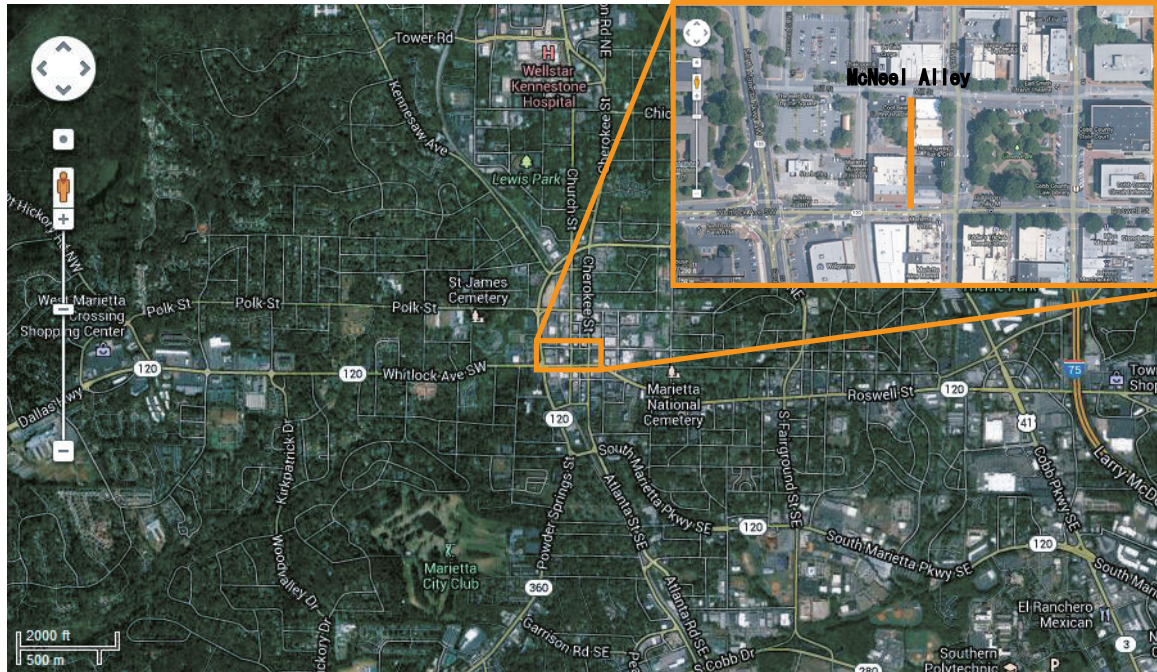
Japan



5 cases

APPENDIX D-1: McNeel Alley

City of Marietta, Cobb County, GA, U.S.



Project Name

City of Marietta-Atherton Square Revitalization

Project Type

There are several goals City of Marietta set up such as such as improvement of visibility, improvement of aesthetics, compliment of historic buildings, enhancement of visitor experience, and establishment of design theme. The responsible party is Development Service



Source: Atherton Square Revitalization



Source: Atherton Square Revitalization

- PZ and Public Works.

Special Feature

The alley includes a open space at the intersection of Depot Street and the McNeel Alley.

District: Central Business District

Land Use: City

Building Height: 1~3 stories

Alley Type: Commercial District

Partners:

- City of Marietta
- BDG Group
- Development Service
- Public Works

General Description

This project will improve pedestrian circulation by using the McNeel Alley. The goals of the project are to increase visibility, access, and aesthetics, respect historic buildings, enhance visitor experience, and establish a design theme.

The Site

The alleys located between Mill Street and Whitlock Avenue and between CSX



Source: Atherton Square Revitalization



Source: Atherton Square Revitalization



Source: Atherton Square Revitalization

rail (Marietta Station Walk) and West Park Square, and there are Marietta Museum of History, Marietta Welcome Center, “which was once the original railroad depot, built in 1864, and then rebuilt in 1898 after Sherman burnt it down” (Marietta to receive\$1.45 million for Transportation Enhancement, 2011).

“Work will consist of restoring the plumbing system, constructing a new roof, and repaving with brick or concrete pavers the Mill Street sidewalks, McNeel Alley, and Atherton Square” (Marietta to receive\$1.45 million for Transportation Enhancement, 2011), and some retail on the ground level and most on the second level. The alley is located on an active place, and it is shady. There are granite and brick paving, granite steps, seat walls, planting, and historic elements, and there are also many windows, wall lights, planting bed, ramps, and vines (Atherton Square Revitalization, 2012).

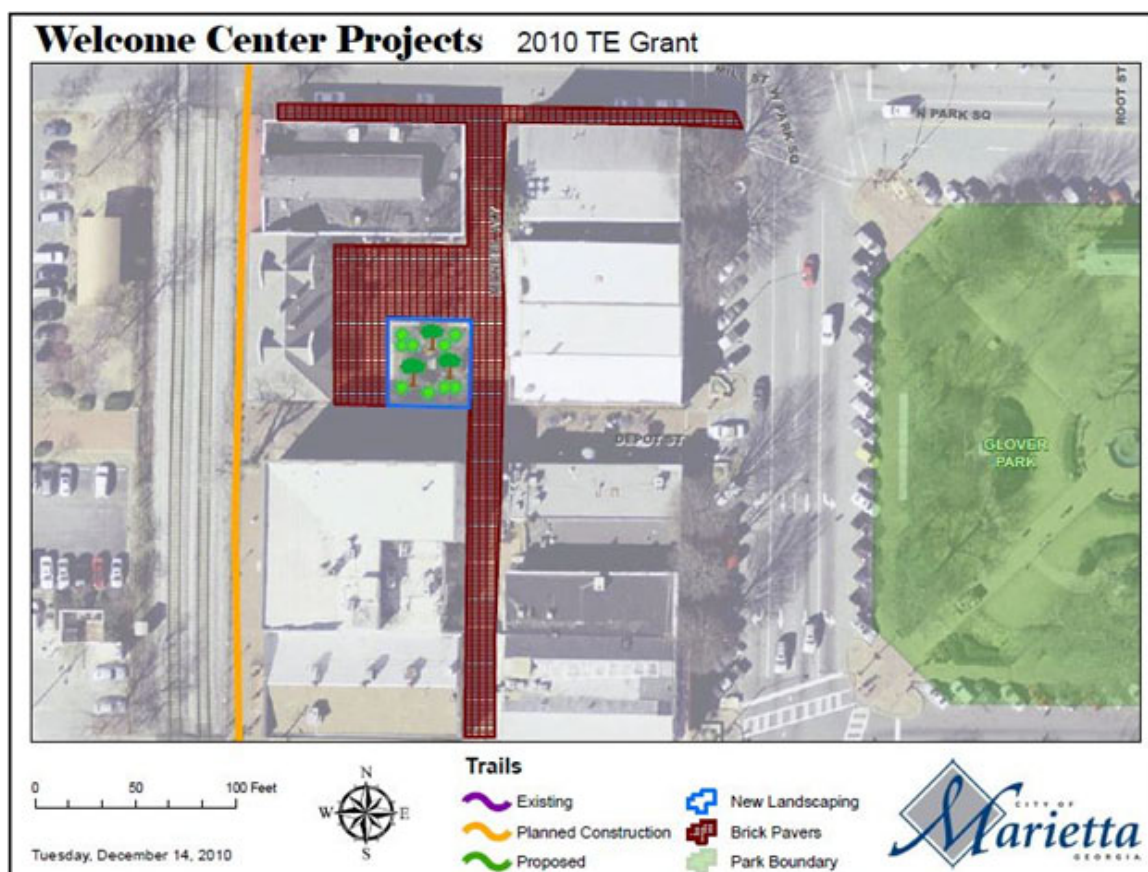
Financing

The funding source is Georgia Department of Transportation (GDOT) - Transportation Enhancement (TE) and 2011 Special-purpose local-option sales tax (SPLOST). The cost was estimated at \$773,407. The city of Marietta received \$1,450,000 in TE \$538,000, funded for the Atherton Square Revitalization project (Marietta to receive\$1.45 million for Transportation Enhancement, 2011).

Planning and Design

The design features are tree replacement, canopies, plantings, furniture, handrails, wall lights, planting beds, and vines. The important consideration of this project is accessibility, such as route accessibility and rest room accessibility. The alley will have new brick paving, a trash enclosure, canopy trees, granite paving, and movable tables, chairs, and umbrellas. There will be a gateway, new trees, transformed wall with graphics and seat wall, historical panels, granite band time-line, expanded landscape, art, window

treatments, screen utilities, and a new ramp. Another focus of this project is art installation such as art location and graphics (Atherton Square Revitalization, 2012). “The project will entail the upgrading of seven pedestrian lights, improved landscaping, and hardscaping with benches and planters” (Marietta to receive \$1.45 million for Transportation Enhancement, 2011).



Source: Welcome Center Project

Plan A



Plan B



Source: Atherton Square Revitalization

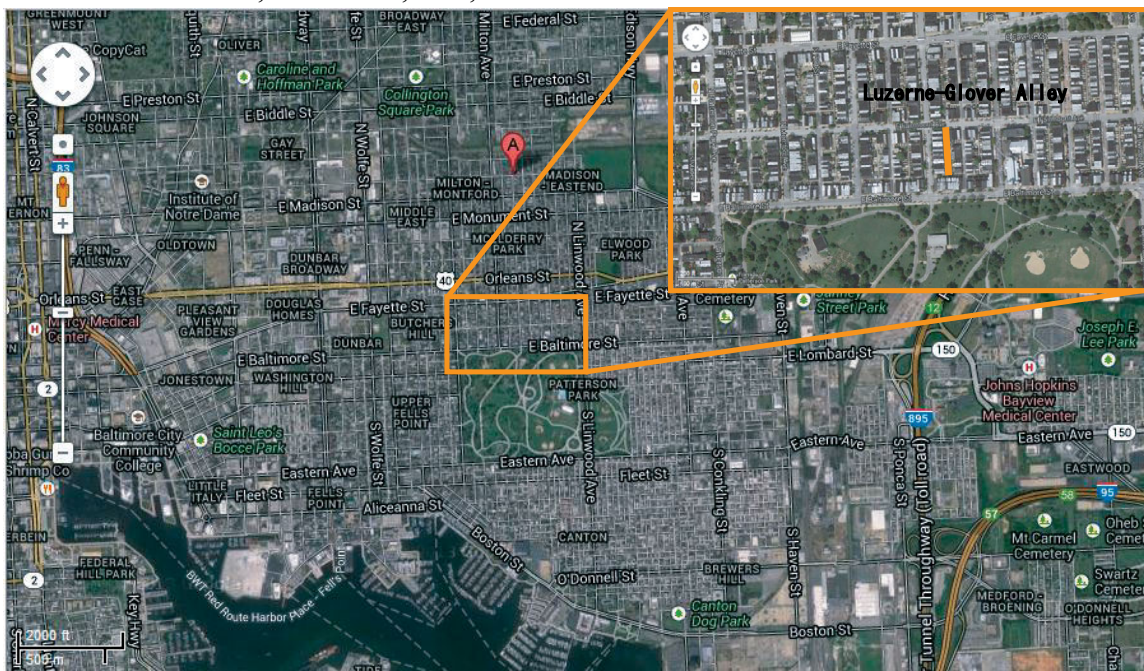
Plan C



Source: Atherton Square Revitalization

APPENDIX D-2: Luzerne-Glover Alley

Baltimore-Linwood, Baltimore, MD, US



Project Name

South Los Angeles Green Alley Master Plan

Project Type



Source: Alley Gating and Greening Toolkit
Baltimore

“The Alley Gating and Greening Program is oriented toward residential neighborhoods in order to eliminate crime and blight” (Mona Seymour, Jennifer Wolch, Kim D. Reynolds, Hilary Bradbury, 2010).

Special Feature

N/A

District: Residential District

Land Use: N/A

Building Height: N/A

Alley Type: Residential District

Partners:

- Department of General Services
- Ashoka's Community Greens
- City of Baltimore's Department of Public Works
- The Abell Foundation
- The Baltimore Community Foundation
- Mayor's Office of Neighborhood and Constituent Services
- Cleaner Greener Baltimore
- The Small-Alper Family Foundation
- The Shriver Center, University of Maryland
- The Social Work Community Outreach Services of the University of Maryland School of Social Work



Source: Green Community One Alley at a Time



Source: Green Community One Alley at a Time



Source: Alley Gating and Greening Toolkit Baltimore

General Description

The Luzerne-Glover alley is the first completed alley under Baltimore's Alley Gating and Greening Program. The program oriented from concerns about crime, dumping, and pest control problems associated with alleys (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 146), and it has succeeded in reducing crime and illegal dumping (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 146).



Source: Alley Gating and Greening Toolkit
Baltimore

“With Alleys, cutting through the block in the shape of combined F and T, four gates were required” (Arly Cassidy, Josh Newell, Jennifer Wolch, 2008).

The Site

Baltimore Alley network encompasses over 600 linear miles (Alley gating & greening program. Baltimore: City of Baltimore., 2008). The alley is located between North Luzerne Avenue and North Glover Street and between East Fairmount Avenue and East Baltimore Street. It connects these streets and avenues.

Financing

This program is funded by adjacent residents.

Planning and Design

The program is a two-tiered program. "Residents may apply to gate their alleys in order to eliminate noise, littering, and loiterers, and they may also apply to green an alley" (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 146). Greening is also considered to be beautification and provides amenities. "The gates used can be opened by each resident, who has a key. The City requires that all gates also have gate boxes for use by the Fire Department" (Arly Cassidy, Josh Newell, Jennifer Wolch, 2008).

The residents put in the vast majority of equity and quite a lot of funds, but it still needed partners to contribute additional resources which are necessary to beautify the alley and support the community organizing work of Community Greens (Green Community One Alley at a Time). The Luzerne-Glover block residents held a fundraising event with a local Patterson Park (Benjamin Nathanson, Danielle Emmet, 2008, 39). "A block member bar tended for a happy hour during which all tips and a percentage of sales went towards the project" (Benjamin Nathanson, Danielle Emmet, 2008, 39). The Luzerne-Glover block were gated, and it has been beautified by chairs, potted plants, barbecues, painted walls and fences, planters, and benches. Neighbors have parties in the alley. The alley functions as a residential pocket park and a social space that reconnected neighbors, and it is the first community in Baltimore to use the Gating and Greening Alleys ordinance.



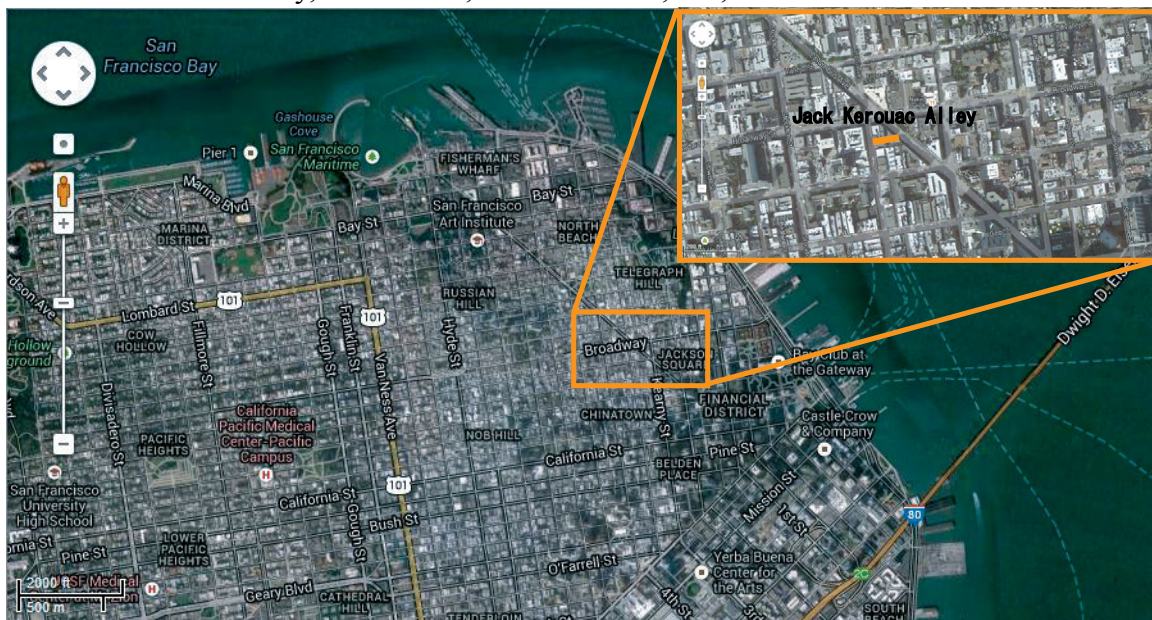
Source: Green Community One Alley at a Time



Source: Green Community One Alley at a Time

APPENDIX D-3: Jack Kerouac Alley

Columbus & Broadway, Chinatown, San Francisco, CA, CA



Project Name

Chinatown Alley Masterplan

Project Type

The project focuses on the pedestrian-only conversion and economic development in Chinatown.

Special Feature

N/A



Source: Jack Kerouac Alley

District: Mission District (Mission San Francisco de sis)

Land Use: Commercial

Building Height: N/A

Alley Type: Commercial District

Partners:

- Chinatown Community Development Center
- San Francisco Department of Public Works
- Chinatown Development Commission
- Chinatown Alleyway Improvement Association
- Vesuvio
- City Lights



Source: SAN FRANCISCO/ Kerouac Alley has face-lift



Source: SAN FRANCISCO/ Kerouac Alley has face-lift

General Description

The design purposes of the Chinatown Alley Master Plan, which aims to renovate 31 alleys in Chinatown are to “reduce illegal parking and vehicle access” (DPW Projects: Chinatown Alleyway Renovation Program), to increase pedestrian safety, to “mandate access improvements for the disabled and elderly” (DPW Projects: Chinatown Alleyway



Source: SAN FRANCISCO / Kerouac Alley is restored with cheer

Renovation Program), to reduce illegal dumping through the consolidation of dumpster areas” (DPW Projects: Chinatown Alleyway Renovation Program), to make “open spaces through installation of landscape features and seating where appropriate” (DPW Projects: Chinatown Alleyway Renovation Program), and to “provide attractive and safe secondary streets for tourists and visitors” (DPW Projects: Chinatown Alleyway Renovation Program), The Chinatown Alley Master Plan will encourage economic development for Chinatown and improve the quality of life for residents of Chinatown.

One of the characteristics of the city is a dominant east-west grain which has high density and is connected to open spaces. Individual districts and neighborhoods are mixed together through infrastructural edges and topographic change. There are low adjacent building heights and slightly south of east-west orientation. Tiny sidewalks line both sides and sidewalks are right of the way which is not building owners lands (Toole, 2011). There is furniture for restaurant use (Toole, 2011).



Source: SAN FRANCISCO / Kerouac Alley is restored with cheer



Source: San Francisco - North Beach: Jack Kerouac Alley



Source: Steven W. Snyder VibrantCanvas.com

The project will bring benefits to millions of tourists who visit Chinatown and the approximately 20,000 people who live or work in Chinatown. Jack Kerouac Alley, formerly known as Adler Alley or Adler Place, is a common alley shared by City Light Bookstore and Vesuvio connecting Columbus Street to Grant Street between Broadway and Pacific Street. Following a pedestrian-only conversion and redesign



Source: Changing Place Names to Change Historical Memory

by landscape architect Jasmine Kaw, the 60-plus foot passageway was rededicated in honor of the Beat Generation author in 2007 (Gobetz, 2009).

It's the history of Jack Kerouac and Allen Ginsberg, the Beats and Chinatown. It connects the most important and culturally rich parts of the city: Chinatown and North Beach (Carl Nolte, Chronicle Staff Writer, 2007). In 1988, Lawrence Ferlinghetti, who is the co-founder of City Lights Book Store, presented his idea to the San Francisco Board of Supervisor to transform the alleyway.

The Site

Chinatown is the second most dense neighborhood besides Manhattan in the U.S. (Toole, 2011). and there are mainly low income immigrants. It is the birth place of San Francisco and settled in the 1850s during the gold rush" (Toole, 2011).

The alley is in the Mission district, which belongs to the Mission San Francisco de Asis that is the oldest surviving structure in San Francisco.

The Jack Kerouac Alley is one of those one-of-kind city places. Only sixty or so feet long, it connects Grant Avenue, the main street of Chinatown, with Columbus

Avenue, the main drag of North Beach (Carl Nolte, Chronicle Staff Writer, 2007).

Financing

Under the Chinatown Master Alley Plan, \$2.3 million was funded. To repair the seven alleys, \$2 million was already spent. Only \$277,000 was left for other projects.

The cost for the Jack Kerouac Alley was \$321,000.

Planning and Design

There is currently no identified maintenance fund, therefore, DPW has worked on including this category into the City's 10-year Capitol Plan, which is a long-term plan that analyzes, identifies, and prioritizes capital improvement citywide (DPW Projects: Chinatown Alleyway Renovation Program).

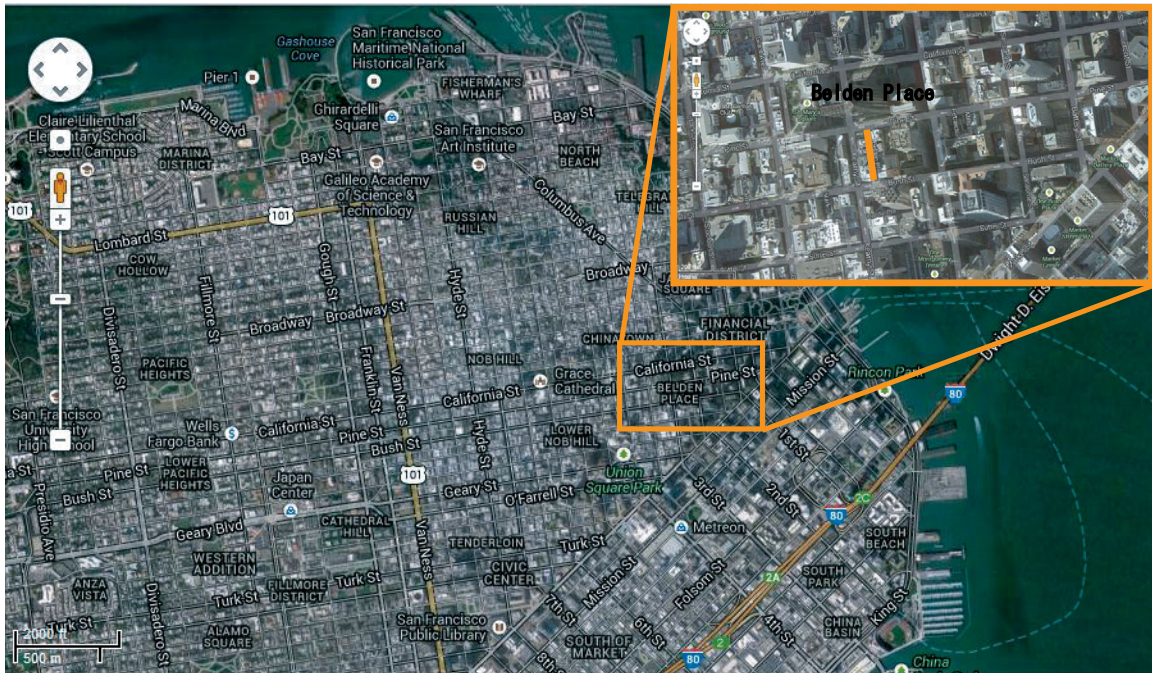
The site used to serve as a public restroom, however, it has been "transformed into an open-air way linking two neighborhoods and their cultures" (Chinatown alley plan: \$2M down, 24 alleys to go, 2007)

The alley has been repaved with new granite blocks, widened a bit and cleaned. Vehicles were banned and new decorative streetlights were installed (Carl Nolte, Chronicle Staff Writer, 2007).

Symbolically connecting Chinatown and North Beach, the alley is inlaid with stone and metal plaques inscribed with poetry - Chinese poems by Li Po and Confucius on Western end, and Western poems by John Steinbeck, Maya Angelou, and Kerouac himself on the eastern end (Gobetz, 2009).

APPENDIX D-4: Belden Place

Chinatown, San Francisco, CA



Project Name

The Downtown Streetscape Plan,
Chinatown Alley Masterplan, Better
Streets Plan: Policies and Guidelines for
the Pedestrian Realm.



Source: Alley of Seattle Blog

Project Type

The design purposes of the Chinatown Alley Master Plan, which aims to renovate thirty-one alleys in Chinatown, are to “reduce illegal parking and vehicle access” (DPW Projects: Chinatown

Alleyway Renovation Program), to increase pedestrian safety, to “mandate access improvements for the disabled and elderly (DPW Projects: Chinatown Alleyway Renovation Program), to reduce illegal dumping through the consolidation of dumpster areas” (DPW Projects: Chinatown Alleyway Renovation Program), to make “open spaces through installation of landscape features and seating where appropriate” (DPW Projects: Chinatown Alleyway Renovation Program), and to “provide attractive and safe secondary streets for tourists and visitors” (DPW Projects: Chinatown Alleyway Renovation Program), which will encourage economic development for Chinatown and improve the quality of life for its residents.



Source: On Belden Place, Bon Appetit!/Alley's Alfresco Cuisine, Ambience Provide A Taste of European Life



Source: Romantic Belden Place

The Downtown Streetscape Plan classified San Francisco's network of streets into five different categories: special streets, second level streets, base case streets, destination alleys, and walkthrough alleys. This classification system was necessary to make a design matrix for streetscape elements in order to create interrelated pedestrian routes.

Belden Place Alley was designated as a destination alley that merits its own design to be developed by working with local merchants and property owners (Destination Downtown: Streetscape Investments for a Walkable City, 1995, 10). Better Streets Plan: Policies and Guidelines for the Pedestrian Realm, similar in concept to the 1995 Plan,

provided “a blueprint for the future of San Francisco’s pedestrian environment” (San Francisco Better streets plan: Policies and guidelines for the pedestrian realm, draft plan release packet, 2008, 5).

Special Feature

N/A

District: Financial District

Land Use: Commercial

Building Height: n/a

Alley Type: Commercial District

Partners:

- Chinatown Community Development Center
- San Francisco Department of Public Works
- Chinatown Development Commission
- Chinatown Community Development Center
- Chinatown Alleyway Improvement Association
- The City and County of San Francisco

General Description

One of the characteristics of the city is a dominant east-west grain which has high density and is connected to open spaces. Individual districts and neighborhoods are mixed together through infrastructural edges and topographic change. There are low adjacent building heights and slightly south of east-west orientation. Tiny sidewalks line both sides and sidewalks are right of the way which is not building owners lands (Toole,

2011). There is furniture for restaurant use (Toole, 2011). The project will bring benefits to millions of tourists who visit Chinatown and the approximately 20,000 people who live or work in Chinatown.

Belden Place has become one of the most attractive place and the city's prime dining to enjoy lunch and dinner. It attracts tourists, expatriates, and thousands of workers "who fill the nearby high rise financial district" (Bauer, 2004). The place was originally lacking in ethnic restaurants, however, a few people started their businesses, such as Sam's, and the number of restaurants and cafes has increased little by little. Today, "French, Italian, Mediterranean, Spanish and American are all part of the alley culture" (Bauer, 2004).

The Site

Chinatown is the second most dense neighborhood besides Manhattan in the U.S. (TIGHT URBANISM). and there are mainly low income immigrants. "It is the birth place of San Francisco and settled in the 1850s during the gold rush" (Toole, 2011). The location serves as a hub of the French community, and there are many French restaurants and institutions. One portion has been referred as the French Quarter for its historic ties to French immigrants. The French Quarter is located along one block-long alley running south from Pine Street to Bush Street, parallel to and in between Montgomery and Kearny Streets. The site is also within the financial district, however, it is also considered as the Joie de Vivre, or Joy of Living district.

Financing

Under the Chinatown Master Alley Plan, \$2.3 million was funded. To repair the seven alleys, Jack Kerouac, Waverly, John, Commercial, Ross, Cordelia and Hang Ah, \$2 mil

lion was already spent. Only \$277,000 was left for other needs. (Chinatown alley plan: \$2M down, 24 alleys to go, 2007).

Planning and Design

There is currently no identified maintenance fund, therefore, DPW has worked on including this category into the City's 10-years Capitol Plan, which is "a long term 10-year plan that analyzes, identifies, and prioritizes capital improvement citywide" DPW Projects: Chinatown Alleyway Renovation Program).

There are set-up and take-down furniture and very interesting operable canopies taken out every morning and put away late every night (San Francisco day 2, 2010).

There were several events happening at the alley, for example, there was an annual big event for open-air celebrations at the alley and restaurants of the French Quarter around Bush and Kearny streets (Jesse Hamlin, San Francisco Chronicle Staff Writer, 2000). The event included another alley between Grant Avenue and Kearny Street. These two alleys were closed for the event. In 1999, more than 5,000 people came to the alleys to eat, drink, and dance until 10pm, when police shut down the event (Jesse Hamlin, San Francisco Chronicle Staff Writer, 2000). In 2000, the event organizers got permission to keep the event open until midnight (Jesse Hamlin, San Francisco Chronicle Staff Writer,



Source: On Belden Place, Bon Appetit!/Alley's Alfresco Cuisine, Ambience Provide A Taste of European Life
Chronicle / Michael Macor

2000).

The Belden Place has strong characteristics serving as the city's prime dining location, such as "Bright orange, red and blue awnings and they flutter in the breeze" (Bauer, 2004), and "strings of lights zigzag overhead, adding a starry ceiling to the alley" (Bauer, 2004).

Business owners place tables and chairs into the alley with permission and it helps not only to improve the pedestrian experience but also to grow the owners' square footage and increase the likelihood of drawing a crowd (San Francisco day 4, 2010). The alley was transformed by the entrepreneurs' ideas (San Francisco day 4, 2010). The City and County of San Francisco encourage public spaces in unique locations through the reduction of permit fees for outdoor tables. Therefore, restaurants at Belden Place transformed and added to the European sidewalk-café sensibility in San Francisco, and because of this there are lots of outdoor options that take advantage of the urban aesthetic (Bauer, *The Alfresco Experience*, 2008).

The street network surrounding Belden Place was well organized to make Belden Place walkable, and it is pedestrian-oriented system, therefore, it increases traffic for the restaurants and it improves public safety benefits. Belden Place has distinctive dining establishments, therefore, there are no chain restaurants or fast-food restaurants, and restaurant row's popularity keeps the unique Belden Place atmosphere.

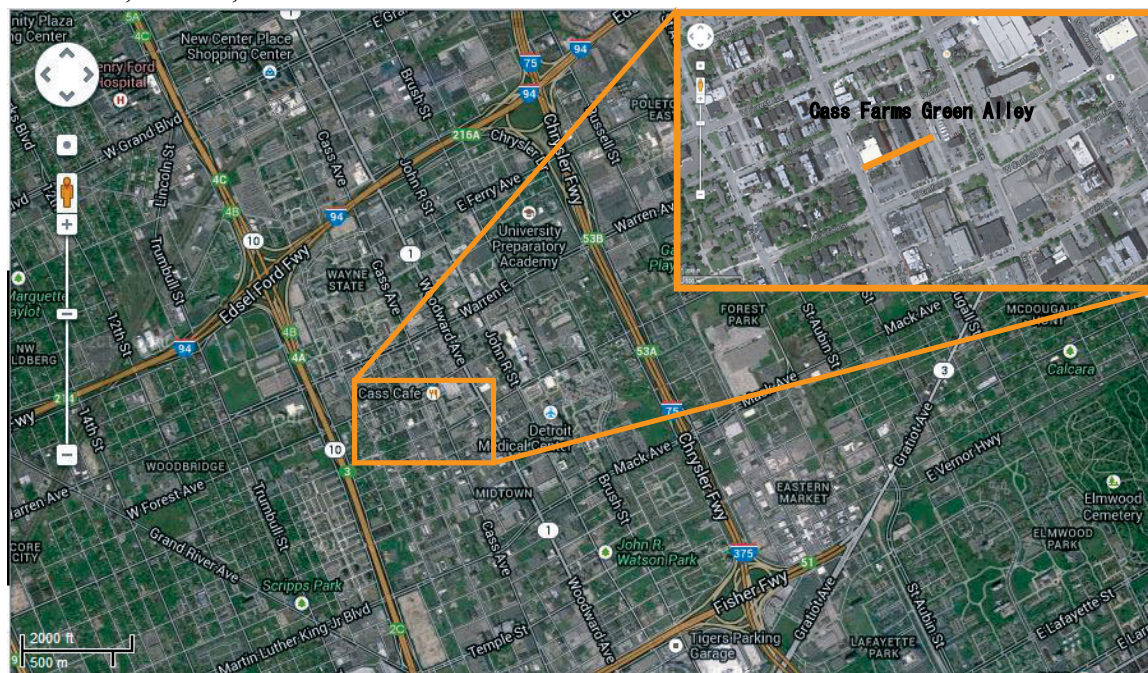
Alley improvements are not just a one-time occurrence and therefore funds used to pay for the ongoing maintenance should be identified for the long-term benefit of that alleyway. Belden Place increased sales tax revenue to the city from the restaurants and property tax revenues because the surrounding property values have increased based on the aesthetic improvements of those alleyways.

In the early 1990s, the city paid for some improvements of Belden Place alleyway including raising the street level to the six-inch curb, improving drainage, and adding a permanent gate. The gate would be closed or opened depending on the time of day. The

goals with these improvements were to make the alley safer for pedestrians and satisfy the Americans with Disabilities Act (ADA) compliance standards. In 1994, San Francisco Supervisor, Angela Alioto, put effort into permitting outside seating in alleys (Enkoji, 2009) (Enkoji M. , 2009). In 1995, the Planning Department of the City and County of San Francisco published the Downtown Streetscape Plan which is about the implementation framework for downtown streetscape improvements to improve the Downtown Pedestrian Network (Destination Downtown: Streetscape Investments for a Walkable City, 1995). Types of designs for Destination Alleys considered entry gates, decorative single surface paving treatments, banners, pedestrian-scale lighting, plantings and restricted vehicular access (Destination Downtown: Streetscape Investments for a Walkable City, 1995).

APPENDIX D-5: Cass Farms Green Alley

Midtown, Detroit, MI



Project Name

Detroit's First Green Alley Demonstration Project

Project Type

This is Detroit's First Green Alley Demonstration project. This project represents the possibility for future alley projects for Detroit's more than 1,000 miles of alleyways. The Green Alley demonstrates earth-friendly approaches to manage rainwater runoff, reducing heat



Source: Detroit overview



Source: Detroit overview

island effect, promoting recycling, conserving energy, and fostering a connected, walkable community (Assoc, 2010).

Special Feature

N/A

District: Mixed-Use District (Midtown)

Land Use: Commercial and Office

Building Height: N/A

Alley Type: Mixed Use District

Partners:

- Kresge Foundation
- America Foundation
- Colin Hubbell Fund
- DTE Energy
- City of Detroit's Department of Public Works
- City of Detroit's Water & Sewer Department
- University Cultural Center Association
- Green Alley Neighbors
- Green Garage

General Description



Source: Detroit overview



Source: Detroit overview



Source: Detroit overview

The alley demonstrates the possibility for alley restoration. The Green Garage had "a vision to transform the incredibly blighted Midtown into a green hub" (Assoc, 2010). It is a great opportunity to demonstrate the positive community, environment and economic impact, so this alley is being used as the Green Alley Demonstrative project. It is considered as a leadership action in "creating a new vision for one of the most underutilized assets of Midtown and the City of Detroit" (Green Alley Project 101, 2009). The project transforms the most abandoned alleys into a greenway for pedestrians and bicyclists to enjoy the green gardens and gather a few neighbors, and it encourages shopping at the business establishments (Green Alley Project 101, 2009).

The Site

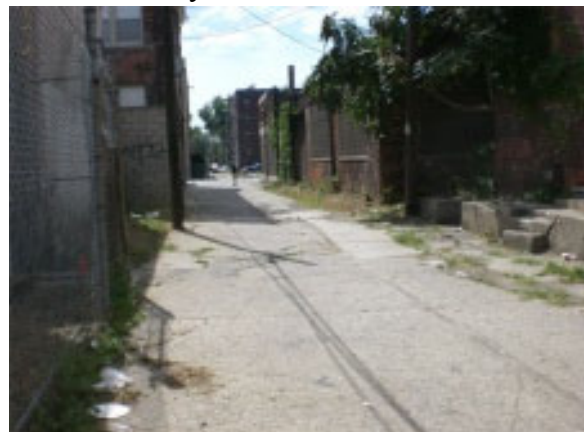
"The folks at the Green Garage purchased an old model T warehouse in 2008 adjacent to Motor City Brewery" (Assoc, 2010). The site is a 220' section of alley off Second Avenue between West Canfield Street and Prentis Street in Midtown

Alley looking west



Source: Green Alley - Design Studio

Center of Alley



Source: Green Alley - Design Studio

Drain at west end of alley



Source: Green Alley - Design Studio

(Green Alley Project 101, 2009). There is a mix use of homes, restaurants, condominiums, apartment buildings, and office/light commercial buildings (Green Alley Project 101, 2009). This alley would be eventually linked to and extend to University Cultural Center Association (UCCA) greenway project (Green Alley Project 101, 2009).

Financing

“Sue Mosey of the UCCA called and told us that the final portion of the money, \$20,000, has been allocated to us from the American Foundation” (Green Alley Funding, 2009). “This joins \$20,000 from the Kresge Foundation and \$10,000 for the lighting from DTE” (Green Alley Funding, 2009).

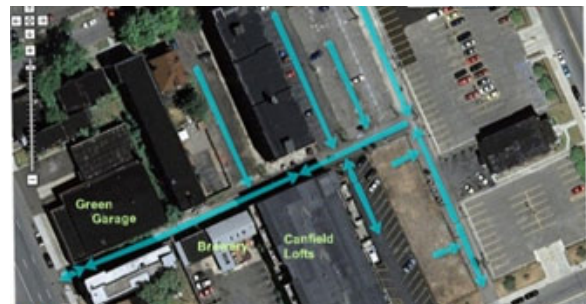
Planning and Design

The alley surface was transformed from pavement and weeds into native plant gardens, permeable pavers and sections of reclaimed historic brick,

Alley looking east



Source: Green Alley - Design Studio



Source: Green Alley - Design Studio



Source: Green Alley - Design Studio



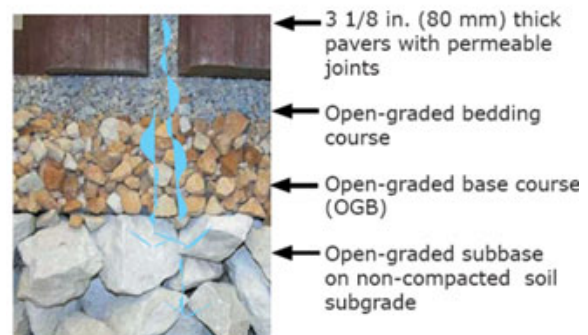
Source: Green Alley - Design Studio

allowing water to be absorbed into the natural water table, not dumped into our sewers. This pedestrian-friendly path is lit with high efficiency induction lighting which promotes safety, is dark sky compliant and will last twenty five years. The alley also features a cooperative waste/recycling center (Assoc, 2010).

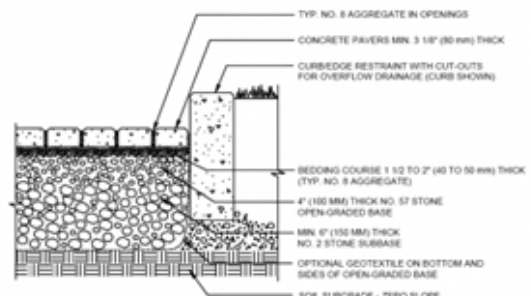
The project considered to have a sustainable alley design. The main considerations of alley design were water, sun, wind/air, land, other human needs, energy footprint, no waste, utilities, and benefits (Green Alley - Design Studio, 2009). The goal of water management was to reduce the rapid runoff, to make water cleaner, to support natural water storage, and snow removal (Green Alley - Design Studio, 2009). To achieve those goals, there were some actions such as using pervious/permeable pavements, harvesting the water from the building runoff, using native plants that clean the water, and encouraging the growth of microbes that clean water (Green Alley - Design Studio, 2009). The goal of the sun was to eliminate heat island which has an effect on climate and



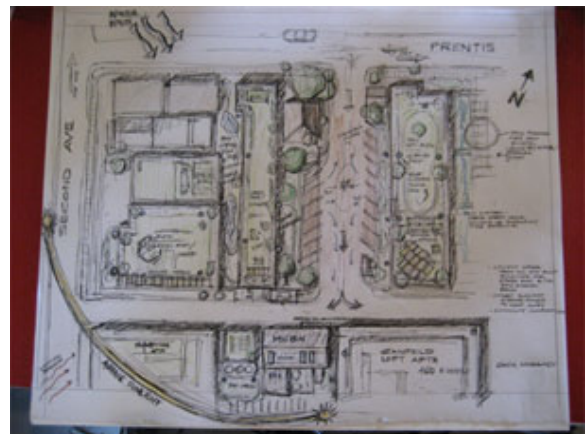
Source: Green Alley - Design Studio



Source: Green Alley - Design Studio



Source: Green Alley - Design Studio

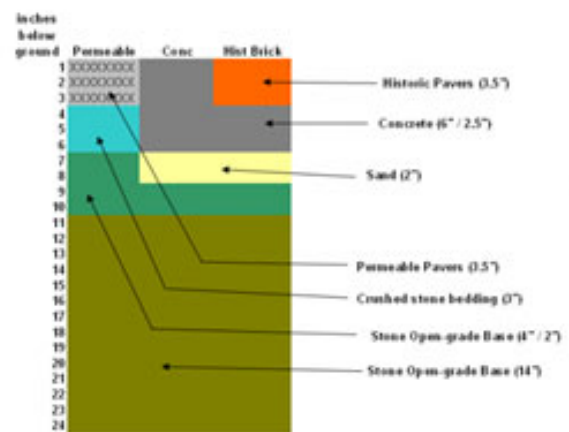


Source: Green Alley - Design Studio

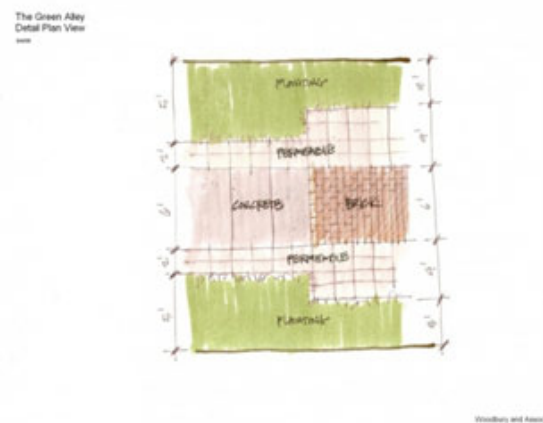
habitats (Green Alley - Design Studio, 2009). The actions of sustainable design for sun were to green screen using native plants on the south side of buildings, use of ground cover, use of trees for shade canopy, lighter pavement color which can reduce the surface temperature by twenty to forty degrees and air temperature by two to four degrees (Green Alley - Design Studio, 2009). The goals of the land were to reduce the waste stored in the alley and sent to the incinerator, to allow the land to breathe, to give creatures to reason to visit the alley which means it allows the essential interconnectedness of the life to return, to reduce night light pollution and noise pollution, and to establish a natural canopy system of interdependence (Green Alley - Design Studio, 2009). The actions to achieve the goals were studying plant life, studying garbage and determining the source, which made consideration of no-waste purchasing habits, establishing a neighborhood composting center, establishing a neighborhood recycling center, leaving some of the land unpaved (Green Alley - Design Studio, 2009). The goals of other human needs are building well-being and strengthening relationships with all



Source: Green Alley - Design Studio



Source: Green Alley - Design Studio



Source: Green Alley - Design Studio

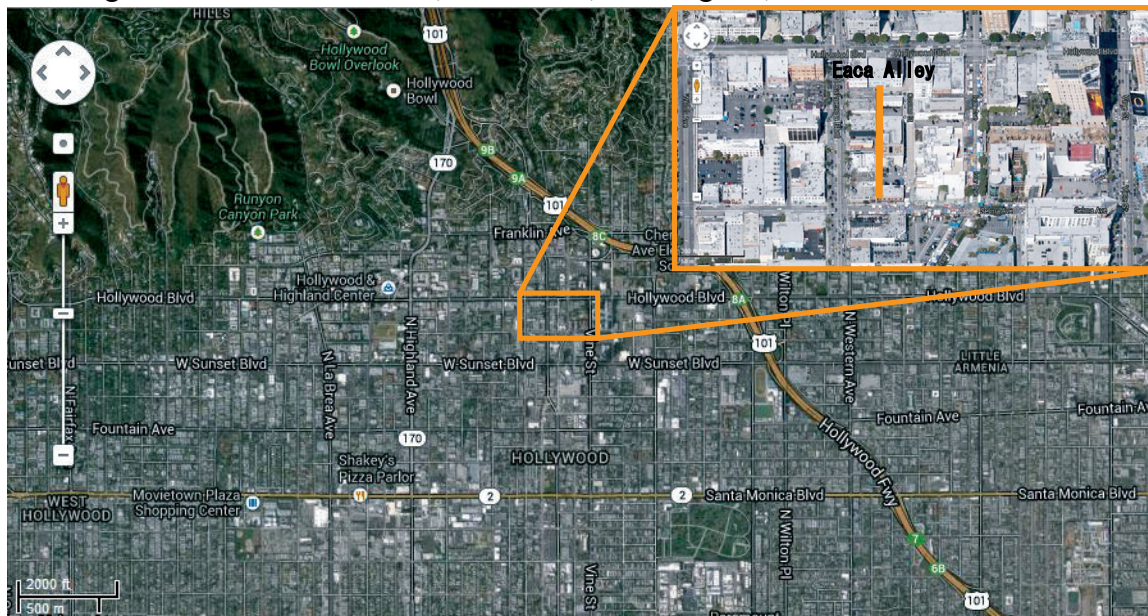
members of the community, enhancing safety such as lighting at night and walking surfaces, improving accessibility such as space safety and removing barriers, eliminating noise pollution, and creating a sense of an inviting community space (Green Alley - Design Studio, 2009). The actions to achieve the goals were use of a community-based design approach, proper lighting requirements for night, and snow removal (Green Alley - Design Studio, 2009). The goals of the energy footprint were to reduce the energy requirements to build, maintain, and operate the alley and its environment (Green Alley - Design Studio, 2009). The actions for the goals were reusing materials, using natural building techniques, reducing the need for artificial lighting, using LED street lights, reducing needs for maintenance, using local suppliers of materials, supporting the enlightened transportation pyramid (Green Alley - Design Studio, 2009), and for “pedestrians and bicyclists exit the Black stone onto the alley” (Green Alley - Design Studio, 2009). The goals for no waste were to leave no materials on the site, to reuse and to recycle materials, and to reduce waste of new materials (Green Alley - Design Studio, 2009). The actions for these goals were reusing the concrete and creating build dimensions for new materials (Green Alley - Design Studio, 2009). For the utilities, the Green Garage considered the partners for each utility, such as lighting, storm sewer, telephone, electrical, and water (Green Alley - Design Studio, 2009). The Green garage also considered the porous pavement because it brings many benefits such as cleaner surface water, cooler and quieter cities, safer driving, and better tree survival rates. In addition, “in typical commercial development, for example, the overall impervious area averages 85%, with two-thirds of that from pavement and one-third from roofs” (Green Alley - Design Studio, 2009). Therefore, it needs to be considered.

The new surface of alley would include fifty percent coverage of the alley with native plant gardens, which have year around color and interest, and the rest of surface would be covered by paving, such as historic paving bricks for historical integrity, permeable/drivable surfaces for heavy service and emergency traffic, and traditional concrete sidewalk

sections for stable structure to keep the existing storm drains (Green Alley Project 101, 2009). The collapsible bollards were placed at the end of the alley (Green Alley Project 101, 2009). “Deep fabric reinforced sub-base to hold up to a ten year storm without water going into the storm drain” (Green Alley Project 101, 2009). There are waste and recycling management improvements, such as a “waste compactor that will eliminate the need for all other trash containers in the alley” (Green Alley Project 101, 2009), “a stream recycling container that locks for use by the entire neighborhood” (Green Alley Project 101, 2009), “historic brick screen around the compactor and recycling center with gates for easy access and pickup” (Green Alley Project 101, 2009) to improve the alley’s appearance. There were three high efficiency street lights installed which would improve safety (Green Alley Project 101, 2009). The processes, guides, lessons, and importance, along with pictures, are available on the website (Green Alley Project 101, 2009). There were also public hearings to talk about processes and considerations such as survey plans to the architect by Michael McClear, architect plans to DPW, other plans to Parks and Recreation, Engineering by City of Detroit, Building and Safety by City of Detroit, and there were some workshops such as cleaning North Cass Community Garden and five community workshops helping other neighborhood groups organize and plan their green alley projects (Green Alley Public Hearing, 2009).

APPENDIX D-6: EaCa Alley (East Cauenga Corridor Alley)

Cahuenga Corridor Street Market, Selma Ave, Los Angeles, CA



Project Name

EaCa Pedestrian Alley Project

Project Type

The project goal is to enhance economic development and create a walkable city, and its purpose is to demonstrate the possibilities for alley transformation.



Source: Sneak Peek: East Cahuenga Pedestrian Alley Opens Tomorrow

Special Feature

N/A

District: Entertainment District

Land Use: N/A

Building Height: N/A

Alley Type: Commercial District

Partners:

- Hollywood Property Owners Alliance
- East Cahuenga Corridor Alley Association
- Community Redevelopment Agency (CRA/LA)
- City Council
- Council District 13
- DPW
- Hollywood Business Improvement District
- Cahuenga District Coalition
- Hollywood Entertainment District

General Description

Since 2008, the project has been worked. The gate was finally opened on February 23rd 2012. The general idea of this project is to create the walkable alleys. there is approximately 11,455 assessable linear feet of alleys and 26 alleys (Walkable Alleys Program, 2012). The collective alley assessment totals approximately



Source: Hollywood's EaCa Pedestrian Alley Already Action-Packed



Source: Sneak Peek: East Cahuenga Pedestrian Alley Opens Tomorrow



Source: Hollywood's EaCa Pedestrian Alley Already Action-Packed

\$135,000 annually (Walkable Alleys Program, 2012). EaCa Alley was named by community leaders. The alley used to be called Haroin Alley about fifteen years ago. The concept of this project is “a safe and environmentally-friendly thoroughfare where pedestrians can stroll, relax, and enjoy outdoor dining and patio space” (Kudler, 2012), and this project’s purpose was a demonstration for the possibility of alley transformation. It transformed the alley segment into a pedestrian-friendly space that capitalizes on its adjacency to numerous restaurants and other businesses (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 9). This project represents the benefits of revitalization of alleys. The project included a storm drain system and safety system, so it is basically a green alley.

The Site

The alley is located between Hollywood Boulevard and Selma Avenue, west of Cosmo Street, and connects them. It is also runs behind restaurants such as St.



Source: Sneak Peek: East Cahuenga Pedestrian Alley Opens Tomorrow



Source: Hollywood’s EaCa Pedestrian Alley Already Action-Packed



Source: Hollywood’s EaCa Pedestrian Alley Already Action-Packed

Felix, Kitchen 24, and Velvet Margarita, which have set up outdoor dining areas located at the southern portion of the alley (Kudler, Hollywood's Eaca Pedestrian Alley Already Action-Packed, 2012). There used to be dumpsters, graffiti, potholes, and stagnant water, but now the site has been changed. The site had rebirth as a pedestrian- friendly area. The site is considered as a Business Improvement District.

Financing

The cost of this project, \$790,000, was paid by Community Redevelopment Agency (CRA) fund. The fund includes money for realigning the storm drainage along Cosmo and Cahuenga. Before breaking ground, the Hollywood Business Improvement District had agreed to a supplemental tax which was estimated at \$125,000 annually for cleaning up the alleys and providing the security services in a larger network of alleys along an eighteen-block stretch of Hollywood Boulevard (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 10) (Berg, 2009).

Planning and Design

The major rehabilitation and construction includes its project scope which is “new drainage, lighting, pavement and sewer system” (Strecker, 2011).

The Hollywood Entertainment District's maintenance vender reduces graffiti and provides “pressure washing services” (Walkable Alleys Program, 2012). They also pick up trash and debris. The HED's security vendor patrols the alleys “during the course of their daily shifts” (Walkable Alleys Program, 2012). They also respond to calls when an incidence occurs in the alleys. There were also security improvements such as a security system and security service. The HOPA provides security and maintenance services funded by the alley assessment.

Property owners have also worked on the improvement of the alleys. They plan to landscape and install lighting. There is patio seating for restaurant patrons. The alley's design also considers bikers, therefore, the first retail in the alley was bike service.

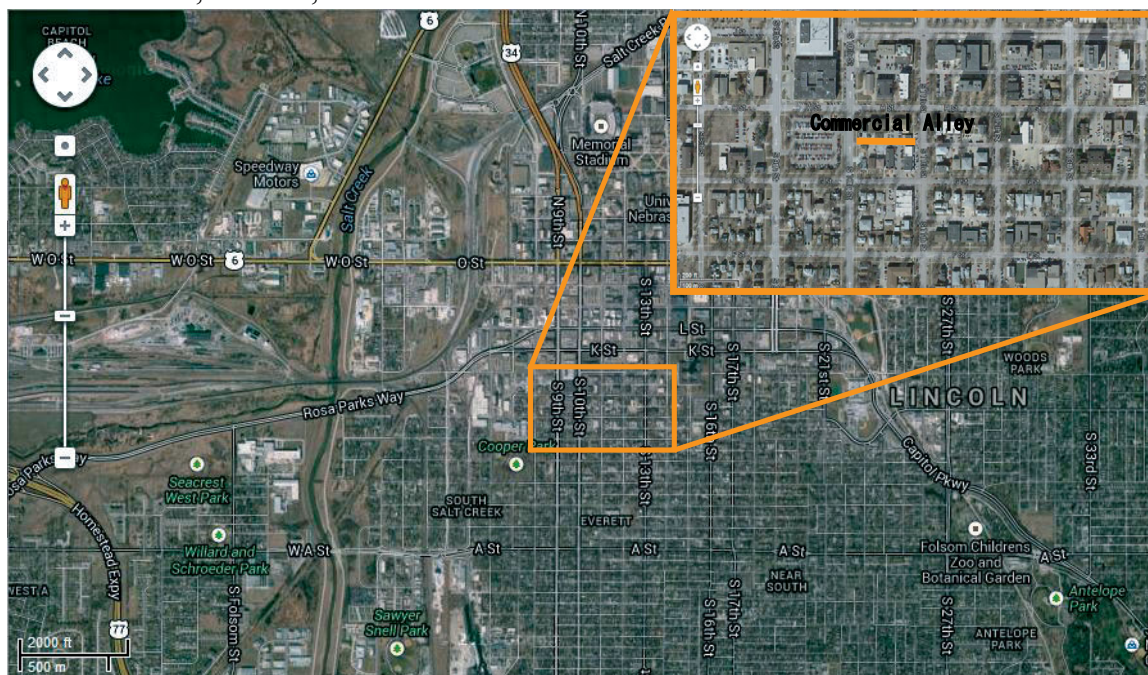
The alley also hosts a farmers market, and there are pop up store fronts and boutiques planned. The alley will take root on local culture, which makes the alley more unique. Those plans could be considered because the HOPA, the CRA, the East Cahuenga Corridor Alley Association, and the City Council have worked together.

Experience gained

- Before the project, there was an alley assessment, and it helped to make sure that the alley will take care of in the future.
- The Hollywood Property Owner Alliance created an alley association which “monitor activity and manage the alley over long time (Baguio, 2012).
- This project demonstrates the innovation and creative solutions that can result when Hollywood's business community works together with city agencies.

APPENDIX D-7: Commercial Alley

Klein's Corner, Lincoln, NE

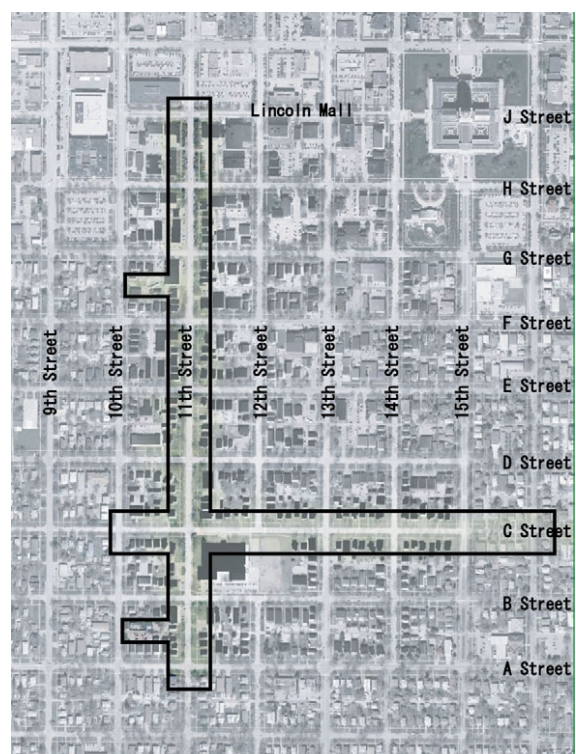


Project Name

Greening America's Capital

Project Type

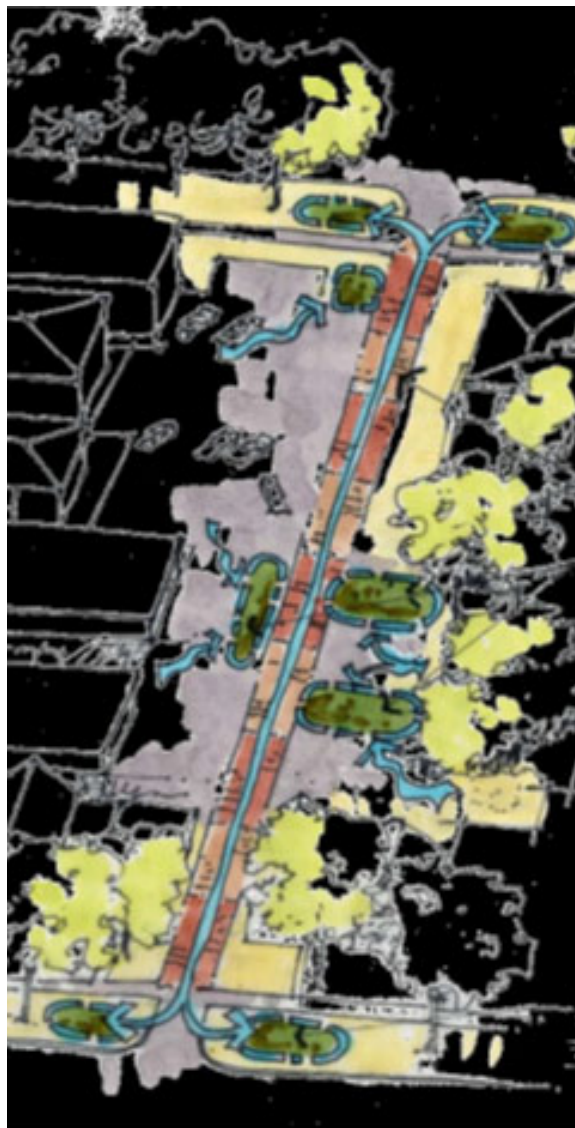
Greening America's Capitol is a project of the Partnership for Sustainable Community between the U.S. Environmental Protection Agency (EPA), the U.S. Department of Housing and Urban Development (HUD), and the U.S. Department of Transportation (DOT) to help state capitals develop an implementable vision



of distinctive, environmentally friendly neighborhoods that incorporate innovative green building and green infrastructure strategies. This program will assist three to five communities per year (Greening America's Capitals Lincoln, Nebraska 2012, 2012).

EPA will fund a team of designers to visit each city to produce schematic designs and exciting illustrations intended to catalyze or complement a larger planning process for the pilot neighborhood. Additionally, these pilots could be the testing ground for citywide actions, such as changes to local codes and ordinances to better support sustainable growth and green building. The design team and EPA, HUD, and DOT staff will also assist the city staff in the development of specific implementation strategies (Greening America's Capitals, 2013).

EPA is providing this design assistance to help support sustainable communities that protect the environment, economy, and public health and inspire state leaders to expand this work elsewhere. Greening America's Capitals



Source: Greening America's Capitals

Present



Source: Greening America's Capitals

will help communities consider ways to incorporate smart growth strategies into their planning and development to create and enhance interesting, distinctive neighborhoods that have multiple social, economic and environmental benefits (Greening America's Capitals Lincoln, Nebraska 2012, 2012).

The city of Lincoln is planning to revitalize the South Capitol neighborhood - a primarily residential neighborhood directly south of the capitol - through improvements to the neighborhood's streets and alleys. The neighborhood currently has deteriorating housing and businesses, wide streets, no bicycle lanes, aging sanitary sewer and water mains, and lower per capita income than the rest of the city. The city will incorporate the Greening America's Capitals project into Mayor Chris Beutler's Stronger, Safer Neighborhood

Initiative, which creates public-private partnerships to improve the quality of life in the neighborhood through ongoing community-building activities such as installing public art and sponsoring neighborhood-based, community-wide events (Greening America's Capitals, 2013).

The Greening America's Capitals team will involve local residents in developing design options for the neighborhood's streets that improve pedestrian and bicyclist safety

Present



Source: Greening America's Capitals



Source: Greening America's Capitals

and comfort, add more street trees, and incorporate green infrastructure elements such as rain gardens to manage and treat stormwater runoff and make the streets more attractive. The city could consider the design options for the South Capitol neighborhood as a model to improve the quality of life for other neighborhoods in Lincoln facing similar issues (Greening America's Capitals, 2013).



Source: Greening America's Capitals

Special Feature

N/A

District: Commercial District

Land Use: N/A

Building Height: N/A

Alley Type: Commercial District

Partners:

- The City of Lincoln Urban Development Department
- BNIM
- EPA
- HUD
- DOT
- Vireo

General Description

The Commercial Alley focuses on storm water treatment. The potential locations for the voluntary backyard rain garden and bioswales at the corner to manage storm water runoff from impervious surface are decided by workshops.

The Site

The South Capitol area are surrounded by two historical neighborhoods, Everett and Near South. The style of the housing stock and block structure is the 20th century neighborhoods, and it is preserved well. People living in the area are mainly renters. There are diversity of cultures and ages, and the majority of residents are mid-20s and 30s. There are many young families, and there are also many small apartments (Greening America's Capitals Lincoln, Nebraska 2012, 2012, 14).

The project is located at two intersecting street corridors running north-south between J Street and A Street and east-west between 10th and 16th Streets. Alleys in the neighborhood have poor drainage and they are not good condition for pedestrians going through (Greening America's Capitals Lincoln, Nebraska 2012, 2012, 14). "Two alleys near 11th Street were selected for this project to improve aesthetic, walkable, and storm-water management for these otherwise unused area of the south capital area" (Greening America's Capitals Lincoln, Nebraska 2012, 2012, 14). The alley between G Street and F Street is a commercial alley, and the alley is located in the North commercial district, Klein's Corner, which is the busiest commercial district in the area.

"The North commercial district, Klein's Corner, is the primary hub of the economic activity in the area. The businesses are small and locally owned" (Greening America's Capitals Lincoln, Nebraska 2012, 2012, 15). "The alley, like all alleys in the area, currently suffers from poor drainage after storms" (Greening America's Capitals Lincoln, Nebraska 2012, 2012, 41), and "the alley has no lighting and does not get regular foot traffic" (Greening America's Capitals Lincoln, Nebraska 2012, 2012, 41).

Financing

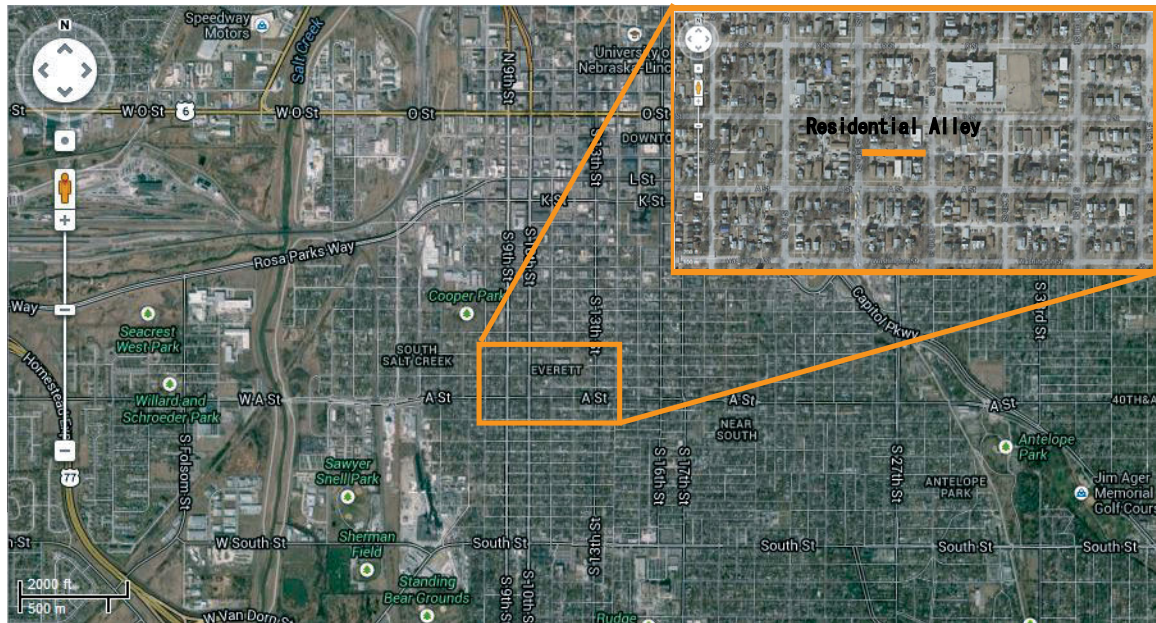
N/A

Planning and Design

The alley will be lighted by small twinkle lights which will give a festival atmosphere. There also will be temporary music and film events. Those would attract people into the alley. Walking paths, bike racks, and benches would also increase number of people coming to the alley to use the space. Therefore, it is important to make the space safer. Permeable pavement will be used along with rain gardens to capture and filter stormwater. These will make the space an aesthetic space (Greening America's Capitals Lincoln, Nebraska 2012, 2012, 44).

The workshop to establish volunteer programs with local residents, business owners , community groups, and school includes "Transformation of Klein's Corner with green infrastructure solutions for managing stormwater and complete street solutions that give priority to the most vulnerable transportation modes, pedestrians, and bicyclists, through traffic calming and lane widths conducive to cross and multimodal safety" (Greening America's Capitals Lincoln, Nebraska 2012, 2012, 49).

Lincoln, NE

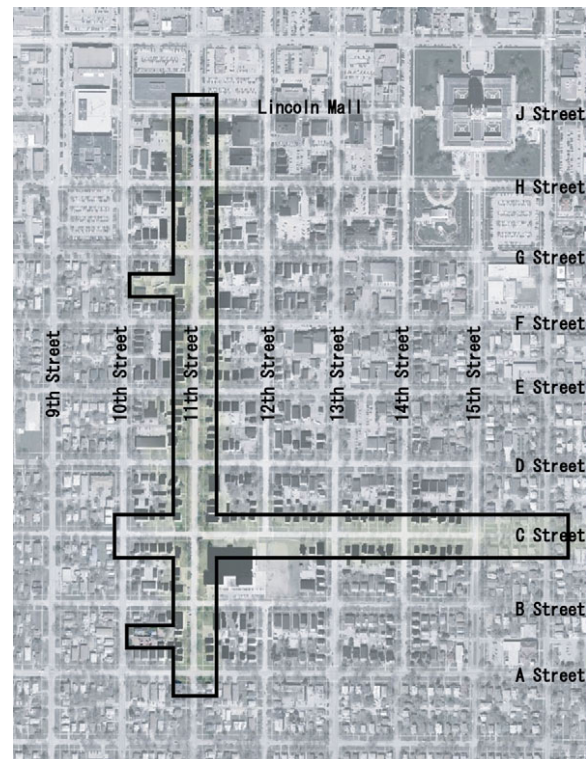


Project Name

Greening America's Capital

Project Type

The Greening America's Capitol is a project of the Partnership for Sustainable Community between the U.S. Environmental Protection Agency (EPA), the U.S. Department of Housing and Urban Development (HUD), and the U.S. Department of Transportation (DOT) to help state capitals develop an implementable



vision of distinctive, environmentally friendly neighborhoods that incorporate innovative green building and green infrastructure strategies. This program will assist three to five communities per year (Greening America's Capitals Lincoln, Nebraska 2012, 2012).

EPA will fund a team of designers to visit each city to produce schematic designs and exciting illustrations intended to catalyze or complement a larger planning process for the pilot neighborhood. Additionally, these pilots could be the testing ground for citywide actions, such as changes to local codes and ordinances to better support sustainable growth and green building. The design team and EPA, HUD, and DOT staff will also assist the city staff in the development of specific implementation strategies (Greening America's Capitals, 2013).

EPA is providing this design assistance to help support sustainable communities that protect the environment, economy, and public health and inspire state leaders to expand this work elsewhere. Greening America's Capitals will help communities consider ways to incorporate smart growth strategies into their planning and development to create and enhance interesting, distinctive neighborhoods that have multiple social, economic and environmental benefits (Greening America's Capitals Lincoln, Nebraska 2012, 2012).

The city of Lincoln is planning to revitalize the South Capitol neighborhood - a

Present



Source: Greening America's Capitals



Source: Greening America's Capitals

primarily residential neighborhood directly south of the capitol - through improvements to the neighborhood's streets and alleys. The neighborhood currently has deteriorating housing and businesses, wide streets, no bicycle lanes, aging sanitary sewer and water mains, and lower per capita income than the rest of the city. The city will incorporate the Greening America's Capitals project into Mayor Chris Beutler's Stronger, Safer Neighborhood Initiative, which creates public-private partnerships to improve the quality of life in the neighborhood through ongoing community-building activities such as installing public art and sponsoring neighborhood-based, community-wide events (Greening America's Capitals, 2013).

The Greening America's Capitals team will involve local residents in developing design options for the neighborhood's streets that improve pedestrian and bicyclist safety and comfort, add more street trees, and incorporate green infrastructure elements such as rain gardens to manage and treat stormwater runoff and make the streets more attractive. The city could consider the design options for the South Capitol neighborhood as a model to improve the quality of life for other neighborhoods in Lincoln facing similar issues (Greening America's Capitals, 2013).

Special Feature

N/A

District: Residential District

Land Use: N/A

Building Height: N/A

Alley Type: Residential District

Partners:

- The City of Lincoln Urban Development Department

- BNIM
- EPA
- HUD
- DOT
- Vireo

General Description

This commercial alley focuses on the storm water treatment. The potential locations for the voluntary backyard rain garden and bioswales at the corner to manage storm water runoff from impervious surfaces are decided by workshops. Enhancement to this alley could encourage residents to become involved in implementing green infrastructure solutions to improve stormwater management.

The Site

The South Capitol area is surrounded by two historical neighborhoods, Everett and Near South. The style of the housing stock and block structure is the 20th century neighborhoods, and it is preserved well. People living in the area are mainly renters. There is diversity of cultures and ages, and the majority of residents are in their mid-20s and 30s. There are many young families, and there are also many small apartments (Greening America's Capitals Lincoln, Nebraska 2012, 2012, 14).

The project is located at two intersecting street corridors running north-south between J Street and A Street and east-west between 10th and 16th Streets. Alleys in the neighborhood have poor drainage and they are not in good condition for that pedestrians going though (Greening America's Capitals Lincoln, Nebraska 2012, 2012, 14). "Two alleys near 11th Street were selected for this project to improve aesthetic, walkable, and

stormwater management for these otherwise unused area of the south capital area”

(Greening America’s Capitals Lincoln, Nebraska 2012, 2012, 14). The alley between B street and A Street is a residential alley.

The residential alley is in the southern part of the South Capital area. There is trash collection, off-street parking, and there is also a mid-block cut-through for pedestrians and bicyclists. There may be stormwater drainage problems during heavy storms because of the poor drainage system. The path is covered by compacted gravel and it is not well-lit, therefore, it is unsafe for pedestrians at night and residents (Greening America’s Capitals Lincoln, Nebraska 2012, 2012, 43).

Financing

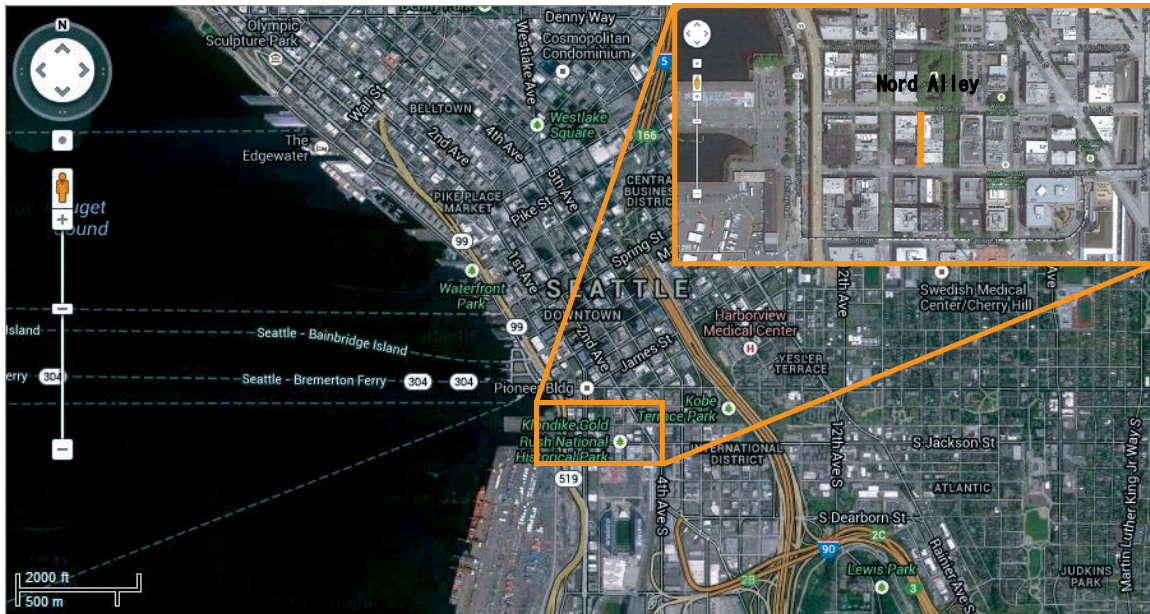
N/A

Planning and Design

“Downspouts could directly runoff from the roof of nearby buildings to rain gardens along the alley” (Greening America’s Capitals Lincoln, Nebraska 2012, 2012, 44), which will help both aesthetic and stormwater management in the alley. There would be local art and gardening program which will attract more people into the alley and which will be great opportunity to show local talent. Pavement will be implemented to create pervious surfaces and create a clear separation from parking areas. These measures would make the alley safer for pedestrians and residents. These design options could be applied to alleys across the entire neighborhood (Greening America’s Capitals Lincoln, Nebraska 2012, 2012, 44).

APPENDIX D-9: Nord Alley

Pioneer Square, Seattle, U.S.

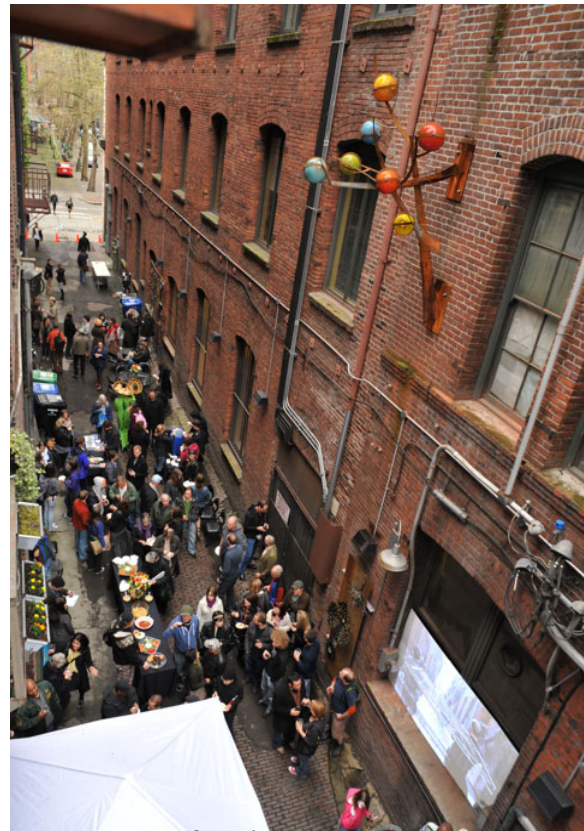


Project Name

Alley Network Project

Project Type

The project goal is to encourage and represent “the energy and ideas of neighbors, businesses, colleagues and community group” (Transforming Pioneer Square’s alleys into one of its unrivaled assets, 2010). This project has focused on soft aspects such as art and events. The project is already completed. There have



Source: Transforming Pioneer Square’s alleys into one of its unrivaled assets

been many events going on.

Special Feature

N/A

District: Historic District

Land Use: TDR (Transferable Development Rights)

Building Height: Current; 88'~96', Future Limit; 100

Alley Type: Art, Cultural/Historical District

Partners:

- The Alliance for Pioneer Square
- Green Future Research & Design

Lab

- Pratt Fine Arts Center
- Feet First
- Seattle Parks Foundation
- International Sustainability Institute

- City of Seattle Matching Fund

Program

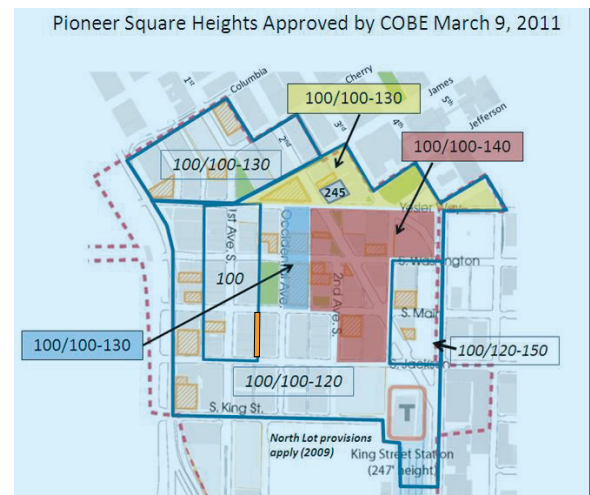
General Description

There are many events organized

Current Height Limits in Pioneer



Source: Legislative Department Seattle City Council Memorandum



Source: Legislative Department Seattle City Council Memorandum



Source: The Public Realm and Forgotten Spaces as a Framework for Revitalization

at Nord alley.

The Site

The Nord Alley is located between S Main Street and S Jackson Street and it is east of First Avenue South. At the Pioneer Square, the height of buildings has been regulated to "protect the integrity of the historic district and enhance creative, authentic neighborhood character" (Moon, 2011). To accomplish the historic preservation of this unique neighbor character as the first neighborhood in Seattle and one of the first in the nation, the city council decided to regulate height limits for the Pioneer Square. The historic area dates back to the late 1800s. Community stakeholders, preservation planners, and the city's Department of Planning and Development have worked together since 2005 by involving Pioneer Square business owners, artists, residents, and preservation organizations. The height limit was proposed by the Department of Planning and Development (DPD). The height increase allows builders to provide affordable housing and open space or to purchase development rights from the historic district.



Source: Downtown SEATTLE



Source: Touring The Alleys of Pioneer Square (Nord Alley)

“Current height range from a low of fourteen feet up to over 100 feet” (Burgess, 2011). The maximum height for the eastern side of Pioneer Square is 140 feet, which is higher than other places to allow for more density. “Heights of 130 feet in the district will bring about a definite change in the scale and feeling of streetscapes and spaces” (Moon, 2011). Preservationists fear that heights above a 120 foot maximum will “lead to a slippery-slope decline of the unique character of the historic district” (Burgess, 2011), but it will bring out more density, which developers desire. Therefore, they carefully picked the right places to increase the density. The Nord Alley stayed as the 100 foot maximum height.



Source: Alley, Alley, in Come Free



Source: Art Party In Between the Streets

Financing

The funds were “from government, private foundation, and local businesses” (Transforming Pioneer Square’s alleys into one of its unrivaled assets, 2010).

Planning and Design

From 2008 to 2010, more than 5,000 people attended events at the alley.

There are five ways to get involved in this project, which is introduced by its

official website, Alley Network Project; (1) join a committee, (2) expand the alley network, (3) participate in events, (4) share the word, and (5) share your experience” (Get Involved, 2010).

To create a pedestrian grid, a resurfacing and lighting design were produced for vital language (Request for Qualification, 2013). There are adjacent historic buildings and historic bricks on surfaces which made the project more complicated and caused a higher cost; in addition, historic preservation and economic feasibility had to be considered. However, it is necessary to resurface partially because “the existing patch paving between remaining historic brick proves daunting to anyone pushing a stroller or wheelchair and poses safety hazards to everyone” (Request for Qualification, 2013).

“As Pioneer Square modernizes its aging infrastructure, it can restore alley surfaces to new standards and make them active public spaces” (Request for Qualification, 2013). “The outcome of this project: A cost effective, community-driven and historically appropriate design approved through SDOT’s Street Improvement Permit (SIP) process and the Pioneer Square Preservation Board clears the most vexing hurdles for resurfacing the neighborhood’s alleys” (Request for Qualification, 2013).

“Alley activation requires a community to work together and draws it closer” (Liz Stenning, Nikki Somers, 2012). Events have been planned by a diverse cross-section of members (Liz Stenning, Nikki Somers, 2012). “Everyone must chip in to help organize these screenings, parties and art displays, and, often these events can support other good work going on in the community” (Liz Stenning, Nikki Somers, 2012). The kinds of events held in the alley are diverse, including events involving art, animals, display screens, poetry readings, and so forth.

Project Name

Green Alleys Competition

Project Type

The design competition seeks potential new uses of alleys with the city's transportation, ecological system, aesthetic, and community-build environments of the city.

Special Feature

N/A

District: Historic District

Land Use: TDR (Transferable Development Rights)

Building Height: Current; 88'~96', Future Limit; 100

Alley Type: Art, Cultural/Historical District

Partners:

- City of Seattle,
- International Sustainability Institute,
- AIA Seattle,
- Feet First,
- Downtown Seattle Association
- People for Puget Sound
- Pioneer Square



Source: Green Alleys Competition – submissions due today!

- Great City

General Description

There are requirements such as creating environments that are welcoming to pedestrian both as walkways and places to visit, incorporating green stormwater infrastructure in functional and aesthetic aspects, encouraging building design to provide doors, windows, and other elements that supply non-service uses, continuing to provide access for service vehicles (Green Alley Competition, 2010).

The Site

The Nord Alley is located between S Main Street and S Jackson Street and it is east of the First Avenue South.

Financing

N/A

Planning and Design

There are four criteria, and they are: "1. Design innovation and quality; 2. Thoughtful integration of green stormwater infrastructure; 3. Response to culture, community, and context; and 4. Transferability of ideas and approach to other alleys" (Green Alleys Competition (deadline), 2010).

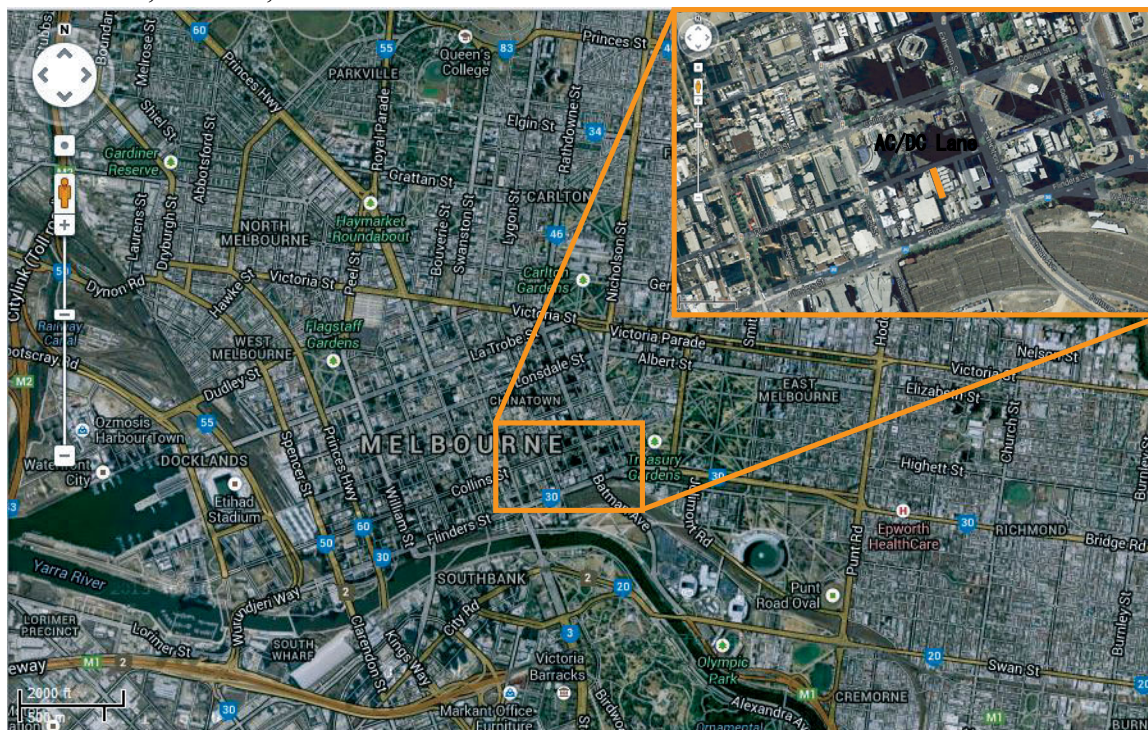
There are some assumptions such as that "soils beneath the alley right-of-way are sufficient for stormwater infiltration (1"/hour permeability)" (Green Alley Competition,

2010). Another assumption is that “the use of the Nord Alley does not preclude designs that may not comport with the Pioneer Square historic guidelines” (Green Alley Competition, 2010). The third assumption is that "designs may be proposed for within the right of way of the alley as well as retrofitting the existing buildings as those designs support the Guiding Principles for creating a Green Alley" (Green Alley Competition, 2010). The last assumption is that "all electronic submissions become the property of the City of Seattle" (Green Alley Competition, 2010).

This competition is supposed to be done by student, new professional, non-affiliated designers, or individuals, firms, or groups that are employed in the design fields (Green Alley Competition, 2010).

APPENDIX D-10: ACDC Lane (AC/DC Lane) (formerly Corporation Lane)

Melbourne, Victoria, Australia.



Project Name

AC/DC Lane

Project Type

This project shows importance of AC/DC to identify the laneway or alley.

Special Feature

N/A



Source: ACDC Lane

District: Historic District

Land Use: Central Business District

Building Height: 2~5 Stories

Alley Type: Art, Cultural/Historical District

Partners:

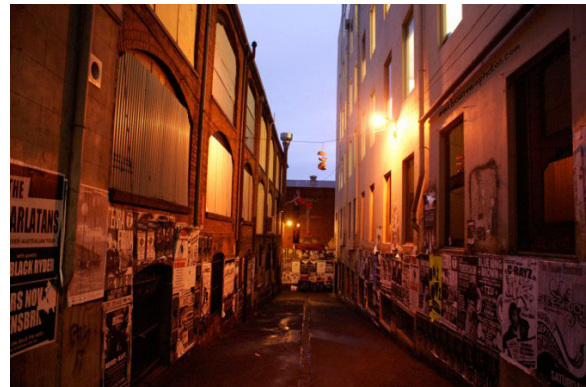
- Melbourne's City Council

General Description

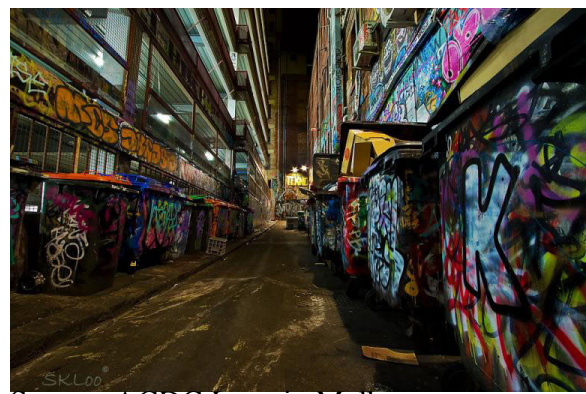
The laneway was formerly called the Corporation Lane, however, it is renamed October 1st, 2004. The city has decided to rename the lane in honor of the Australian rock band AC/DC. The Melbourne's City Council's vote to rename the lane was unanimous (Boulton, Lane way to the top for AC/DC, 2004). "The twenty eight submissions in support of the name change had almost doubled, including one recent submission from Switzerland with thirty three signatures of support for ACDC Lane" (Boulton, 2004).

The Site

It runs south along Flinders Lane between Exhibition Street and Russell Street in the central business district. This laneway was chosen "due to proximity to Swanston Street, where the band filmed their ironic clip for It's a Long Way To the Top on the back



Source: AC/DC Lane



Source: ACDC Lane in Melbourne



Source: Streets of Melbourne

of a flatbed truck” (Donovan, 2005).

Financing

There was no fund. It was a re-naming project.

Planning and Design

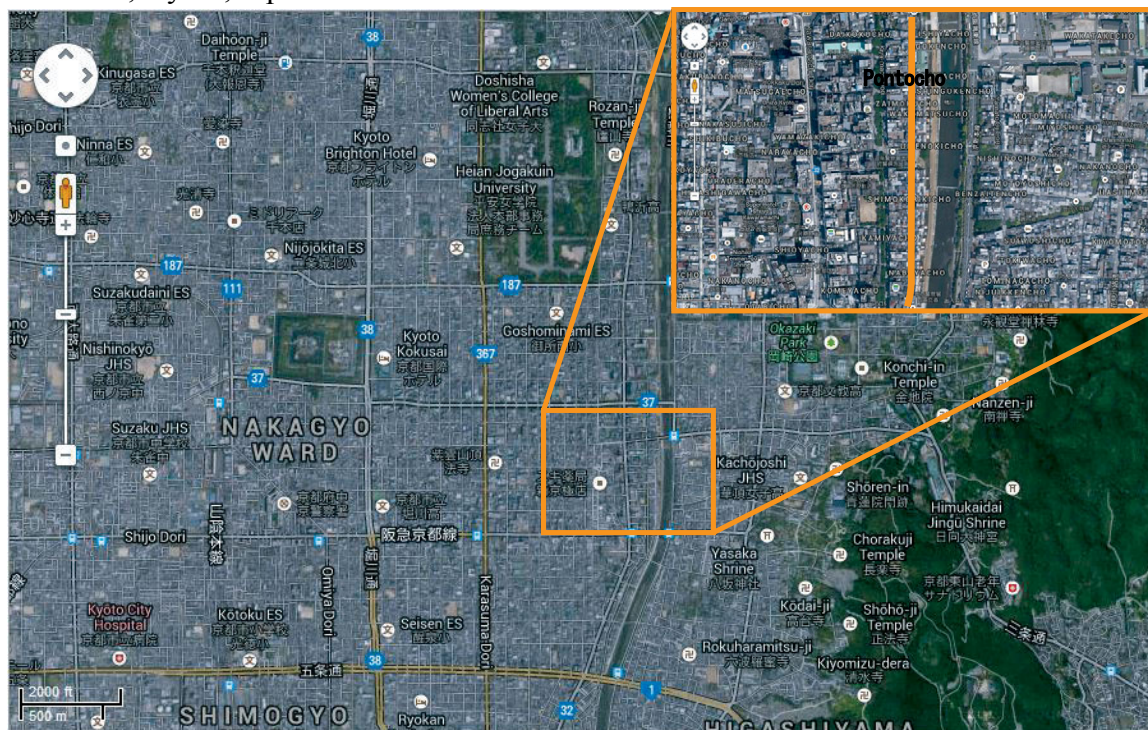


Source: Photo Gallery: Cherry Rock 2010
- Mammoth Mammoth + Gun Street Girls
+ Rose Tattoo and More - AC/DC Lane
(02.05.10)

The laneway was distinguished by renaming it. The lane way had history with the popular band, AC/DC one time residents of the city of Melbourne and played music there (AC/DC). There are several arts such as pictures and photos, and there is “the Cherry bar, a venue that exudes authentic rock n roll in its attitude and aesthetics” (City Lane-ways: That’s Melbourne City, 2008). The lane contributes to music and popular culture in Melbourne, therefore, it became the city’s bar and rock district (Patrick Donovan, Martin Boulton, 2004). There have been some events held here such as Cherry Rock Festival, and rock band have performed here (Donovan, 2005). If this renaming is successful, the council is thinking to change other lane’s name for recognition of “prominent artists and sports people” (Patrick Donovan, Martin Boulton, 2004).

APPENDIX D-11: Pontocho

Pontocho, Kyoto, Japan



Project Name

The Planned Alley

Project Type

Hanamachi

Special Feature

This is built to connect to shrines and temples.



Source: Official Picture from a store



Source: Bar Daitomo

District: Hanamachi (Portmanteau)

Land Use: N/A

Building Height:

Alley Type: Originally Arranged Alley

Partners:

- Noren Organization (Support of Businesses)



Source: Walking around Pontocho 3

General Description

There are some kinds of alley in Japan because of its history. One of them is the planned alley (Shiturae no roji), which is different from alleys created in spaces created between row houses. The planned alley always has a destination that is developed in spaces around shrines and temples. They have been used as a kind of amusement to get to and from destinations (Nishimura, 2006, 28).

One of the significant differences between the planned alley and other alleys are their borders between buildings and the alley (Nishimura, 2006, 28). The



Source: Walking around Hanamachi



Source: Kyoto Photo: Pontocho

alleys in residential areas in Japan and the planned alleys have clear differences. The planned alleys approach the shrine with some specific characteristics such as granite pavement, black fence, and some small retails as opposed to other alleys with

spontaneously created characteristics. The normal alleys do not have clear borders between the buildings and an alley. These borders of other alleys are likely to be slightly curved, and the unclearness of the borders are usually made by the neighbor's life such as potted plants, backyard, bikes, hang drying of clothes, and so forth (Nishimura, 2006). The unclearness often works as an enhancement of neighborhoods and is often seen in some strong alley neighborhoods such as Jokamachi (castle town in Japan); however, the borders for the planned alley are likely to be straight because of the effect of shrines and temples. The planned alley is composed of a combination of straight lines. Another difference between planned alleys and other alleys is flexibility such as dotted lines and extra spaces at the normal alleys; however, the planned alley does not have such things. The planned alley is extruded more. The third difference is the quality of the back of the alley. The normal alleys clearly have front and back. The planned alley is located behind the buildings since it is an alley; however, it acts like it is a facade (Nishimura, 2006, 29). The fourth difference is change by seasons. In the regular alley, the seasons can be identified by the color of plants and trees. On the other hand,



Source: Pontocho Photo: Entrance of Pontocho



Source: kyoto japan pontocho gion maiko



Source: Pontocho Roji (Pontocho Alley)

you must view the color of the sky to recognize seasons in the planned alley. The fifth difference is its structure. The planned alley is not a simple structure. The corners are cut as acute angles and both sides of the buildings faces are arranged to shift their axial centers towards each other (Nishimura, 2006, 30).

The Site

Pontocho, Hanamachi in Chukyo Ward, Kyoto is famous.

It is running on the east side of the Kiyamachi between Sanjo Street and Yonjo Street (500 meter, approximately 1640.5 feet). There are a two meter (approximately 6.6 feet)wide planned alley connecting Sanjo Street and Yonjo Street. The first tea store appeared in 1712, and Pontocho has been officially accepted as Hanamachi in 1859. Since then, Pontocho has flourished as Hanamachi (Ponto-chō Noren organization Office, 2013).



Source: Pontocho Jazz Bar

Financing

N/A

Planning and Design

One of its defining characteristics is its tea stores with red color lattices. This

characteristic helps maintain the quality of Habamachi (Nishimura, 2006, 36). This alley significantly affects the flow of pedestrians. This alley significantly affect on the flow of pedestrians. Smell of tea stores makes not mind of buildings. There are bars, Geisha houses, and so forth, which are similar to Nagaya (terraced house). There are also baths, kitchens, and wells. The small spaces in these alleys are effectively used (Nishimura, 2006, 36). The alleys in Kagurazaka, Tokyo, do not have a space for bicycles or motorcycles, but alleys in Gion, Kyoto, and Pontocho, Kyoto, have such kinds of spaces (Nishimura, 2006, 36).

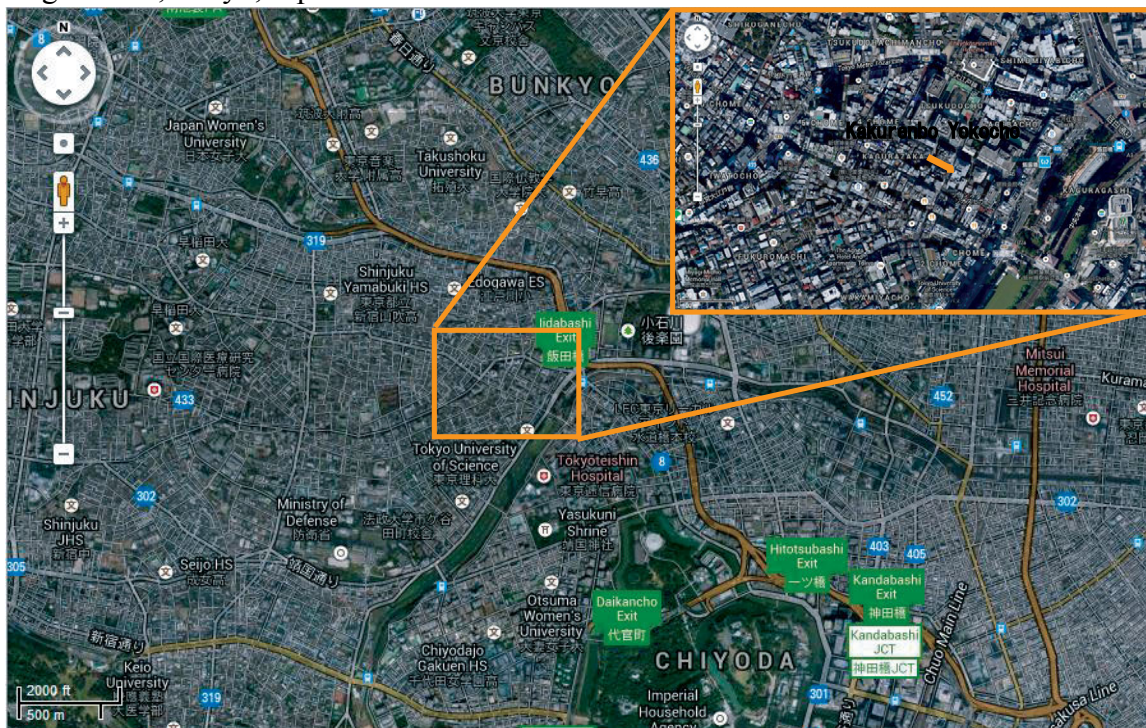


Source: Ponto-cho, Kyoto

Another strong characteristics of this alleys is that there are fifty large and small alleys growing east and west (Ponto-chō Noren organization Office, 2013). There have been variety of retails not only tea stores and Geisha but also restaurants and gift shops.

APPENDIX D-12: Kakurenbo Yokochi

Kagurazaka, Tokyo, Japan



Project Name

The Planned Alley

Project Type

Hanamachi (called Karyukai in Tokyo)

Special Feature

This is built to connect to shrines and temples.



Source: Landscape Kagurazaka Love
Kakurenbo Yokochi (Hukei Johei Kagurazaka Bojo, Kakurenbo Yokochi)

District: Hanamachi (Portmanteau)

Land Use: N/A

Building Height:

Alley Type: Originally Arranged Alley

Partners:

- N/A

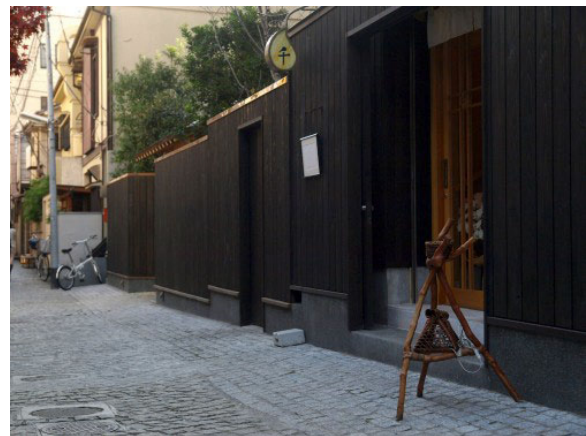
General Description

There are some kinds of alley in Japan because of its history. One of them is the planned alley (Shiturae no roji), which is different from alleys created in spaces created between row houses. The planned alley always has a destination that is developed in spaces around shrines and temples. They have been used as a kind of amusement to get to and from destinations (Nishimura, 2006, 28).

One of the significant differences between the planned alley and other alleys are their borders between buildings and the alley (Nishimura, 2006, 28). The alleys in residential areas in Japan and the planned alleys have clear differences. The planned alleys approach the shrine with some specific characteristics such as



Source: Free pictures of Kagurazak and Iidabashi (Kagurazaka, Iidabasho Shuhen no Free Shasin Sozai Ichiran)



Source: Free pictures of Kagurazak and Iidabashi (Kagurazaka, Iidabasho Shuhen no Free Shasin Sozai Ichiran)

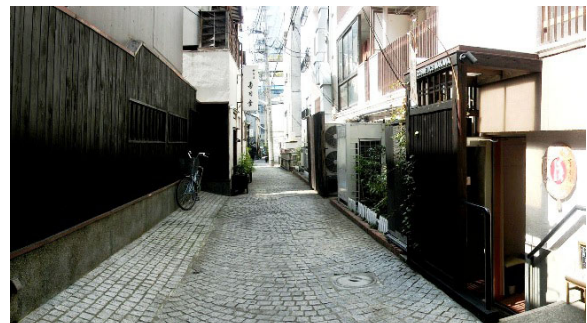


Source: Japanese Lunch at Kagurenbo Yokocho, Kaguraza

granite pavement, black fence, and some small retails as opposed to other alleys with spontaneously created characteristics. The normal alleys do not have clear borders between the buildings and an alley. These borders of other alleys are likely to be slightly curved, and the unclearness of the borders are usually made by the neighbor's life such as potted plants, backyard, bikes, hang drying of clothes, and so forth (Nishimura, 2006). The unclearness often works as an enhancement of neighborhoods and is often seen in some strong alley neighborhoods such as Jokamachi (castle town in Japan); however, the borders for the planned alley are likely to be straight because of the effect of shrines and temples. The planned alley is composed of a combination of straight lines. Another difference between planned alleys and other alleys is flexibility such as dotted lines and extra spaces at the normal alleys; however, the planned alley does not have such things. The planned alley is extruded more. The third difference is the quality of the back of the alley. The normal alleys clearly



Source: Free pictures of Kagurazaka and Iidabashi (Kagurazaka, Iidabashi Shuhen no Free Shasin Sozai Ichiran)



Source: Granite/Kagurazaka/Kagurenbo Yokocho (Ishidatami/Kagurazaka/Kagurenbo Yokocho)



Source: Granite/Kagurazaka/Kagurenbo Yokocho (Ishidatami/Kagurazaka/Kagurenbo Yokocho)

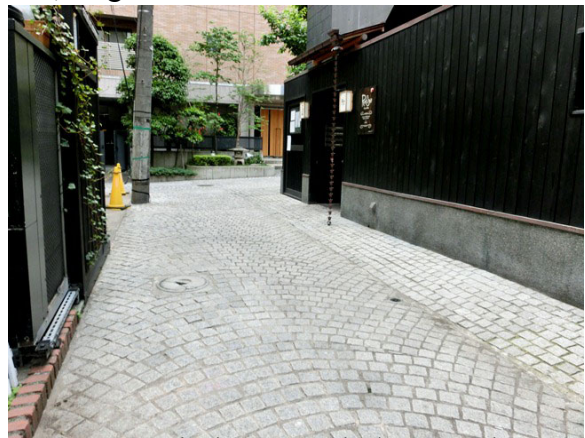
have front and back. The planned alley is located behind the buildings since it is an alley; however, it acts like it is a facade (Nishimura, 2006, 29). The fourth difference is change by seasons. In the regular alley, the seasons can be identified by the color of plants and trees. On the other hand, you must view the color of the sky to recognize seasons in the planned alley. The fifth difference is its structure. The planned alley is not a simple structure. The corners are cut as acute angles and both sides of the buildings faces are arranged to shift their axial centers towards each other (Nishimura, 2006, 30).

The Site

Kagurazaka is located on an undulated hill and near Tokyo University of Science (west) and Idabashi stations (south), therefore Kagurazaka have steepness. Kagurazaka is a shopping street having some street trees, street lights, and several alleys, and these alleys have totally different characteristics and atmosphere from the street. Kagurenbo Yokocho is the one of comprehensive alleys in these alleys. The alley is running to North from Kagurazaka Center Street (Kagurazaka Naka Dori) running to east from Kagurazaka, therefore, the alley is not directly connected to Kagurazaka. Kagurazaka have main street or boulevard, side street, alleys and there are systematically organized with the hill, therefore, the flow of pedestrians are controlled. The bustle got removed at alleys by the control, which gives varies into the area. This control is caused by not only the system



Source: Japanese Lunch at Kagurenbo Yokocho, Kaguraza



Source: Granite/Kagurazaka/Kagurenbo Yokocho (Ishidatami/Kagurazaka/Kagurenbo Yokocho)

but also the width of alley, which automobiles cannot access (Nishimura, 2006). Kagurazaka has been formed while it extended and branched since Edo era (1603~1867).

Financing

N/A

Planning and Design

One of the strong characteristics of the planned alley in Kagurazaka is the black fence. For the Japanese people, it makes alleys mysterious because of Japanese history (Nishimura, 2006, 30). Another characteristic is the granite curbstones (90x90x90mm, 90mm=3.5433070866 inch), which is likely derived from paving materials in Europe. The same kinds of alley in other cities in Tokyo still need Mikage stone (expensive granite). The planned alleys in Kagurazaka changed to a cheaper stone in 1950s~1960s. The corroboration of the black fence and the granite curbstone makes street view stylish and solemn. The third characteristic is its size. its width is one ken to one and a half ken (1 ken is approximately 1.8181818 meter, or about 6ft). This width makes pedestrians feel an unlimited space in comparison to limited spaces of other alleys (Nishimura, 2006, 31).

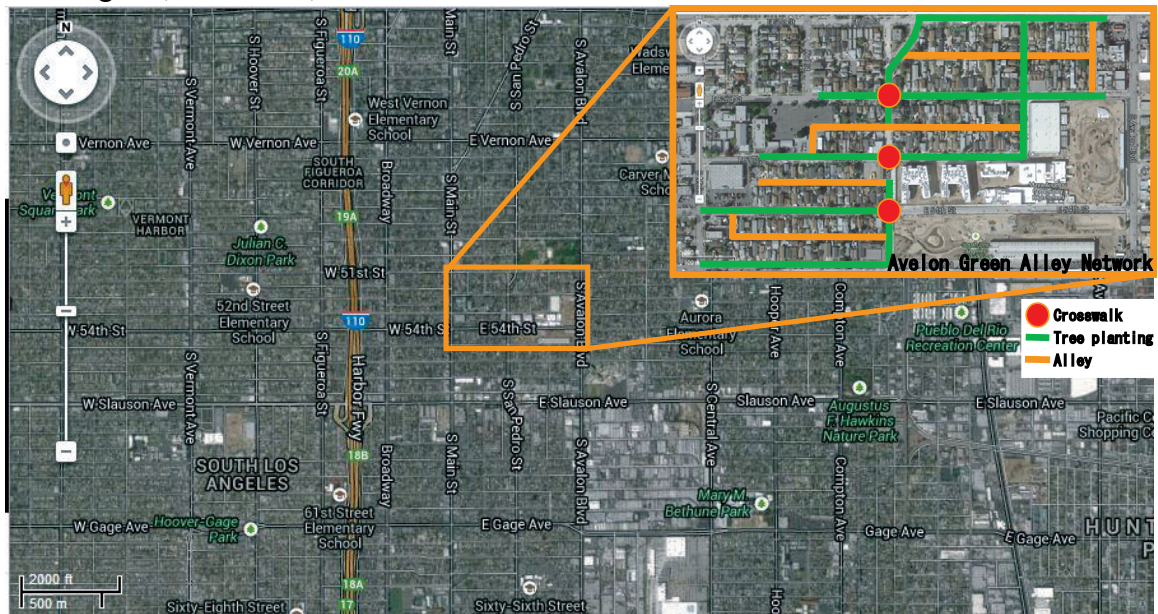
Pavements of granite curbstones or slates are enclosed by black fences and mud walls, and there are Japanese style restaurants and cuisines (Nishimura, 2006, 72). These places' entrances are uniquely designed and gardens are beautiful. The black fences hide these hidden beauties, however, the trees covering sky are still visible above the fences. The hidden part will be seen if people go inside and it gives surprise to people visiting these restaurants. there are many parts of surprising are concealed by the fence.

The authentic Japanese restaurant named Chigetu stands at the end of the alley, at

the entrance from Kagurazaka Center Street. There are two branches from the alley and the alley varies its faces. There is a tatami Tempura restaurant named Tenko and another authentic Japanese restaurant named Shinoda. They are both located on the side of the alley. There are many restaurants along the alley that provide their original dishes. There are also many bars and other restaurants along the two branches (Nishimura, 2006, 28). Around this alley, there are as many refined restaurants as in Kyoto. Kyoto has Hanamachi in the preservation district for Groups of Traditional buildings and the Historical Landscape Preservation and Improvement District. Due to those districts, Hanamachi in Kyoto has been preserved well. These districts do not protect the Hanamachi of Tokyo- (Nishimura, 2006). Instead of no preservation district for Hanamachi in Tokyo, Kaguraza has still kept its refinement that is different from other alleys.

APPENDIX D-13: Avalon Green Alley Network (South Park Green Alley Network)

Los Angeles, California, U.S.



Project Name

South Los Angeles Green Alley Master Plan

Project Type

The project look at greening in the sustainability sense and connecting spaces, and the goals of the project are to increase park space (Martinez, 2012), to encourage walking and playing, to cool the neighborhood, to reduce crime, to save water, and to build communities by providing safe community places (The



Source: Content Object



Source: Content Object

Trust for Public Land).

Special Feature

There are low rise houseings.

District: Residential District

Land Use: Low to Medium Density Residential and General Commercial

Building Height: N/A

Alley Type: Residential District

Partners:

- The Trust for Public Land (TPL)
- Community Redevelopment Agency (CRA/LA)

- Bureau of Sanitation
- Los Angeles Board of Public Works

Works

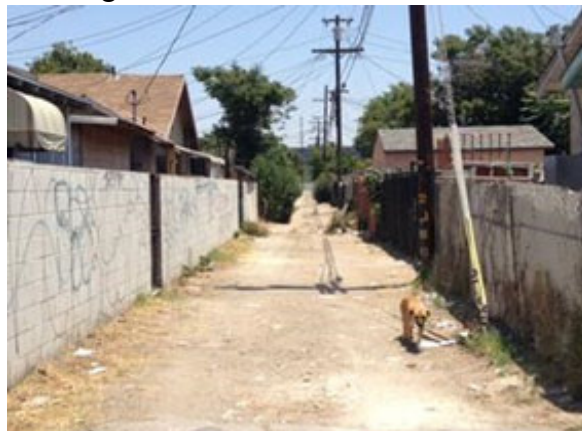
- Alleys Committee
- City of Los Angeles
- Champion of Green Streets
- The City of Los Angeles Community Redevelopment Agency (CRA/LA)
- The Los Angeles Neighborhood Land Trust
- The USC Center of Sustainable Cities (CSC)
- Los Angeles Conservation Corps
- California State Polytechnic University-Pomona's Department of Landscape Architecture graduate project studio (606 Studio)

Existing Condition



Source: Plan Looks to Care South LA Alleys of ugliness, Lack of Accessibility

Existing Condition



Source: Plan Looks to Care South LA Alleys of ugliness, Lack of Accessibility

- Jefferson High School Green Academy
- The Council for Watershed Health

General Description

South Los Angeles Green Alley Master Plan is a plan of additional networks of green alleys, streets, and community connections in the South Los Angeles. This Avalon Green Alley Network project centers on approximately ten alley segments in the South Los Angeles Regions (Green Alley Programs: Planning for a sustainable urban infrastructure?, 153).

This Project makes alleys, sidewalks, and streets of a thirty five acre area in the South Los Angeles more walkable (Plan Looks to Care South LA Alleys of ugliness, Lack of Accessibility). The project focuses on not only alleys but also streets, crosswalks, and sidewalks to connect the schools, supermarkets, and parks in the area (Martinez, 2012). The alleys in the project area were polluted and unsafe, therefore, “identifying health and safety

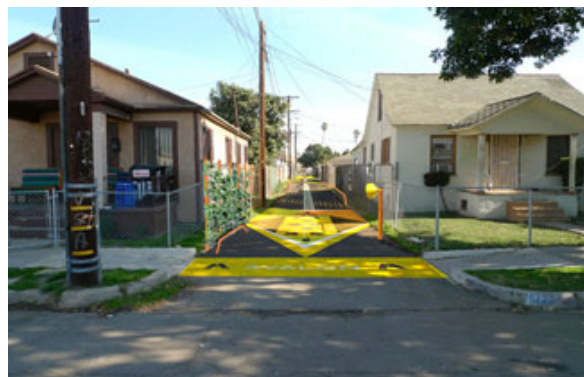
Existing Condition: alley near Main St. and 54th St



Source: Re-imagining Empty Spaces in South Los Angeles



Source: Green Alley Programs: Planning for a sustainable urban infrastructure?



Source: Content Object

goals might be realized through increasing usage and stewardship by residents” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 153).

The Site

The South Los Angeles region was one of the most underserved area of the city (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 153). South Los Angeles is “one of the most park-poor areas in the southern California, and also has some of the highest rates of obesity, cardiovascular disease, and diabetes” (Nagami, 2011). The alleys in the area are polluted and unsafe, therefore, it is important to increase usage and stewardship by residents (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 153). This project has tried to transform approximately ten alley segments into green alleys, “connective tissue linking together two parks and two school sites” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 153). Demonstration projects were implemented in the planning



Source: Content Object

Before



Source: Urban Trails in Underserved Communities

After



Source: Urban Trails in Underserved Communities

stage; one of the alleys in the targeted area was a T-shaped alley in the northeastern corner of the network and other alley segments were located between a Food 4 Less and a high school (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 153).

Financing

In December 2010, the CRA/LA was funded to develop South Los Angeles Green Alley Master Plan.

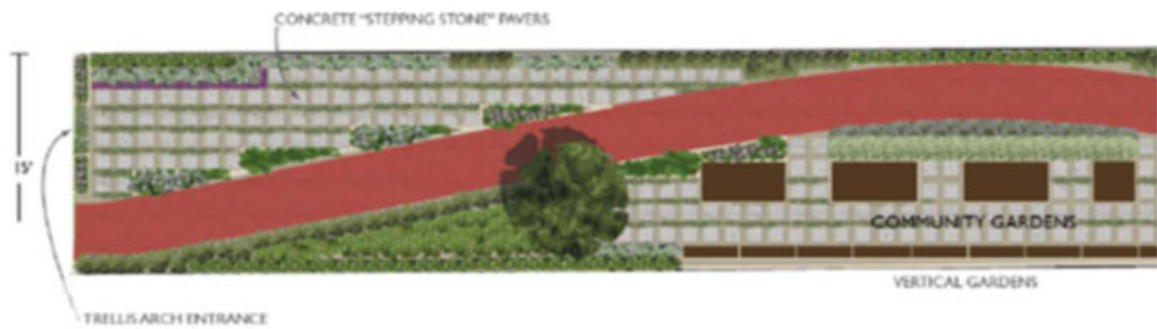
Planning and Design

The project included design guidelines and policy recommendations for three to five networks of green alleys and streets. The improvement of the site includes reduction of darkness and impervious pavement with porous, light-colored paving stones. The light-colored stones will reflect heat and allow water to penetrate rather than running off into sewers (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 152). Planting the edge of the alleys with the greenery to make them cooler and more inviting and adding signs, lighting, and pavement encourages residents to use the alleys as green pathways through the neighborhood (The Trust for Public Land).

“The project proposes to implement numerous stormwater BMPs, including harvesting of rainwater for trees and vines planted along the sides of the alleys” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 153). The permeable paving or drain inlets will collect stormwater and the stormwater flows toward the plants’ roots through “a sloped subgrade or through infiltration planters” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012,

153).

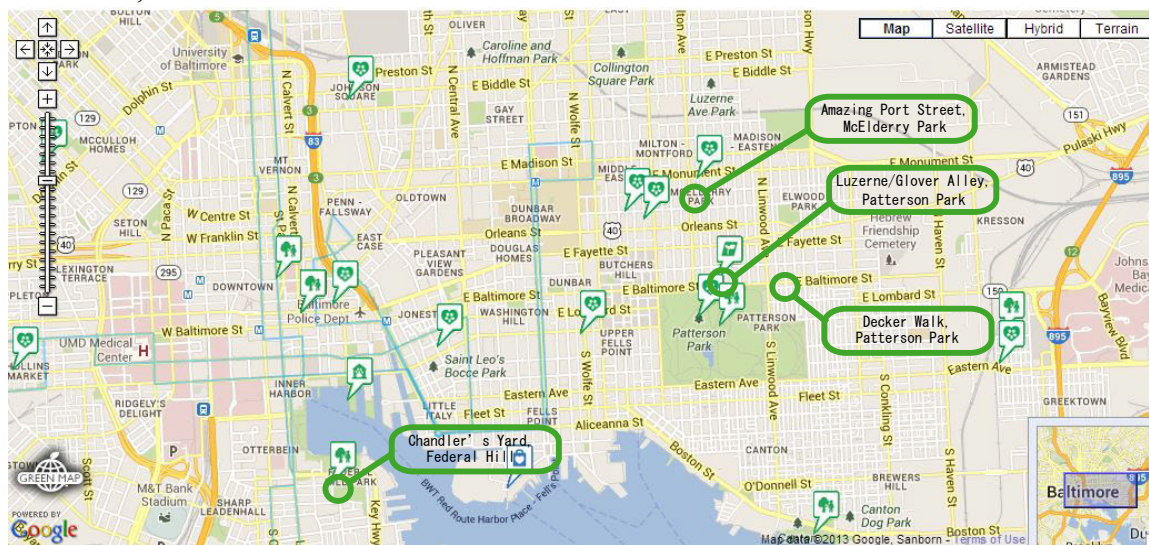
The future of the proposed project includes interpretative green infrastructure, the Los Angeles River Watershed, and espaliered fruit. There will be provided as supplemental food for local restaurants. There will also be outdoor fitness equipment such as pull-up bars (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 153).



Source: Urban Trails in Underserved Communities

APPENDIX D-14: Alley Gating and Greening Program

Baltimore, MD



Project Type

“The Alley Gating and Greening Program is oriented toward residential neighborhoods in order to eliminate crime and blight” (Mona Seymour, Jennifer Wolch, Kim D. Reynolds, Hilary Bradbury, 2010).



Source: Alley Gating and Greening Toolkit Baltimore

Special Feature

N/A

District: N/A

Land Use: Commercial, industrial, and residential

Building Height: N/A

Alley Type: Multiple

Partners:

- Department of General Services
- Ashoka's Community Greens
- City of Baltimore's Department of Public Works
- The Abell Foundation
- The Baltimore Community Foundation
- Mayor's Office of Neighborhood and Constituent Services
- Cleaner Greener Baltimore
- The Small-Alper Family Foundation
- The Shriver Center, University of Maryland
- The Social Work Community Outreach Services of the University of Maryland School of Social Work
- The Neighborhood Design Center
- Neighborhood Associations
- Chicago Green Alley Handbook
- Community Development Corporations (CDC's)
- Civic Works
- Maryland Conservation Corps



Source: Alley Gating and Greening Toolkit Baltimore



Source: Alley Gating/Greening Comes to the Neighborhood



Source: Alley Gating and Greening Toolkit Baltimore

- Low Impact Development Center
- AmeriCorps
- Maryland Native Plant Society
- The Community Law Center, Inc.

General Description

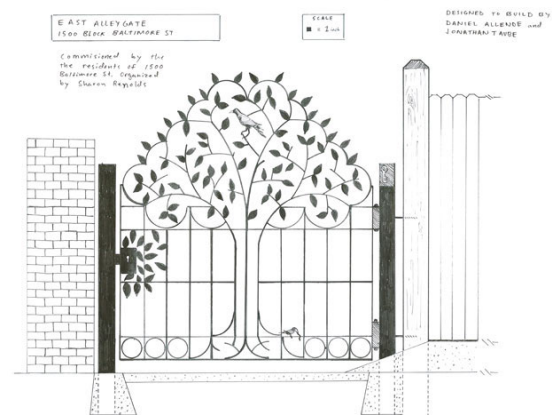
The program originated from concerns about crime, dumping, and pest control problems associated with alleys (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 146), and it has developed and involved a stormwater management vision (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 146).

This program identifies a commitment to build and empower communities (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 146). The green alley's goal is to contribute to a cleaner, greener and more sustainable Baltimore, to upgrade the health of Chesapeake Bay

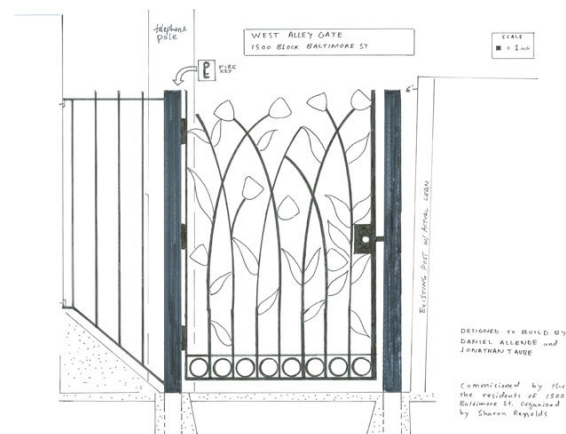
by reducing pollutions and stormwater runoff, to reduce illegal dumping and rat infestations, to improve health conditions, to dissuade crime, to create safer neighborhoods, to



Source: Alley Gating and Greening Toolkit
Baltimore



Source: Ashoka's Community Greens
Shared Parks in Urban Blocks



Source: Ashoka's Community Greens
Shared Parks in Urban Blocks

enhance home values, to make places playable for kids, to offer adult places to unwind and relax, to enhance social connections between residents, to create more attractive places in Baltimore to live and work, and to help push the city's renaissance beyond the harbor and a few neighborhoods to potentially all neighborhoods in the city (Green Community One Alley at a Time).

The Ashoka's Community Greens plan to gate and beautify at least fifty alleys will impact the lives of approximately 6,000 people (Green Community One Alley at a Time). These projects are "an integral part of Shelia Dixon's Sustainability Plan and the Cleaner Greener Baltimore initiative" (Green Community One Alley at a Time).

There are several benefits from the program such as increased safety, higher property values, social bonds between neighborhoods, a vehicle for civic engagement, and improved sanitation, health, and environment. Because of the program, adjacent prosperities tend to increase in value by five percent to fifteen percent, which may attract other homeowners (Benjamin Nathanson, Danielle Emmet, 2008, 7).

The Site

Baltimore's alley network encompasses over 600 linear miles City (Alley gating & greening program. Baltimore: City of Baltimore., 2008).

Financing

This program is funded by adjacent residents. The Ashoka's Community Greens created a Five Year Plan. There are four steps which classified by funding amount. The classifications were For \$10,000, For \$20,000, For \$40,000, and For \$60,000. In the For \$10,000 plan, a specific neighborhood making hundreds of families will be aware of the alley gating and greening opportunities by the outreach with the plan (Green Community

One Alley at a Time). In the For \$20,000 plan, the several blocks shepherded by the Ashoka's Community Greens will get complex process of obtaining needed consents from neighbors and agencies by the Ashoka's Community Greens and residents work together (Green Community One Alley at a Time). In the For \$40,000 plan, an alley green is professionally designed and made a unique and beautiful space for the estimated forty families (Green Community One Alley at a Time). In the For \$60,000 plan, actual beautification of an approved alley such as providing plants, planters, soils, paint, benches, and gates is accomplished (Green Community One Alley at a Time).

There is a normal administrative fee for all project, which costs \$200 to \$600 (Benjamin Nathanson, Danielle Emmet, 2008, 27). It is "assessed on a sliding scale based on the scale of the project and the financial status of the community paying" (Benjamin Nathanson, Danielle Emmet, 2008, 27).

Planning and Design

The program is a two-tiered program. Residents may apply to gate their alleys in order to eliminate noise, littering, and loiterers, and they may also additionally apply for the green plan (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 146). Greening is also considered to be beautification and provides amenities. Developing gated, restricted-access alleyways that are populated with potted plants and seating improves and solves the problems of crime, garbage, and dumping.

Ashoka Community Greens, which is a collaborating organization, offered leadership training to Baltimore residents to improve their capacity as community organizers. This program satisfied the requirements of residents such as that eighty to one hundred percent of adjacent residents must signify agreement with the proposal, and that residents have some discretion in proposing to the city what greening will constitute in their alleyways, therefore, the leadership training helps residents to garner support for projects and set up

the common goals (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 146, 147). The program is organized by block group, the block groups have block meetings led by a block leader (Benjamin Nathanson, Danielle Emmet, 2008, 17). The block eventually establishes an Alley Gating and Greening committee and residents talk about what they can contribute (Benjamin Nathanson, Danielle Emmet, 2008, 17). For the program, the positions needed are: contact person for the city, contact person for residents and homeowners, block leader, overall coordinator, fund-raising, grant writing, bookkeeping, treasurer, accounting, communication (email, web, newsletter), design, installation project manager, legal coordinator, signature collector, secretary, and maintenance (Benjamin Nathanson, Danielle Emmet, 2008, 17, 18, 19).

There are seven steps to get started on a project. The first step is sending a request to the City of Baltimore to evaluate an alley, which includes photographs and maps (General Services / Alley Gating & Greening Program, 2010) “The Gating and Greening Alleys Ordinance allows the Department of General Services (DGS) to receive, evaluate and process requests for alley gating and/or greening” (General Services / Alley Gating & Greening Program, 2010). The second step is requesting an application after preliminary approval (General Services / Alley Gating & Greening Program, 2010) and it costs \$250. The third step is reviewing the application, which should consider the interests of all legal users and public safety (General Services / Alley Gating & Greening Program, 2010). The fourth step is signing of a consent form by all property owners abutting the alley (General Services / Alley Gating & Greening Program, 2010). The fifth step is requiring engineer drawings “to obtain the necessary right-of-way permits from the DGS Right-of-Way Services Division, along with a DGS approved developer’s agreement for alley greening” (General Services / Alley Gating & Greening Program, 2010). The sixth step is public notice, public hearing, and public approval by the Baltimore City Board of Estimates (General Services / Alley Gating & Greening Program, 2010). The seventh step is beginning the project (The City of Baltimore).

Design and planning services in support of community-sponsored initiatives are provided by the Neighborhood Design Center by “mobilizing volunteer architects, planners, landscape architects, engineers, and other design professionals who donate their professional services to help groups in the initial stages of neighborhood revitalization efforts.” (Benjamin Nathanson, Danielle Emmet, 2008, 27). The design considerations are gating, outdoor furnishing, lighting, planting, watering, adjusting fences, and parking (Benjamin Nathanson, Danielle Emmet, 2008, 28). It is also important to maintain the new space (Benjamin Nathanson, Danielle Emmet, 2008, 29). The types of gates under consideration include iron gate, aluminum gate, wooden gate, chain link gate, recycled plastic gate, and arctic gate (Benjamin Nathanson, Danielle Emmet, 2008, 31). The program attracts interested artists (Alley Gating & Greening The Baltimore Story). Many students from the Maryland Institute College of Art (MICA) have tried to get involved in the program such as designing gates (Alley Gating & Greening The Baltimore Story). The gates could be locked; however, for emergency, there is a knox box and the fire department could access to the alley (Benjamin Nathanson, Danielle Emmet, 2008, 47). For trash pick-up, residents have options such as leaving the trash outside of the gate, placing the trash in front of their house, or leaving the gate unlocked or open (Benjamin Nathanson, Danielle Emmet, 2008, 47).

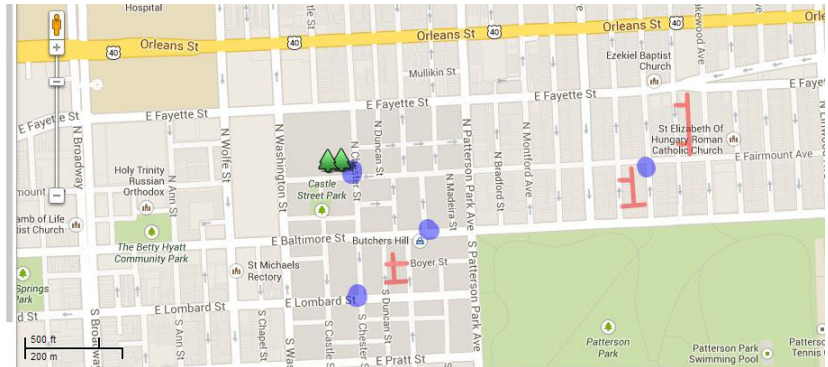
APPENDIX D-15: Baltimore Blue Alleys

Baltimore, MD

Baltimore Blue Alley Locations
 Proposed locations in Butchers Hill and Patterson Park for pervious alley and green curb bumpout installations through Blue Water Baltimore's Blue Alley Program.

Public · 2 Collaborators · 1,751 views
 Created on Apr 6, 2012 · By DanaP · Updated Apr 18, 2012
[Rate this map](#) · [Write a comment](#) · [KML](#)

- / Patterson Park Blue Alley 1
- / Patterson Park Blue Alley 2
- / Patterson Park Curb Bumpout
- / Butchers Hill Blue Alley
- / Butchers Hill Curb Bumpout 1
- / Butchers Hill Curb Bumpout 2
- / Butchers Hill Curb Bumpout 3
- / Butchers Hill Stormwater Tree Pit 1



Project Type

Baltimore has tried to make long neglected back alleys blue (other cities such as Los Angeles and Chicago calls it green) to achieve a set of ecosystem and public health goals (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 144).



Source: Blue Alley

Special Feature

N/A

District: N/A

Land Use: Butchers Hill; High Density Residential, Patterson Park; Barren/Open Land



Source: Southeast to Pioneer New Stormwater System

Building Height: N/A

Alley Type: Multiple

Partners:

- Baltimore City Department of Transportation (DOT)
- Baltimore Department of Public Works
- National Fish and Wildlife Foundation Grant
- City of Baltimore
- Blue Water Baltimore
- Watershed Protection
- Biohabitats



Source: Piloting Blue Alleys in Baltimore

General Description

The Blue Alley pilot effort has tried to diminish the volume of polluted runoff into the neighborhood stream and Baltimore Harbor (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 146).

The project involves many partners: the Center of Watershed Protection helped surveys and site selection; Biohabitats assisted with designs and monitoring; the Baltimore City DOT oversaw the requests for proposals and management of the actual installations (Blue Alley, 2012).

The Site

Baltimore's alley network encompasses over 600 linear miles (Alley gating & greening program. Baltimore: City of Baltimore., 2008). In 2012, the neighborhoods of Butchers

Hill and Patterson Park were selected to participate in the Blue Alley Program (Blue Alley, 2012). “Final site selection has been completed” (Blue Alley, 2012). “Proposed locations in Butchers Hill and Patterson Park for pervious alley and green curb bumpout installations through Blue Water Baltimore’s Blue Alley Program” (Baltimore Blue Alley Locations, 2012). There was one pervious alley and three curb bumpouts in Butchers Hill neighborhood and two pervious alleys and one curb bumpout in Patterson Park neighborhood. One Blue Alley in Butchers Hill connects South Duncan Street with South Collington Avenue and it is located on the north side of the unit block. Patterson Park has Blue Alleys slated for alleyways connecting North Rose Street and North Luzerne Avenue as well as North Glover Street and North Lakewood Avenue (Southeast to Pioneer New Stormwater System, 2013).

The program utilizes the Water Audit Program, which Blue Water Baltimore uses to analyze the impact of stormwater on a site and suggests recommendations such as Rain Barrels, Rain Gardens, Tree Planting, Conservation Landscaping, Pavement Reduction, Downspout Disconnection, and Green Roofs to reduce stormwater.

Financing

The program was “partially funded through stormwater related sources” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 146). In 2010, a \$60,000 National Fish and Wildlife Foundation grant was secured by Blue Water Baltimore to implement a pilot project in downtown Baltimore, and downtown Baltimore has improved the damaged alleys with innovative new materials (Blue Alley, 2012). Baltimore City DOT and the Department of Public Works also contributed an additional \$300,000 to implement this project (Blue Alley, 2012). Because of substantial match from Baltimore City DOT and Department of Public Works, National Fish and Wildlife have made the 1.2 million project possible (Southeast to Pioneer New Stormwater System,

2013).

Planning and Design

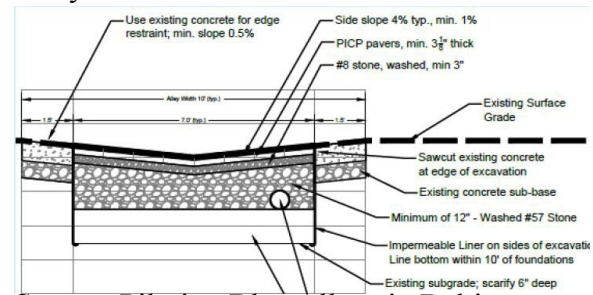
“Blue alley is a special type of alley pave with pervious materials that allow polluted runoff to soak into the ground instead of into stormdrains and neighborhood streams and Baltimore Harbor” (Blue Alley, 2012).

To get widely accepted stormwater management practices on a larger scale, a goal of the program is education (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 149). “Outreach has suggested that Baltimore residents were unaware of

relationships between stormwater, waterway pollution, and health” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 149).

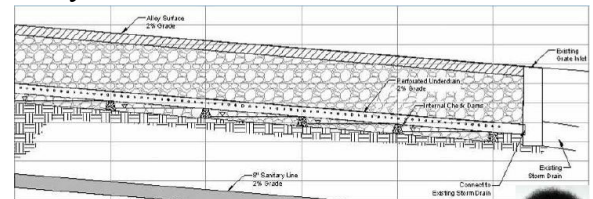
In Baltimore, alleys used to be traditionally paved with solid impervious concrete, and when it rains, water on the alleys used be polluted by rainwater from the surrounding rooftops and roadways flowing down to alleys, picking up trash, chemicals, sediment, and anything else laying on the ground (Blue Alley, 2012). Therefore, this program replaces traditional paving with permeable materials. The materials “will allow the stormwater and fine pollutants to soak right though the alley surface and into the ground” (Blue Alley, 2012). Although the water and pollutants go through below the surface, the many of pollutants will be filtered out and water will soak into the ground (Blue Alley, 2012). The

Alley Cross Section



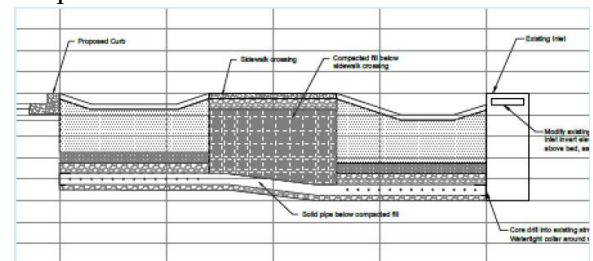
Source: Piloting Blue Alleys in Baltimore

Alley Profile



Source: Piloting Blue Alleys in Baltimore

Slope Considerations



Source: Piloting Blue Alleys in Baltimore

water becomes cooler and cleaner after the process, so it enters the waterways much more naturally as groundwater (Blue Alley, 2012). The alleys will be more drivable, even for heavy vehicles” (Blue Alley, 2012).

Two neighborhoods were selected to pilot the program in 2012, and the program was based on “the availability of promising sites for project implementation” (Blue Alley, 2012) and “evidence from the community groups of their strong commitment to broad-scale community greening” (Blue Alley, 2012). Blue Water Baltimore has currently monitored stormwater runoff volume at four locations in order to develop baseline data to show that the installed system is capable of reducing runoff volume.

Through the Water Audit Program, Blue Water Baltimore analyzes the Blue Alley installation with residents living around the alley to find out the best opportunities for the simple goal of residential stormwater reduction (Blue Alley, 2012).

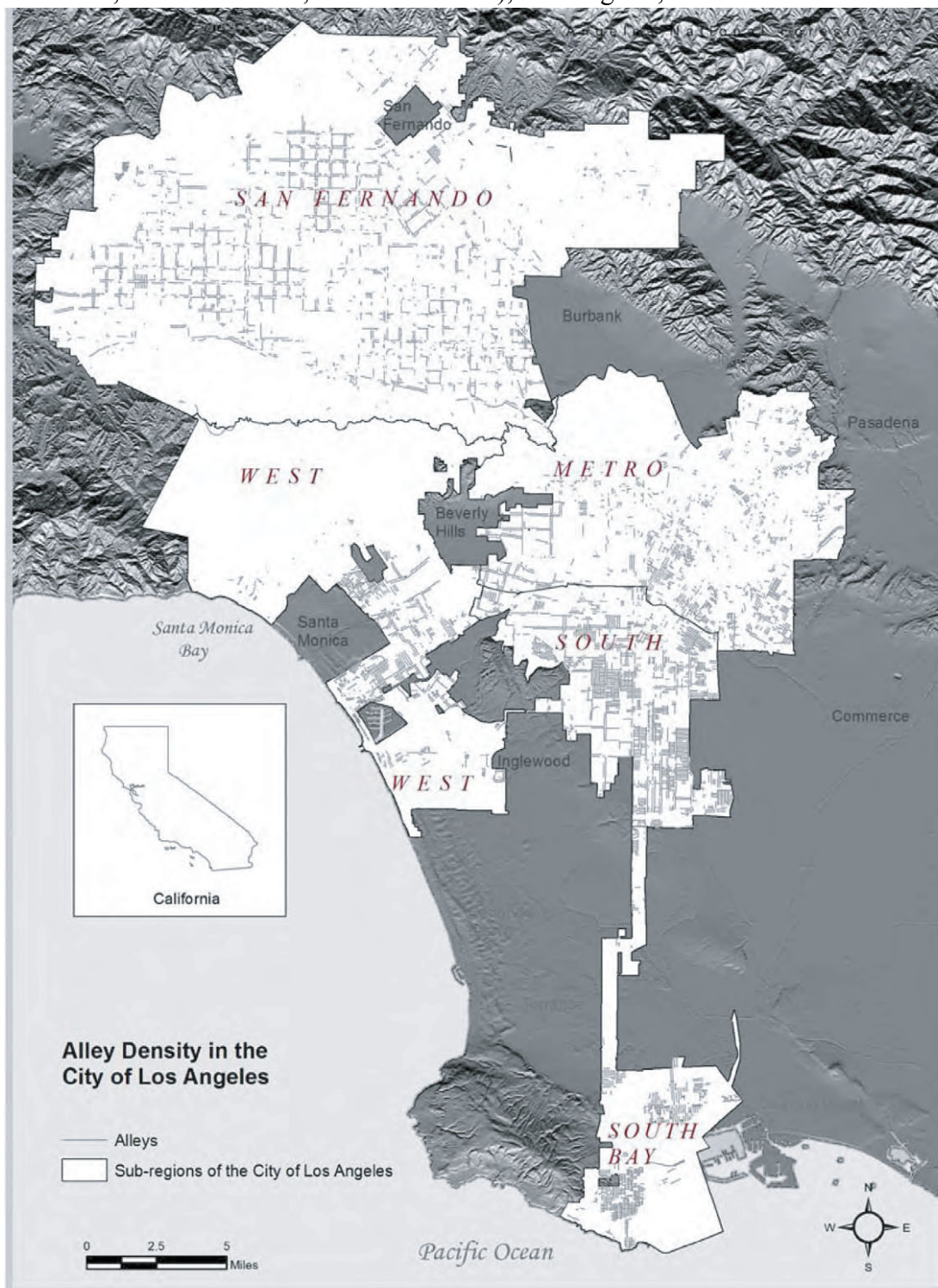
For the process of site selection, GIS was used to identify utility conflict and steep slope, and it looked for sites on the city re-pave list, appropriate drainage areas, and storm drain inlets nearby (Ashley Traut, Nick Lindow, Greg Hoffmann, 2011). In the field assessment process, GIS was used to look for the sites with few structures adjacent to alleys, significant damage, storm sewer outlets, and sufficient treatment capacity (Ashley Traut, Nick Lindow, Greg Hoffmann, 2011). In the design process, gross pollutants, aging infrastructures, slopes, conveyances, offsets, plant selection, and pretreatment were considered (Ashley Traut, Nick Lindow, Greg Hoffmann, 2011).



Source: Blue Alley

APPENDIX D-16: The Los Angeles Green Alley Program

Five Focus Groups: (Five Neighborhoods: PACOIMA, SUN VALLEY, SOUTH LOS ANGELES, HOLLYWOOD, WILMINGTON), Los Angeles, CA



Project Type

The Best Management Practices (BMPs) for the Greening Infrastructure

Special Feature

N/A

District: N/A

Land Use: N/A

Building Height: N/A

Alley Type: Multiple

Partners:

- The Los Angeles Department of Public Works
- The City of Los Angeles Community Redevelopment Agency (CRA/LA)
- John Randolph Haynes
- Dora Haynes Foundation
- TreePeople
- Pacoima Beautiful
- The Los Angeles Neighborhood Land Trust
- The USC Center of Sustainable Cities (CSC)
- The Trust for Public Land (TPL)

Neighborhood party in the converted Luzerne-Glover Alley



Source: Transforming Alleys into Green Infrastructure for Los Angeles



Source: Green Alleys



Source: Green Is Right Up Our Alley

- City of Los Angeles Bureau of Sanitation
- The Los Angeles Conservation Corps
- Ah'be Landscape Architects
- Bureau of Sanitation
- University of Southern California Center for Sustainable Cities

General Description

The City of Los Angeles has approximately 6,500 miles of streets with 10,000 miles sidewalk, 900 linear miles of alleys, in the form of over 12,000 alley segments, and there are 34,000 catch basins (Rainwater Harvesting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009). The program was adopted in fall 2008. In 2008, before the program was adopted, the Los Angeles Department of Public Works established the Green Alleys Subcommittee, which is made up of representatives from the city's Community Redevelopment Agency, Board of Public Works, Bureau of Sanitation, and Department of Planning along with the representatives from the CSC and TPL. This program was originally started from the research project entitled Black Alley LA in 2006 for CSC at the University of Southern California and expertise from non-governmental organizations such as the Trust for Public Land (TPL) has been involved.

Los Angeles has implemented alley-related processes such as mapping of alley resources in Los Angeles regions and audits to assess the physical attributes and activity patterns of the alleys (Mona Seymour, Kim D KD Reynolds, Jennifer Wolch, 2010) (Jennifer Wolch, Josh P. Newell, Mona Seymour, Hilary Bradbury Huang, Kim Reynolds, Jennifer Mapes, September 20, 2010), and measurement of soil contamination level in unpaved alleys are implemented (Joseph S. Devinnny, Travis Longcore, 2008).

The project initially had multiple objectives: such as "improving urban runoff management; cooling the urban heat islands; harvesting rainwater; promoting physical

activity through walking, cycling, and playing, increasing connectivity between homes, schools, and parks; encouraging non-motorized transport; expanding green and open space; building neighborhoods and communities” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 8), and other focuses are creating recreational opportunities, encouraging neighborhood walkability connectivity, green-ing the urban matrix, reducing crime (Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009). The “menu” of the six green design scenarios for alleys were formalized by the subcommittee (Green Alley Programs: Planning for a sustainable urban infrastructure?, 8).

A number of demonstration projects were identified to refine project selection criteria, partnership arrangements, and design guidelines.

The Site

The region has a higher concentration of alleys than other regions, and communities have less access to park resources than residents in other areas of the city (Jennifer Wolch, Josh P. Newell, Mona Seymour, Hilary Bradbury Huang, Kim Reynolds, Jennifer Mapes, September 20, 2010). These area are populated by Latinos, African-Americans, and Asian-Pacific Islanders tending to have lower incomes (Chona Sister, Jennifer Wolch, John Wilson, 2010) (Jennifer Wolch, John P. Wilson, Jed Fehrenbach, 2005).

Financing

The project was financially supported by the John Randolph Haynes and Dora Haynes Foundation. There are six scenarios , and a basic cost estimate was provided for each. The cheapest scenario 1 cost estimate was \$16,462.50 and the most expensive scenario 1 was \$32,962.50 which included white top treatment options added to surface. The

scenario 2 estimate was \$46,500.00 for a dry well to an existing alley and another estimate was \$57,957.00 for standard alley with a dry well. The cheapest scenario 3 was \$14,700.00 such as standard asphalt alley with 4' wide permeable band along the center of the alley, and if permeable alley with two 4' wide concrete walks on either side, the estimate was \$20,700.00, which was the most expensive scenario 3 estimate. The scenario 4 estimate was \$42,700.00. The scenario 5 estimate was \$15,960.00 for a 5' wide central bio-swale and \$27,900.00 for permeable strips of bio-planters, permeable pavers at driveway entries, and concrete bands for vehicular travel. The scenario 6 estimate was \$34,877.00. There was light fixture costs estimation, and it was \$6,461.00. (Rainwater Harvesting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009).

Planning and Design

This program included research on soil contamination and community involvement. Trace metal deposits “such as lead, chromium, and arsenic, and petroleum compounds in fuel and motor oil, measured as Total Petroleum Hydrocarbons (TPHs)” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 7) were examined by the soil contamination study. The level of the soil contamination were determined based on California Human Health Screening (CHHS) Standards. The program suggested that Urban design for runoff management could improve not only stormwater management but also rehabilitation soil contamination as well.

“Almost all of these projects focus on best management practices (BMPs) designed to manage runoff and improve runoff water quality” (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 8), however there were few alleys focusing on the different objects and features.

The project makes alleys walkable, playable, and bikeable by using the existing

underused infrastructure, and the project provides connections between parks, schools, and neighborhood centers. Planting drought-tolerant, California friendly plants in the combination with permeable pavement will create shade, retain rainwater, reduce heat-island effect and provide habitat for native species, and improvement of lighting and making alleys attractive will enhance safety.

Scenario 1 (Possible Materials)

Recycled local materials are used for paving, which is considered a green paving alternative (Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009). The possible material is: 1. regular concrete which is light grey color of standard Portland concrete cerement having a high albedo rate; 2. White concrete cement (low in iron and manganese) has even higher albedo rate; 3. White photocatalytic cement has self cleaning and digests pollutions; 4. Green mix foamed asphalt which is one hundred percent recycled asphalt pavement has significantly lower energy use than the standard mix process and no green house emissions, 5. Rubber asphalt has a porous top layer, cooling down quicker than concrete, which influences on the heat-island effect, and also helps to decrease noise levels and maintenance costs and improve pavement life; and 6. Natural PAVE resin pavement is a non-petroleum, versatile material with mixed materials that retains coloration and texture, in addition, it covers up

Scenario1



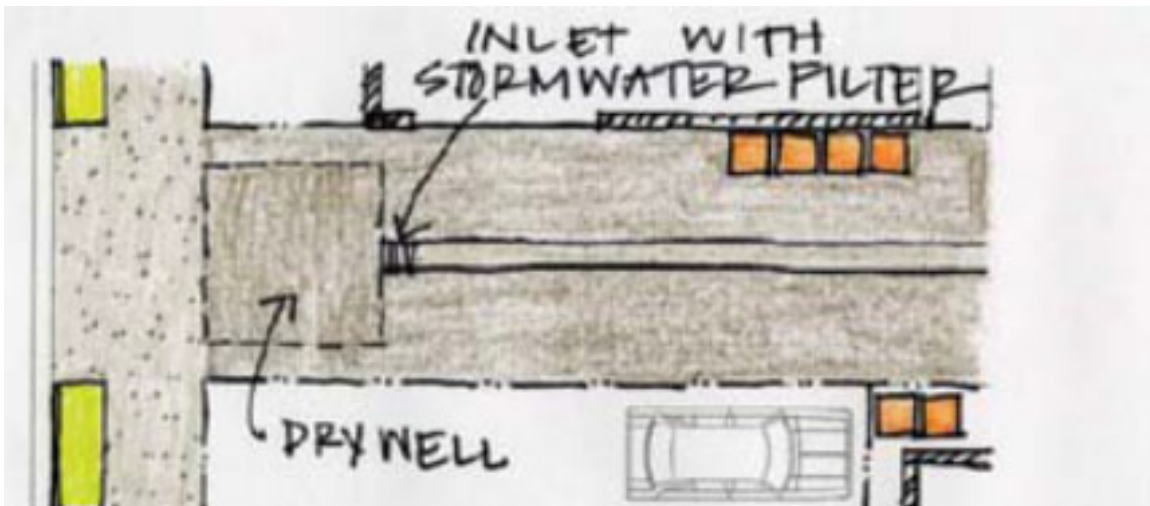
Source: Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition

existing asphalt and has a high albedo rate (Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009).

Scenario2 (drywell)

“The scenario2 maintains the existing central drainage swale while adding a dry well with a grease interceptor downstream at the end of the alley” (Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009).

Scenario2

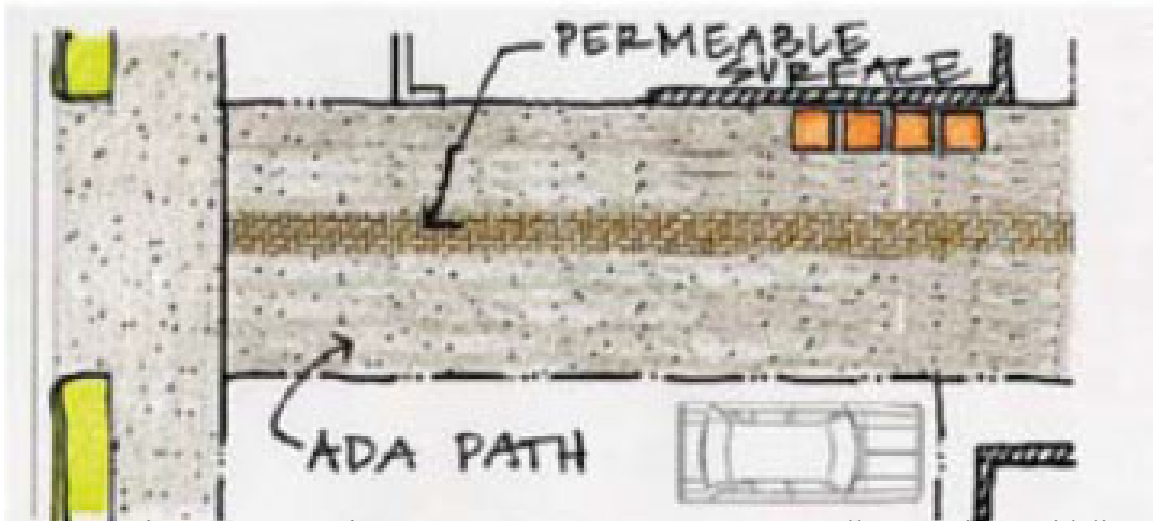
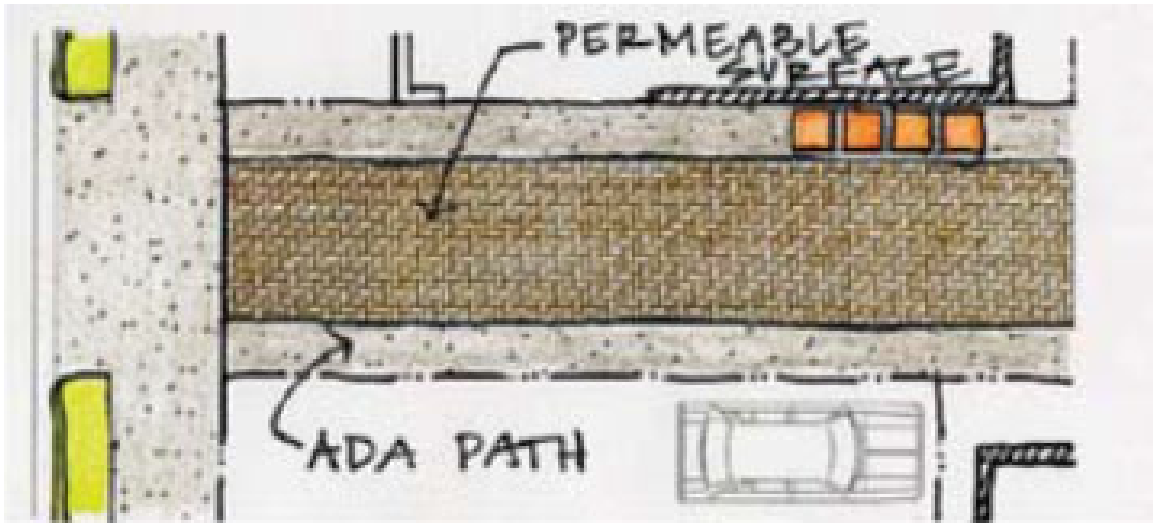


Source: Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition

Scenario3 (Permeable paving)

"Permeable paving surfaces are implemented to reduce storm water runoff and increase infiltration rates" (Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009). An ADA compliant path of travel would be maintained for vital when designing green alley (Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009). "Layout configuration and percentage coverage can be adjusted for multiple configurations" (Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009).

Scenario3

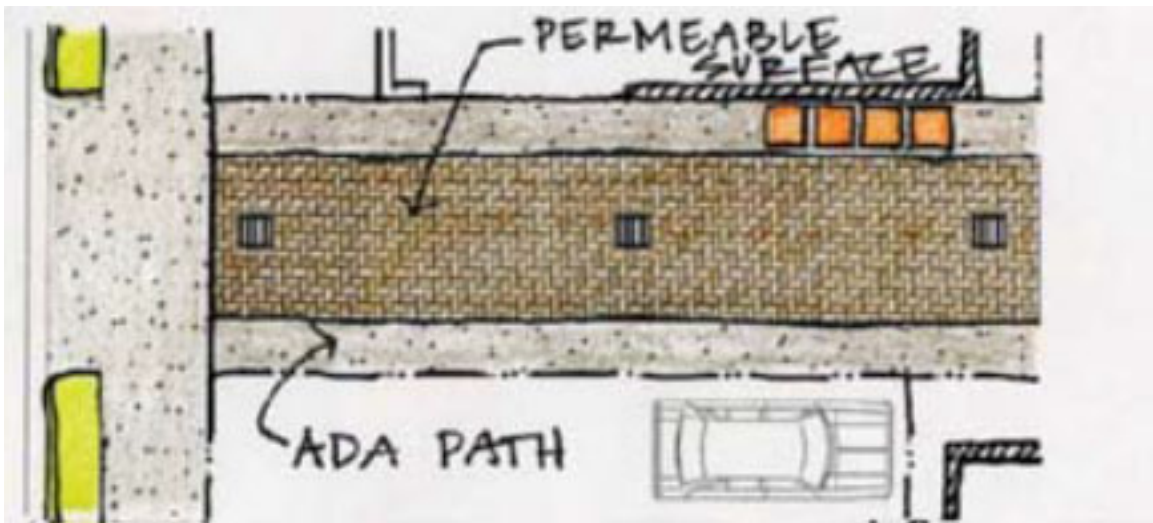


Source: Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition

Scenario4

Scenario4 is combination of scenario2 and 3 with smaller drywells which should be located at each end of the alley every seventy five to one hundred LF (Linear Feet) of drainage area (Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009).

Scenario4

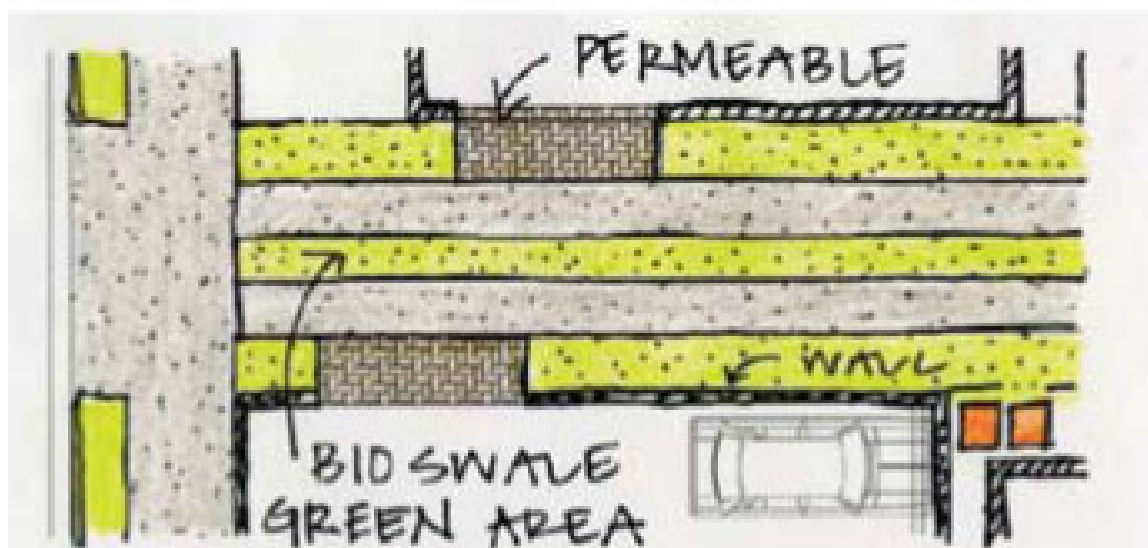
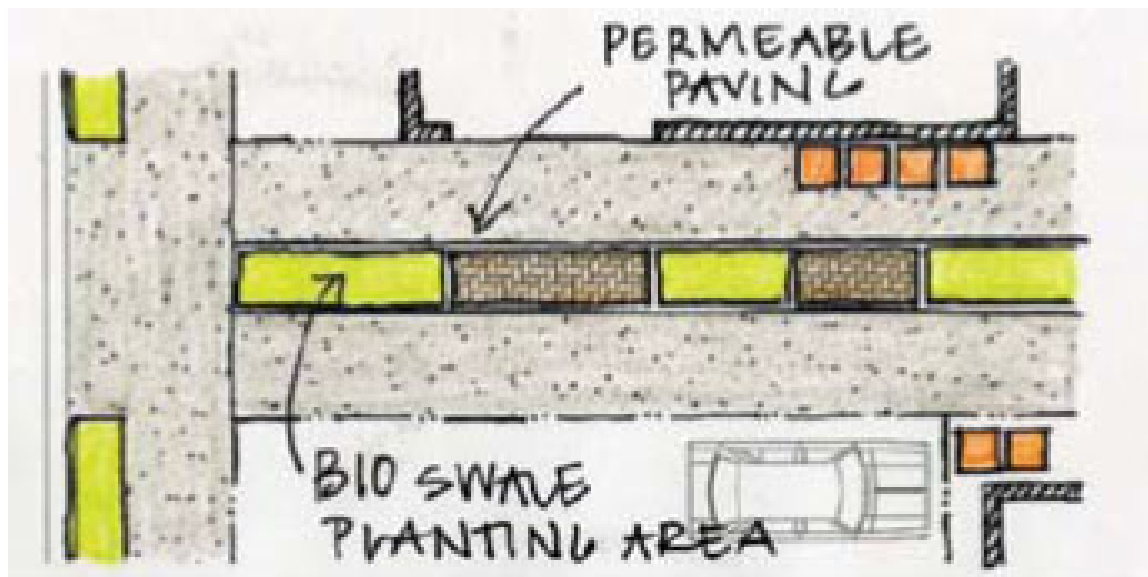


Source: Rainwater Harvesting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition

Scenario5 (biofiltration system)

For storm water treatment and greenscape, a biofiltration system which removes and oxidizes organic gases by methods of beds made of compost or soil, is adopted (Rainwater Harvesting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009). "Variation of percentage of surface to be permeable based on desired infiltration area could fluctuate but will impact cost and design appearance" (Rainwater Harvesting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009). Watering will be important for any bio-areas during an establishment period, so irrigation is recommended for plant life (Rainwater Harvesting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009).

Scenario5



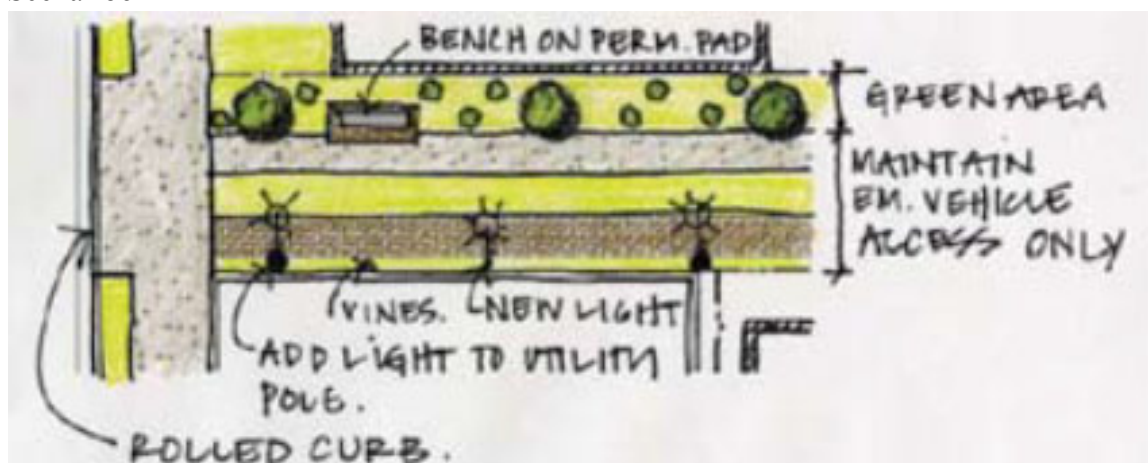
Source: Rainwater Harvesting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition

Scenario6 (walk-ability and other options)

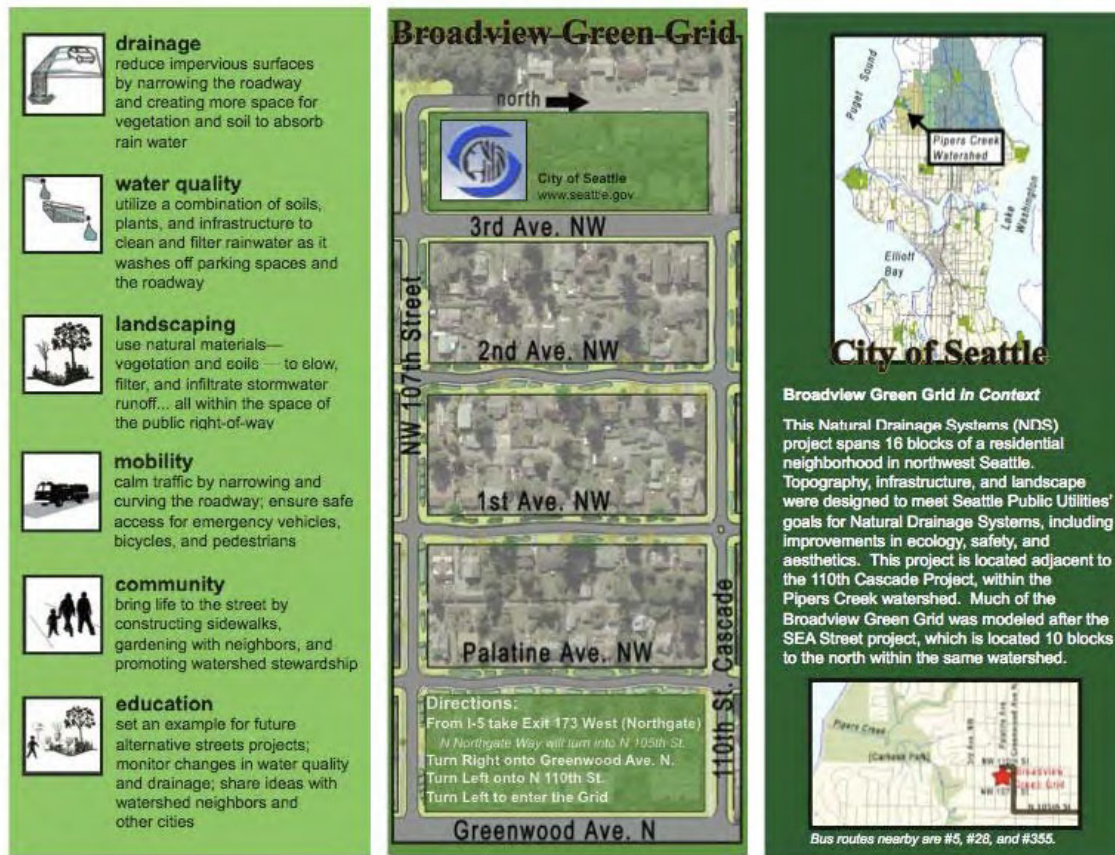
Scenario6 focuses on the addition of elements to increase walk-ability. This scenario also closes alleys off to all vehicles except for emergency access (Rainwater Harvesting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009). All asphalt will be replace with a mix of greener options, which is mentioned in previous

scenarios. Other options will new lighting options such as spotlights at existing utility poles, new fixtures between the utility poles, plantings, and seating (Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009). “Additional Planting might be possible on perimeter edges particularly if drive lane can be narrowed” (Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009). “All added planting areas would need irrigation (Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition, 2009).

Scenario6



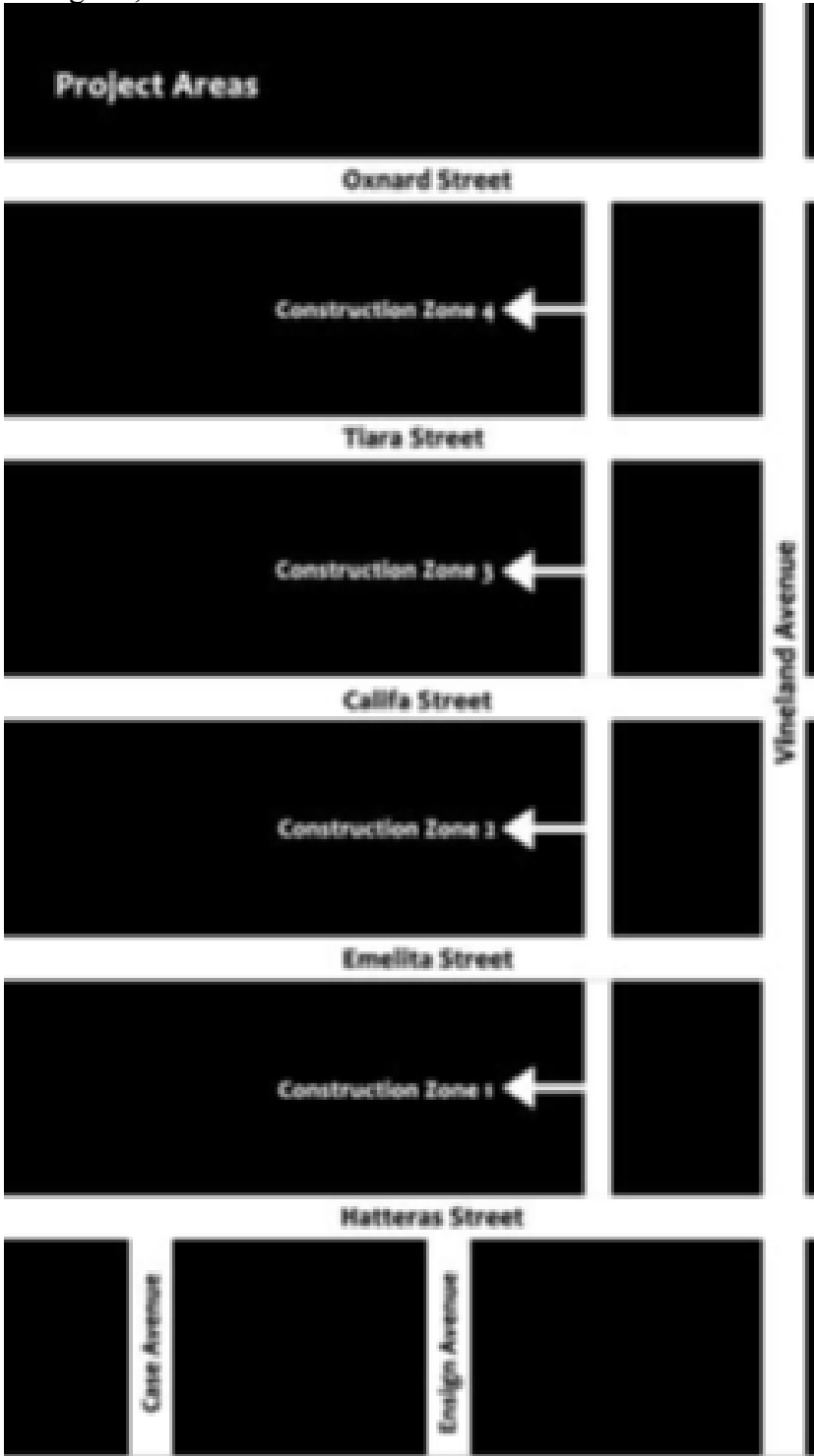
Source: Rainwater Harvasting Program: Green Streets & Green Alleys Design Guidelines Standard 1st Edition



Source: Transforming Alleys into Green Infrastructure for Los Angeles

APPENDIX D-17: Hollywood Alley Retrofit Project

Hollywood, Los Angeles, CA



Source: North Hollywood Alley Retrofit Project

Project Type

The a sustainable green alley project located in the North Hollywood community of Los Angeles.

Special Feature

N/A



Source: North Hollywood Alley Retrofit Project

District: Residential District

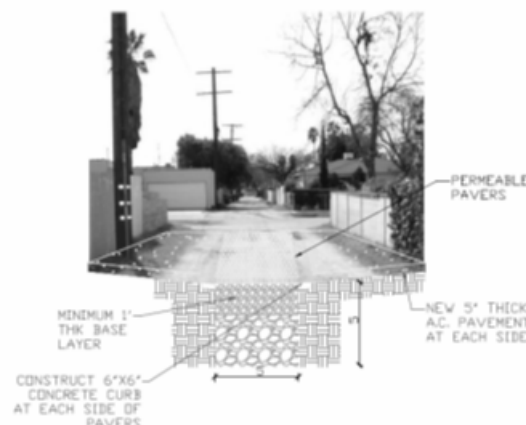
Land Use: N/A

Building Height: N/A

Alley Type: Residential District

Partners: N/A

- Department of Water and Power
- Department of Public Works (DPWs)
- Councilman Tom LaBonge



Source: North Hollywood Alley Retrofit Project

General Description

“The Department of Public Works is scheduled to begin construction in one of your neighborhood alleys starting early 2011” (North Hollywood Alley Retrofit, 2011). A strip of permeable pavers was installed down the center of each segment. The redesign will help on site water treatment such as alleviating flooding in the alleys and recharging groundwater supplies. It will also improve the neighborhood (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 9).

The Site

The project focused on several contiguous alley segments. The project created stormwater and catch basin improvements in the alley just west of Vineland Avenue between Hatteras Street and Oxnard Street (North Hollywood Alley Retrofit, 2011).

Financing

The Department of Water and Power funded the \$800,000 project (Joshua P. Newell, Mona Seymour, Thomas Yee, Jennifer Renteria, Travis Longcore, 2012, 9).

Planning and Design

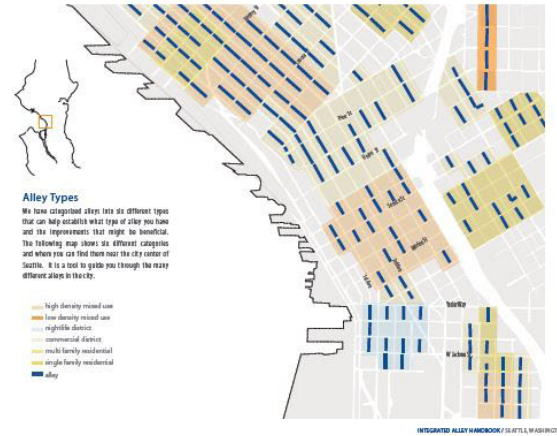
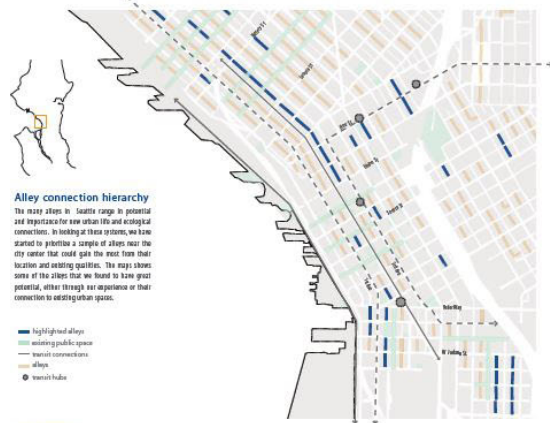
“The project will improve a total of 1,075 feet of alleys and will install catch basins, which will divert polluted urban runoff from the adjacent streets into the alley where it will then permeate into the ground” (Follow the Green Paved Alleys, 2011).

“The construction activities will close the alley in segments from January through the summer of 2011, thereby impacting access to the residents’ garages” (North Hollywood Alley Retrofit, 2011).

The project installs permeable pavers at the center of the alley and new five inch A,C, pavement at each side, and there is a minimum one-inch base layer and six inch by six inch concrete curbs on each side of the pavers. Those will help to “capture storm water runoff and infiltrate it into underground aquifers for recharging purposes” (Follow the Green Paved Alleys, 2011).

APPENDIX D-18: Activating Alleys for a Lively City

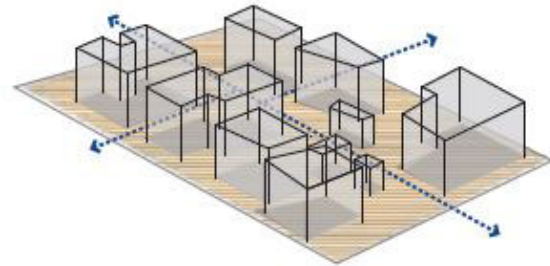
Seattle, US



Source: Activating Alleys for a Lively City

Project Type

This project is to enhance the business on laneways.



Special Feature

N/A

District: N/A

Land Use: N/A

Building Height: N/A

Alley Type: Multiple

Partners:

- UW Green Future Research and Design Lab
- Scan Design foundation



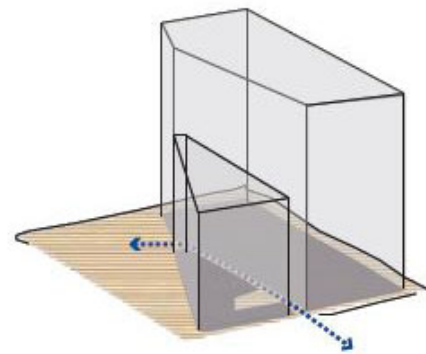
Source: Activating Alleys for a Lively City

- Gehl Architects

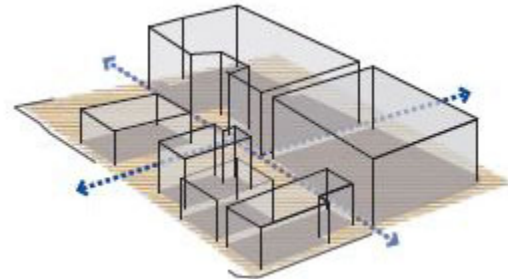
General Description

This project was created by two 2010 Fall interns, Jenny Hampton and Mary Fialko, and its purpose was to transform alleys in Seattle into public realm (University of Washington). The project visions are quality of public life, health, image of the city, and safety (Mary Fialko and Jennifer Hampton, 2010). To enhance the quality of life, public space has more variety and it is within five minutes walking distance of most residents (Mary Fialko and Jennifer Hampton, 2010). To improve health and image of the city, it needs more green such as local plants, storm-water drainage, and green infrastructure initiative (Mary Fialko and Jennifer Hampton, 2010). With these elements, the healthy environment would be created (Mary Fialko and Jennifer Hampton, 2010). To create safer environments for people, there are additional

uses such as retails, cafes, arts, venues, and industries with original use such as service access, which would make alleys safer and more beautiful by improving dark, discarded



Source: Activating Alleys for a Lively City



Source: Activating Alleys for a Lively City

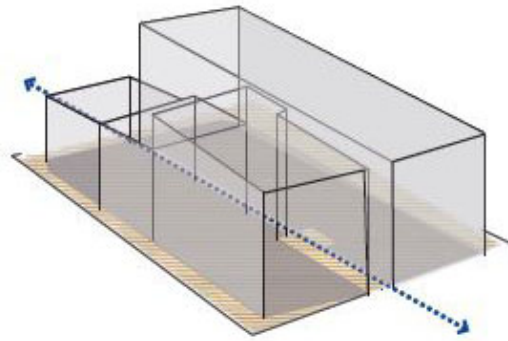
neglected, and sometimes not even paved places (Mary Fialko and Jennifer Hampton, 2010).

There are some alley potentials, such as a more walkable city, a place for green infrastructure, intimate and personal city spaces, additional store frontages for a greater economy, places for children and the elderly, off-street spaces for festival and cultural activities, and unique experiences (Mary Fialko and Jennifer Hampton, 2010).

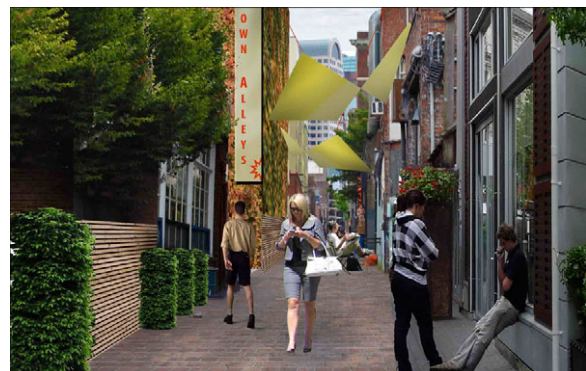
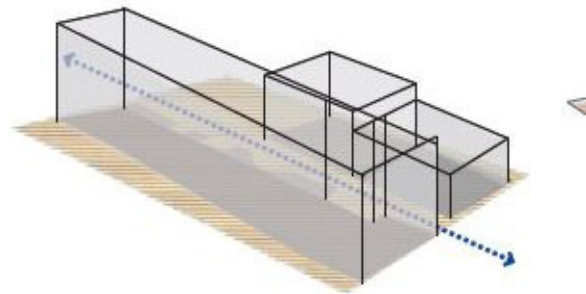
The Site

The project considers over 200 alleys in nine neighborhoods (Activating Alleys for a Lively City | Seattle Integrated Alley Handbook, 2012). “There are approximately 217,500 square feet of alleys in Seattle downtown, and eighty five percent of these are underused” (Mary Fialko and Jennifer Hampton, 2010). There are 456,390 square feet of existing public spaces such as parks and pedestrian streets (Mary Fialko and Jennifer

Hampton, 2010), So, if the alleys are successfully activated, public spaces in Seattle



Source: Activating Alleys for a Lively City



Source: Activating Alleys for a Lively City

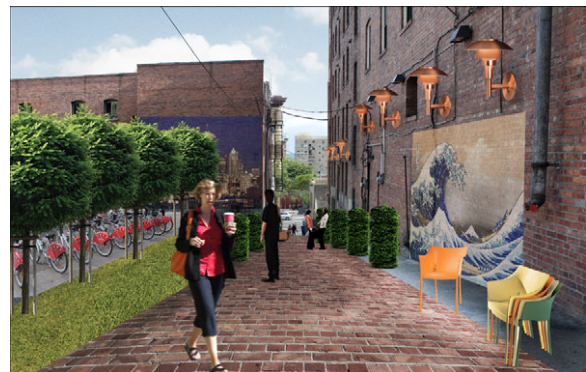
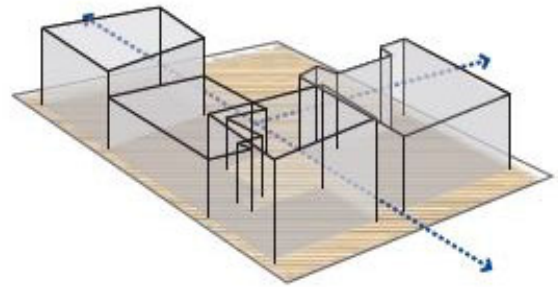
downtown will be increased by fifty-percent the downtown will be increased by fifty (Mary Fialko and Jennifer Hampton, 2010).

Financing

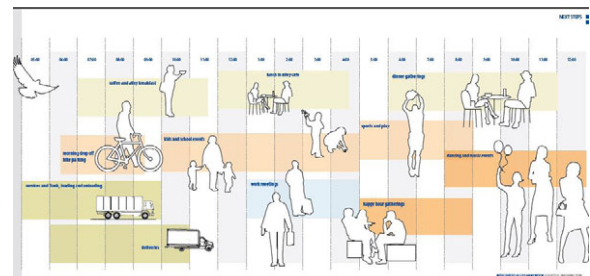
This handbook was created by two interns in Gehl Architects, therefore, it has not implemented yet.

Planning and Design

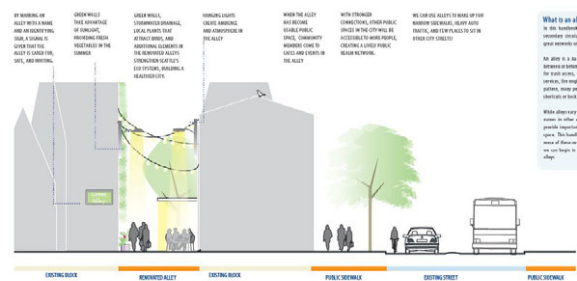
The project categorizes alley types, such as High Density Mixed Use, Low Density Mixed Use, Nightlife District, Commercial District, Multi Family Residential, and Single Family Residential (Mary Fialko and Jennifer Hampton, 2010). The High Density Mixed Use Alley, mainly used for pedestrian pathways and temporary parking, is usually surrounded by tall buildings, and their uses are various such as office, residential, restaurants, retail stores, and parking (Mary Fialko and Jennifer Hampton, 2010). The alley in the Low Density Mixed Use is surrounded by lower buildings with diverse use, and it is usually with plants, gardens, and



Source: Activating Alleys for a Lively City



Source: Activating Alleys for a Lively City



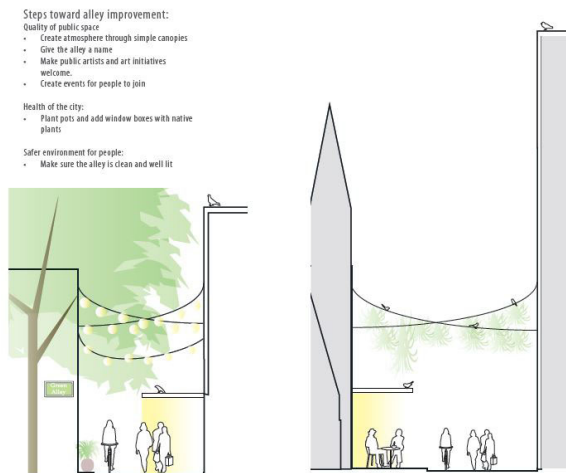
Source: Activating Alleys for a Lively City

parking (Mary Fialko and Jennifer Hampton, 2010). It also receives a lot of sun, so it is a great location for cafes, stores, and other public spaces (Mary Fialko and Jennifer Hampton, 2010). The Nightlife District Alley is active after dark--bars, restaurants, and clubs--so there is potential to extend business (Mary Fialko and Jennifer Hampton, 2010).

The Commercial District Alley has a lot of active retail stores and spaces, so it has potential for local business communities and new store opportunities (Mary Fialko and Jennifer Hampton, 2010). Multi Family Residential Alley is characterized by “Residential usage in adjacent multi-unit buildings” (Mary Fialko and Jennifer Hampton, 2010), and it has

potential for gathering spaces, additional pedestrian passages (Mary Fialko and Jennifer Hampton, 2010). Houses with the Single Family Residential Alley have backyards and the alley connects points within and between blocks. It has potential for green infrastructure, wildlife, and walkability (Mary Fialko and Jennifer Hampton, 2010).

Some field studies were implemented for key elements to make successful alleys, such as walking condition, pedestrians in the streets, existence of lightings, human scale, existence of businesses, and building facade quality (Mary Fialko and Jennifer Hampton, 2010). Another field study was for elements to create quality and enjoyment, such as invitation for interaction, existence of trash containers, existence of plants, primary alley use,



Source: Activating Alleys for a Lively City



Source: Activating Alleys for a Lively City

existence of positive night activities, and existence of drains (Mary Fialko and Jennifer Hampton, 2010).

There are four perspectives to contribute to the activation of alleys. The first perspective is of a designer. Alleys would offer designers influence over the design of the urban environment, and designers would have chance to know alleys potential. It is important to collaborate with other perspectives such as business owners, city officials, and citizens. Another perspective is a business owner. Business owners may realize the alley's potential and may have opportunities to expand their business and connect to communities. There would be other benefits for business owners such as "providing community hotspots and creating cohesion among adjacent businesses" (Mary Fialko and Jennifer Hampton, 2010). A third perspective is of a city official because alleys are usually owned by a city. City officials and planners should support these processes. Transforming alleys would give some benefits to a city such as utilization of public space and treatment of storm water with infiltration. The last perspective is of a citizen. Alleys, as public amenities, would enhance neighbors by giving more choices of activities (Mary Fialko and Jennifer Hampton, 2010).

This project tries to define the keys of successful alleys. It says the keys to successful alleys are quality of public life, ecological health of the city, and a safer environment for people. To achieve those keys of successful alleys, the project identifies categories to consider such as paving, lighting, canopies, plants, opening facades, identity, furniture, water run-off, on-site water treatment, and water collection. Lastly, the project shows what good strategies are for each type of alley.

High Density Mixed Use may use categories such as opening facade, identity, paving, and lighting. Low Density Mixed Use is suggested to adopt furniture, lighting, opening facade, identity, paving, water runoff, on-site water treatment, and canopies. Nightlife Districts should consider identity, lighting, plants, opening facade, canopies, and furniture. Commercial Districts need plants, identity, lighting, and canopies. It was

also recommended to remove or enclose trash to make the alley feel more inviting to people. Multi Family Residential may use identity, lighting, plants, canopies, on-site water treatment, and water runoff. Single Family Residential should adopt planting, paving, on-site water treatment, water runoff, and water collection.

APPENDIX D-19: Melbourne's Revitalized Laneways

Melbourne, Victoria, Australia



Project Type

This goal of this project is to enhance the business on laneways.

Special Feature

N/A



Source: Melbourne's Revitalization Laneways

District: Commercial District

Land Use: N/A

Building Height: N/A

Alley Type: Multiple

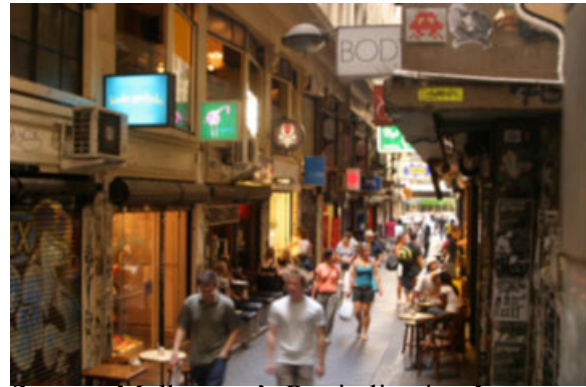
Partners:

- Public Art Program
- City of Melbourne
- Laneway Commissions Program
- Gelh Architecture
- Melbourne City Council
- DG Design Network

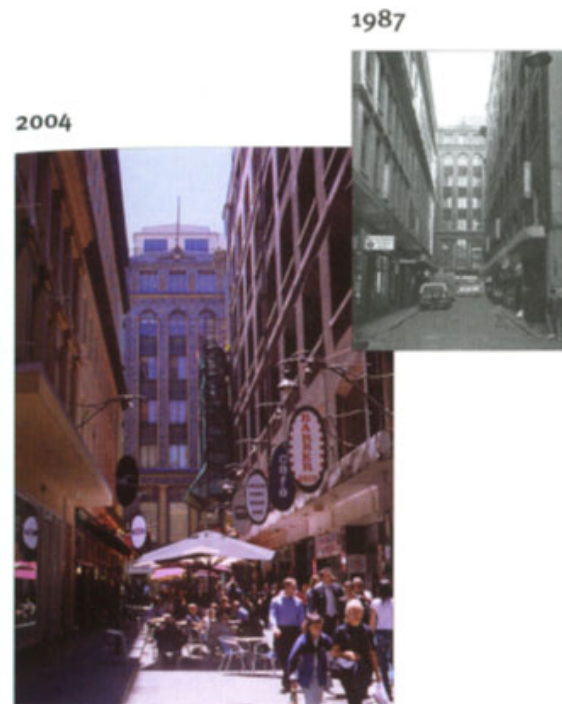
General Description

Over the last thirty years, the city of Melbourne has worked on making vibrant laneways, which had been neglected during the latter half of the last century. Since 1994, the city has increased the amount of active and accessible laneways and arcades from three hundred meters to nearly three and half kilometers. Some of these laneways are mixed-use which offers several pedestrian amenities.

The City of Melbourne established the Laneway Commissions Program in 2001, and this program has put forth effort to transform the neglected laneways into art galleries. Melbourne's Lord Mayor definitely feel that the artwork was successful and they



Source: Melbourne's Revitalization Laneways



Source: Melbourne's Revitalization Laneways

made darker and quieter areas of the city safer.

The lanes in Melbourne Bennetts Lane and Manchester Lane attract the world's biggest Jazz acts, and there are plenty of local talents. Some events were hold within the laneways which encourage many people to go to the city center. One of the most popular events is the St. Jerome's Laneway Festival, an annual music festival that last year attracted over 5,000 people, and which is held in Caledonian Lane and sometimes spreads to adjacent alleys.

The Site

The city has put effort into the revitalization in the City of Melbourne. The main site is the central city, however, the laneway projects are widely implemented in the city.

Financing

N/A



Source: Red tape strangles fledgling lane-way bars



Source: Melbourne's Revitalization Lane-ways

Planning and Design

The revitalized laneways and arcades offer a wide range of pedestrian activities and opportunities, and amenities such as cafes, boutique shops, restaurants, and street arts. The laneway also presents a variety of experiences for the public.



Source; How did Melbourne's 'laneway culture' come about?

Some laneways have been redesigned for safe and attractive entries for residences.

"Melbourne's laneways are still associated with fringe culture" (Sarah Ferreter, Mike Lewis, Mike Pickford, 2008, 3) and the city has tried to bring those cultures into the mainstream. Therefore, applications are accepted to register street art on the laneways.

Various city policies also helps to bring more pedestrian activity. The Melbourne City Council adopted a planning policy, Lanes Policy 22.20 within Amendment C105, in September 2007 (Sarah Ferreter, Mike Lewis, Mike Pickford, 2008, 4). "The policy calls for the preservation or enhancement of connectivity, 24-hour public access, views, active street front—ages, service functions, and pedestrian amenities" (Sarah Ferreter, Mike Lewis, Mike Pickford, 2008, 4). The policy is meant to enhance built form, character of laneways through sensitive and innovative design, to encourage activity, vitality, and interaction between laneways and adjacent private uses at the group level, to enhance pedestrian amenities in the laneways, and to reinforce the primary function of laneways as key pedestrian, service, and access spaces within the central city (Sarah Ferreter, Mike Lewis, Mike Pickford, 2008, 4).

The Laneway Commissions Program annual program accepts proposals for temporary artwork by individuals artists or groups of artists and provides grants for these artists to produce their artwork, while the city maintains the policy to remove illegal graffiti and tagging (Sarah Ferreter, Mike Lewis, Mike Pickford, 2008, 4,5).

As design features of the revitalization of laneways, active frontage, building form, connections, entrances, pedestrian affordances, scale, signage, and sustainability are main focuses. "Range of types attract different crowds" (Sarah Ferreter, Mike Lewis, Mike Pickford, 2008, 6) such as restaurants, boutiques, cafes, clubs, bars, residences, and art installations. "Policy implemented to focus on designing for pedestrian experience" (Sarah Ferreter, Mike Lewis, Mike Pickford, 2008, 6) is considered as active frontage. "Addressing second-floor building facades" (Sarah Ferreter, Mike Lewis, Mike Pickford, 2008, 6) and "retention of heritage streetscapes" are focuses of building form. Connections aim to "provide important North-South connections in the dense city center" (Sarah Ferreter, Mike Lewis, Mike Pickford, 2008, 6) and "expands the city's pedestrian network" (Sarah Ferreter, Mike Lewis, Mike Pickford, 2008, 6). "Alleys provide entrances to retail and residential facilities", and "gateways to lanes appear discrete and invite exploration" are taken into consideration as entrances. Regarding to scale, "awning and seating establish a human scale in the narrow lane" and setbacks reduce downdraft are counted. "Some lunchtime lane closures reduce vehicular traffic" and "provide opportunity for increase in outdoor cafe seating", and the variety of seating, benches, awning, and paving are the design feature of pedestrian affordances. The design feature of signage are that "visible signs coincide with existing character of lane", that "laneways have unique names and corresponding signage", and that "generally, business signs along alley are same size and height". The last consideration of design feature is sustainability. It is "facilitate increased density by stacking functions" and "expanding businesses without making new roads" (Sarah Ferreter, Mike Lewis, Mike Pickford, 2008, 6).

APPENDIX D-20: Laneways Business Development Program

Sydney, Australia

Project Type

This project is to enhance the business on laneways.

Special Feature

N/A

District: Central Business District

Land Use:

Building Height:

Alley Type: Commercial District

Partners:

- The Council of the City of Sydney

General Description

The focus of the Laneways Business Development Program is Fine Grain.

“Finegrain businesses are small scale, diverse, and innovative businesses that are likely to be engaged in special retail, hospitality and entertainment or will otherwise encourage activation of underused spaces in city laneways and plazas with business activity that is currently under supplied or non extent in the city centre” (POLICY, GRANTS AND SPONSORSHIPS, 2010) (Finegrain matching grants, 2013).

There are certain processes to understand when applying for this program. Instead

of considering “program objective, eligibility of the criteria, and businesses 1-2-3 framework object” (Laneways Business Development Program: Matched funding up to \$30,000, 2008) There are several guidelines created for the program such as: “The purpose of these guidelines are to assist potential applicants determine their sustainability to apply for assistance under the Laneway Business Development program, and to provide relevant information should they choose to apply for support” (Laneways Business Development Program: Matched funding up to \$30,000, 2008) (Before applying: grand finding support through the Laneway Business Developing programs, a pre-application meeting with the city’s Laneways & Small Bars Businesses Development Coordinator).

The Site

The Sydney CBD area is the targeting area.

Financing

The finding for this program is up to \$30,000. Up to this much funding will be considered for this.

Planning and Design

At first, there would be rigid assessment of the application such as business plans and economic visibility to determine if a particular business proposition is related enough to the criteria to be supported. And if so, what extent and what type of support will be provided would be considered. Before potential applicant apply the program, grand finding support through the Laneway Business Development Programs would be considered, and a pre-application meeting with the city’s Laneways & Small Bars Business

Development Coordinator would take place. The proposition of these guidelines would help potential applicants determine their sustainability to apply for assistances under the Laneways Business Development Program--which helps them to decide which program they should apply for (Laneways Business Development Program: Matched funding up to \$30,000, 2008).

There are some strategies to achieve this program. There are several strategic projects in the program that support small business, such as a dedicated Laneways and Small Bars Business Development Coordinator to administer the program, referral to the Sydney Business Enterprise Centre to establish the network and to provide information and services, Capital Works and Improvements to implement the program and to create design principles for laneways, working towards the Establishment of Shared Zones (which includes measurement of temporary road closure and ten kilometer per hour speed limit), and Marketing and Promotion Opportunities to let people know the program by media (Laneways Business Development Program: Matched funding up to \$30,000, 2008).

This program aims to support new and existing small businesses in locating and prospering in the laneways precincts of the city centre: “businesses contribute to achieving the broad aims of the Sustainable Sydney 2030 strategies to create a Green, Connected, and Global Sydney” (Laneways Business Development Program: Matched funding up to \$30,000, 2008). Specifically, this program was purposed to endorse businesses “that contribute to developing a lively and engaging city centre and enhance a global competitive and innovative city by” (Laneways Business Development Program: Matched funding up to \$30,000, 2008): (1) Improving existing or developing “new finegrain precincts with specialized retail, hospitality, entertainment, or other appropriate business activities”(Laneways Business Development Program: Matched funding up to \$30,000, 2008); (2) strengthening the finegrain of the city in streets and lanes a mean of draught, attracting more people and bringing life to the city centre; (3) enabling “existing blank edges in

streets, laneways, empty plazas or other city spaces with new uses and/or providing new activities in the fine spaces of the city centre” (Laneways Business Development Program: Matched funding up to \$30,000, 2008); (4) supplying a business activity/offering that is underused in the city centre, that draws people; (5) providing “balance of day and night time activity with diverse and distinctive economic and community benefit” (Laneways Business Development Program: Matched funding up to \$30,000, 2008); (6) Utilizing temporal or long term vacant space for new or creative spaces; and (7) providing support to new and up-and-coming businesses (Laneways Business Development Program: Matched funding up to \$30,000, 2008).

There are eligibility criterion when applying for this program. The Laneway Business Development programs focus on small businesses and they will demonstrate their possibilities and their activities that contribute to the program objectives and how they meet the eligibility criterion--such as that the small business must be located a laneway precinct within the Sydney CBD area, that the small business has less than 20 workers, that “the applicant is an Australian Citizen or permanent resident of Australia and the business/company is registered in Australia” (Laneways Business Development Program: Matched funding up to \$30,000, 2008), and that “the applicant hold approved Development Consent and all required operating licenses, or has lodged such applications” (Laneways Business Development Program: Matched funding up to \$30,000, 2008). The applicants must need to make a matched contribution to the business venture’s requirements. The contribution invests in businesses and “refers to cash only” (Finegrain matching grants, 2013). The contribution must not be obtained through any other subsidy from state, territory, or federal governments.

How the program works:

The city of Sydney assessment panel carries out a viability and risk assessment.

1. Concept
2. Business ready
3. Growth.

written applications are not required for the concept proposal.

Business development, training, and mentoring assistance.

BEC are designed to facilitate the creation, retention, and development of sustainable business enterprises, and to foster local economic development.

- Developing business plans, marketing plans and cash flow models.
- Participate in ongoing training and mentoring as a condition of the grant funding.

Matched fund

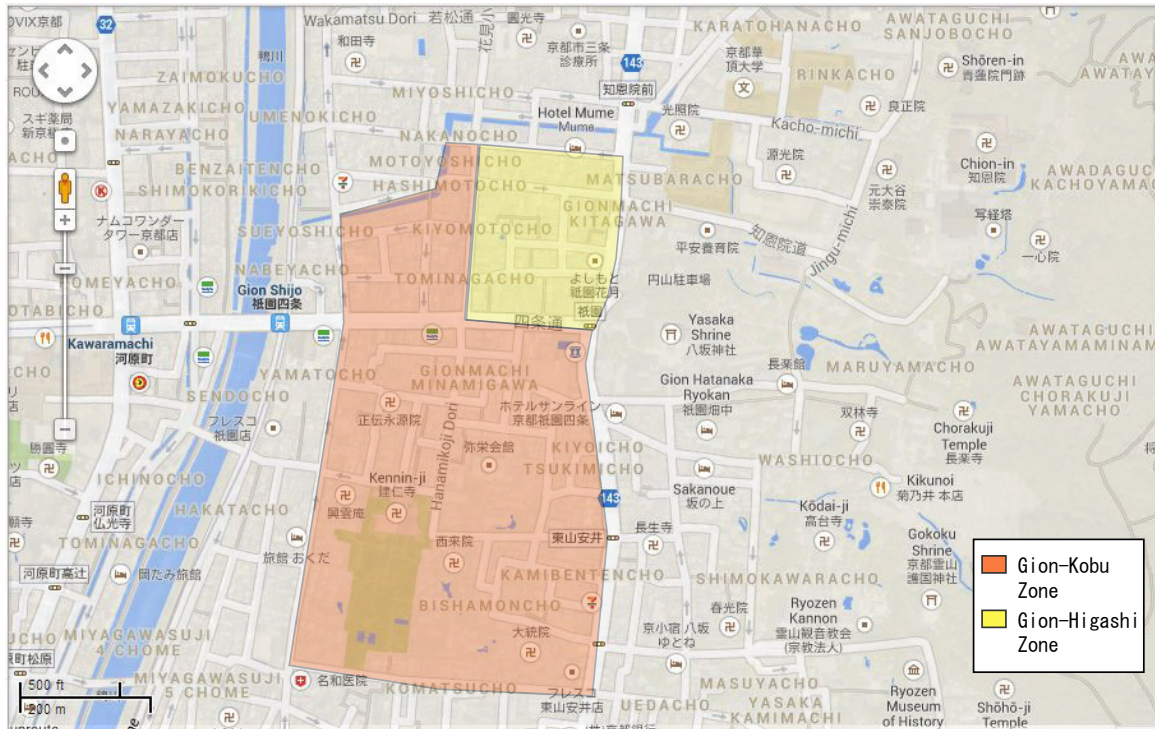
Contribution to the business for which funding is sought.

What can the matched cash grant be used for?

- Cost associated with capital improvements, equipment, improving the façade and fit out of the business premises
- Cost associated with the purchase of specialist software directly related to the establishment of the business
- Contributing 50% of costs associated with identified training and development programs, to a maximum of 10% the grant
- Not more than 10% of the cash grant can be used for approved marketing and promotion activity

APPENDIX D-21: The Planned Alleys in Gion

Gion, Kyoto, Japan



Project Type

Hanamachi

Special Feature

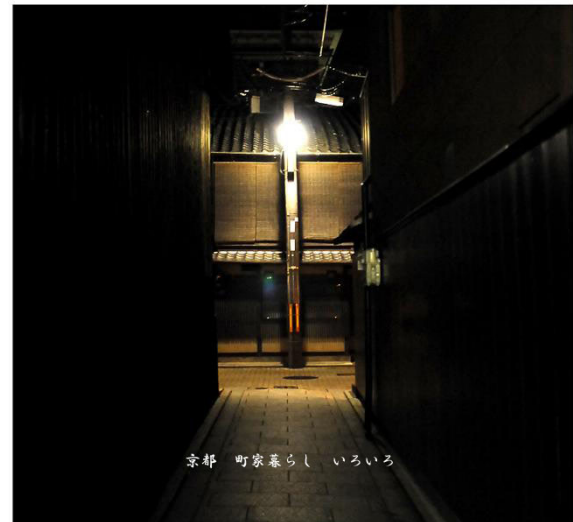
This is built to connect to shrines and temples.

District: Hanamachi (Portmanteau)

Land Use: N/A

Building Height: N/A

Alley Type: Originally Arranged Alley



Source: Album of various banner Life of the row house in Kyoto (Kyoto Nagaya Kurashi Iroiro na banner de Shashinshu)

Partners:

- N/A

General Description

There are some kinds of alley in Japan because of its history. One of them is the planned alley (Shiturae no roji), which is different from alleys created in spaces created between row houses. The planned alley always has a destination that is developed in spaces around shrines and temples. They have been used as a kind of amusement to get to and from destinations (Nishimura, 2006, 28).

One of the significant differences between the planned alley and other alleys are their borders between buildings and the alley (Nishimura, 2006, 28). The alleys in residential areas in Japan and the planned alleys have clear differences. The planned alleys approach the shrine with some specific characteristics such as granite pavement, black fence, and some small retails as opposed to other alleys with spontaneously created characteristics. The normal alleys do not have clear borders between the buildings and an alley. These borders of other alleys are likely to be slightly curved, and the unclearness of the borders are usually made by the neighbor's life such as



Source: Gion Roji (Gion Alley)



Source: Kyoto end of the day



Source: Blooming Cherry blossom at an Alley in Gion (Sakurasaku Gion no Roji)

potted plants, backyard, bikes, hang drying of clothes, and so forth (Nishimura, 2006). The unclearness often works as an enhancement of neighborhoods and is often seen in some strong alley neighborhoods such as Jokamachi (castle town in Japan); however, the borders for the planned alley are likely to be straight because of the effect of shrines and temples. The planned alley is composed of a combination of straight lines. Another difference between planned alleys and other alleys is flexibility such as dotted lines and extra spaces at the normal alleys; however, the planned alley does not have such things. The planned alley is extruded more. The third difference is the quality of the back of the alley. The normal alleys clearly have front and back. The planned alley is located behind the buildings since it is an alley; however, it acts like it is a facade (Nishimura, 2006, 29). The fourth difference is change by seasons. In the regular alley, the seasons can be identified by the color of plants and trees. On the other hand, you must view the color of the sky to recognize seasons in the planned alley. The fifth difference is its structure. The planned alley is not a simple structure. The



Source: Alleys along Hanamikoji, Gion

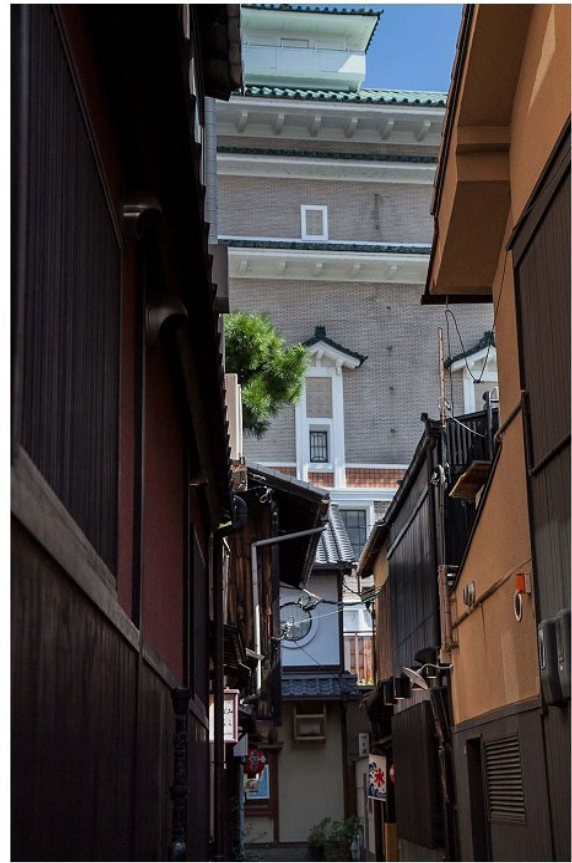


Source: I quited Maiko

corners are cut as acute angles and both sides of the buildings faces are arranged to shift their axial centers towards each other (Nishimura, 2006, 30).

The Site

Gion used to be a town in front of the gate of Yasaka shrine. The tea stores showed up for visitors around the beginning of Edo era (1603~1867), and later in the tea stores gradually improved their accomplishments. The areas were divided into two in the beginning of Meiji era (1868~1911). The alley used to be a code-



Source: Alleys along Hanamikoji, Gion

sac by Shinbashi Street, North end, and Kenji Temple, Southwest end, therefore the alley used to have full of tea smell. During the World War II, the North of Hanami Koji Street was fired, and it became wider street. Therefore, the characteristics of the street and the wider streets have showed up through all one's fortunes. However, the Hanamachi's atmosphere has still been existing at alleys (Nishimura, 2006, 35). During the World War II, the North of Hanami Koji Street was fired, and it became a wide street. Therefore, the characteristics of the street and the wider streets have showed up through all one's fortunes. However, The wider streets showed up through all one's fortunes; however, the Hanamachi's atmosphere has still been existing at alleys (Nishimura, 2006, 35).

Financing

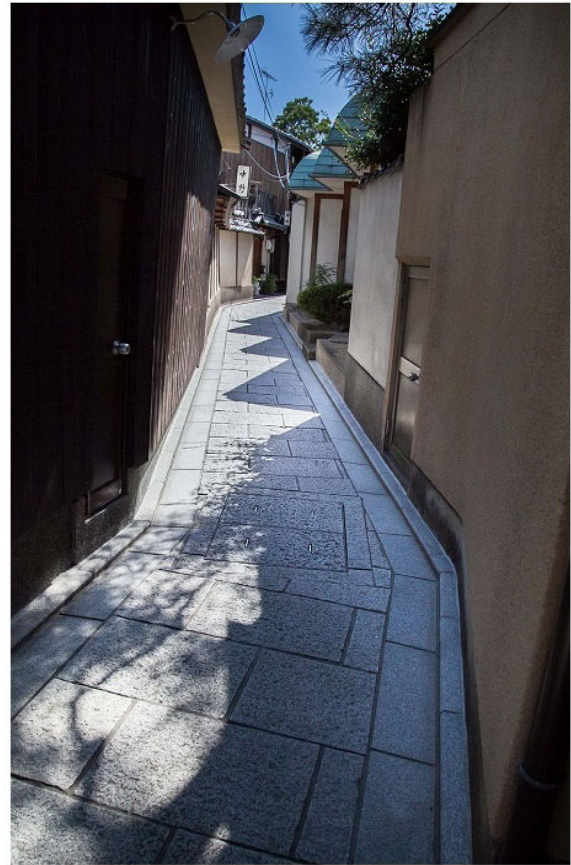
N/A

Planning and Design

The zoning of the north of the area is the traditional buildings preservation district. There are alleys paved by Mikage stones, therefore, the zoning and Mikage stones make the area emotional places.

On the other hand, the south of the area is used for a historical street view preservation district; however, it is full of people in the daytime. This demonstrates that it is not like traditional places. The alleys which are usually less than three meters

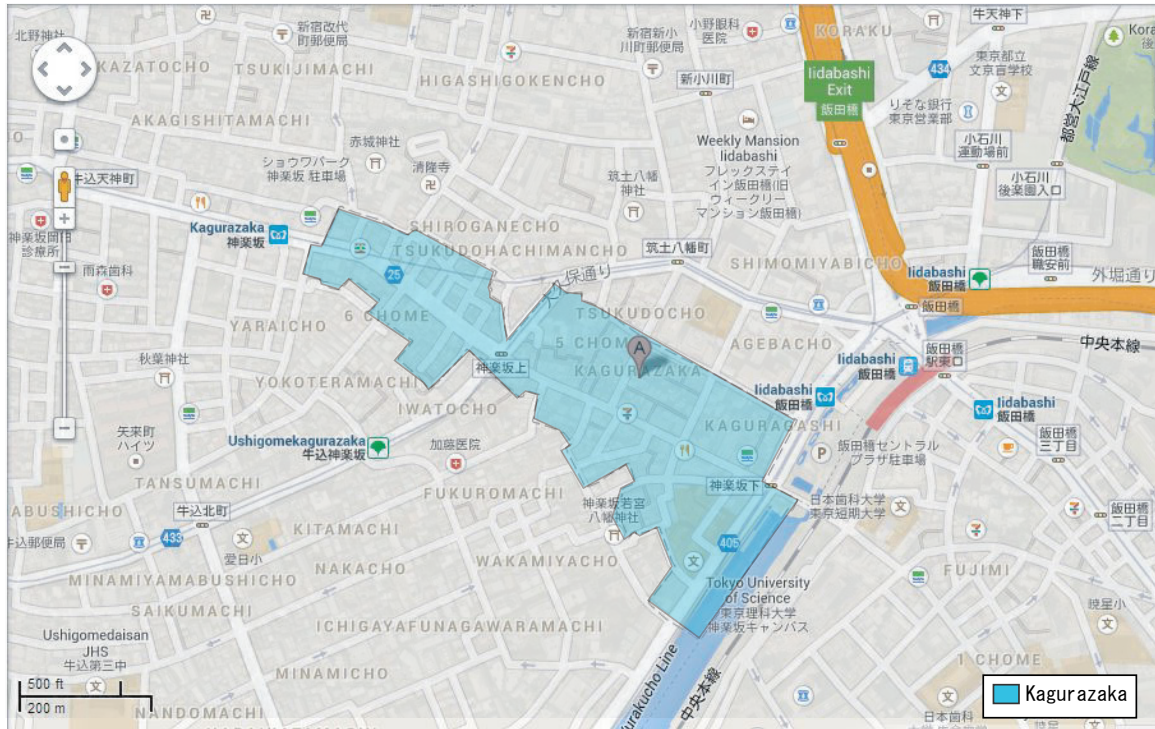
(9.8 ft) in the district, take on traditional characteristics during the daytime rather than the town's because of its silence (Nishimura, 2006, 36). The alleys in Kagurazaka, Tokyo, do not have space for bicycles or motorcycles, but alleys in Gion, Kyoto, and Pontocho, Kyoto, have such kinds of space (Nishimura, 2006, 36).



Source: Alleys along Hanamikoji, Gion

APPENDIX D-22: The Planned Alleys in Kagurazaka

Kagurazaka, Tokyo, Japan



Project Type

Hanamachi (called Karyukai in Tokyo)

Special Feature

This is built to connect to shrines and temples

District: Hanamachi (Portmanteau)

Land Use: N/A

Building Height: N/A



Source: Kagurazaka Hyogo Yokocho



Source: Interior Design Room Blog

Alley Type: Originally Arranged Alley

Partners:

- N/A

General Description

There are some kinds of alley in Japan because of its history. One of them is the planned alley (Shiturae no roji), which is different from alleys created in spaces created between row houses. The planned alley always has a destination that is developed in spaces around shrines and temples. They have been used as a kind of amusement to get to and from destinations (Nishimura, 2006, 28).

One of the significant differences between the planned alley and other alleys are their borders between buildings and the alley (Nishimura, 2006, 28). The alleys in residential areas in Japan and the planned alleys have clear differences. The planned alleys approach the shrine with some specific characteristics such as granite pavement, black fence, and some small retails as opposed to other alleys with spontaneously created characteristics. The normal alleys do not have clear borders between the buildings and an alley. These borders of other alleys are likely to be slightly curved, and the unclearness of the borders are usually



Source: Kagurazaka Tori Great Landscape



Source: Kagurazaka Geisha Street

made by the neighbor's life such as potted plants, backyard, bikes, hang drying of clothes, and so forth (Nishimura, 2006).

The unclearness often works as an enhancement of neighborhoods and is often seen in some strong alley neighborhoods such as Jokamachi (castle town in Japan); however, the borders for the planned alley are likely to be straight because of the effect of shrines and temples. The planned alley is composed of a combination of straight lines. Another difference between planned alleys and other alleys is flexibility such as dotted lines and extra spaces at the normal alleys; however, the planned alley does not have such things. The planned alley is extruded more. The third difference is the quality of the back of the alley. The normal alleys clearly have front and back. The planned alley is located behind the buildings since it is an alley; however, it acts like it is a facade (Nishimura, 2006, 29). The fourth

difference is change by seasons. In the regular alley, the seasons can be identified by the color of plants and trees. On the other hand, you must view the color of the sky to recognize seasons in the planned alley. The fifth difference is its structure. The planned alley is not a simple structure. The corners are cut as acute angles and both sides of the buildings



Source: Kagurazaka Tori Great Landscape



Source: Interior Design Room Blog

faces are arranged to shift their axial centers towards each other (Nishimura, 2006, 30).

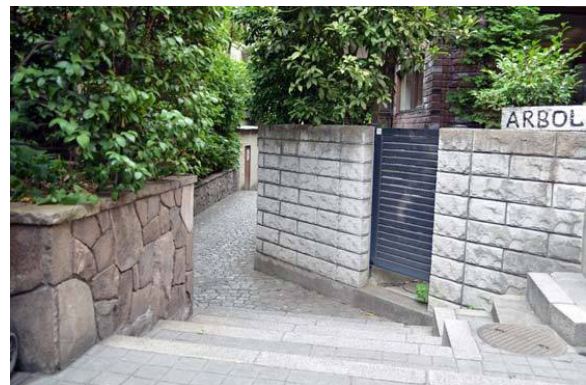
The Site

Kagurazaka is located on an undulated hill and near Tokyo University of Science (west) and Idabashi stations (south) creating steepness to its location. Kagurazaka is a shopping street having some street trees, streetlights, and several alleys. These alleys have totally different characteristics and atmosphere from the street. Kagurazaka has a main street or boulevard, Side Street, and alleys. They are systematically organized with the hill and therefore the flows of pedestrians are controlled. The bustle got removed from alleys by this control, which brought varieties into the area. This control is caused by not only the system, but also the width of alley, which automobiles cannot access (Nishimura, 2006). Kaguraza has been formed while it extended and branched since the Edo era (1603~1867).

Financing



Source: Kagurazaka Great Black Fence



Source: Kagurazaka Tori Great Landscape

N/A

Planning and Design

One of the strong characteristics of the planned alley in Kagurazaka is the black fence. For the Japanese people, it makes alleys mysterious and rigid because of Japanese history (Nishimura, 2006, 30). Another characteristic is the granite curbstones (90x90x90mm, 90mm=3.5433070866 inch), which is likely derived from paving materials in Europe. The same kinds of alley in other cities in Tokyo still need Mikage stone (expensive granite). The planned alleys in Kagurazaka changed to a cheaper stone in 1950s~1960s. The corroboration of the back fence and the granite curbstone makes street view stylish and solemn. The third characteristic is its size. its width is one ken to one and a half ken (1 ken is approximately 1.8181818 meter, or about 6ft). This width makes pedestrians feel an unlimited space in comparison to limited spaces of other alleys (Nishimura, 2006, 31).

Pavements of granite curbstones or slates are enclosed by black fences and mud walls, and there are Japanese style restaurants and cuisines (Nishimura, 2006, 72). These



Source: Kagurazaka & Bishamonten



Source: Kagurazaka Hyogo Yokocho

places' entrances are uniquely designed and gardens are beautiful. The black fences hide these hidden beauties, however, the trees covering sky are still visible above the fences. The hidden part will be seen if people go inside and it gives surprise to people visiting these restaurants. There are many parts of surprising are concealed by the fence.

An alley's attraction must not simply talk about hard characteristics, but also soft characteristics like architectural design, fragrant rooms, people working there, and their services such as the very well-coordinated high class Japanese style restaurants (Nishimura, 2006, 32). The alleys in Kagurazaka, Tokyo, do not have a space for bicycles or motorcycle, but alleys in Gion, Kyoto, and Pontocho, Kyoto, have such kinds of spaces (Nishimura, 2006, 36).

The preservation district for Groups of Traditional buildings and the Historical Landscape Preservation and Improvement District has preserved Hanamachi in Kyoto; however, Hanamachi of Tokyo have not been protected by these districts (Nishimura, 2006). Instead of no preservation district for Hanamachi in Tokyo, Kaguraza has still kept its refinement. This is different from other alleys because there is no



Source: Kagurazaka & Bishamonten



Source: Kagurazaka Hyogo Yokocho

preservation of alleys in Kagurazaka. Kagurazaka is popular and there are several enterprises that tried to take part in its popularity. Because of this, there have been many conflicts between these enterprises and fans of the area (Nishimura, 2006). Another problem is the disaster prevention. Since the alleys in Japan are narrow and alleys are defined by its width, there have been problems with disaster prevention. The Building Standard of Act has dealt with this problem by widening these alleys; which ultimately means removal of these alleys. Widening the street would enhance disaster prevention, but Nishimura (2006) mentions that a stronger community also helps toward the disaster prevention. Therefore, the communities organized by alleys may enhance the disaster prevention (Nishimura, 2006).

Around Kakurazaka, there are alleys making a lived-in feel, but it shows a different face from the Castle town (Jokamachi) because of its history. These still remain with the identity of Kagurazaka (Nishimura, 2006).



Source: Kagurazaka Tori Great Landscape



Source: Kagurazaka my stone pavement, walking around Alleys (Kagurazaka jibundakeno ishidatami Rojiurasansaku)

APPENDIX D-23: Good Alleys in other cities

APPENDIX D-23-1: Greece

Commercial

Syros, Island, Cyclades

This Alley considered how the colors effect the environment. The signs, buildings, alley materials, and furniture are well-unified.



Source: <http://www.flickr.com/photos/11701426@N05/1396253245/>

Under the Acropolis, Plaka, Athens

Parasols and small furniture show that there are some restaurants and other activities going on-- even though there are signs of it. This is one of the good examples of how the steps could be used.



Source: <http://www.pinterest.com/pin/139541288425614194/>

Residential

Nafplio, Peloponnese

Plants, trees, and signs significantly change the atmosphere of the alley.



Source: <http://elladaa.tumblr.com/image/61497918879>

Nafplio, Peloponnese

The signs, small furniture, plants, and trees make an alley a comfortable space.



Source: <http://www.flickr.com/photos/lv-wei1123/3598578613/>

Chaina, Crete Island
The picture was taken in 1927.



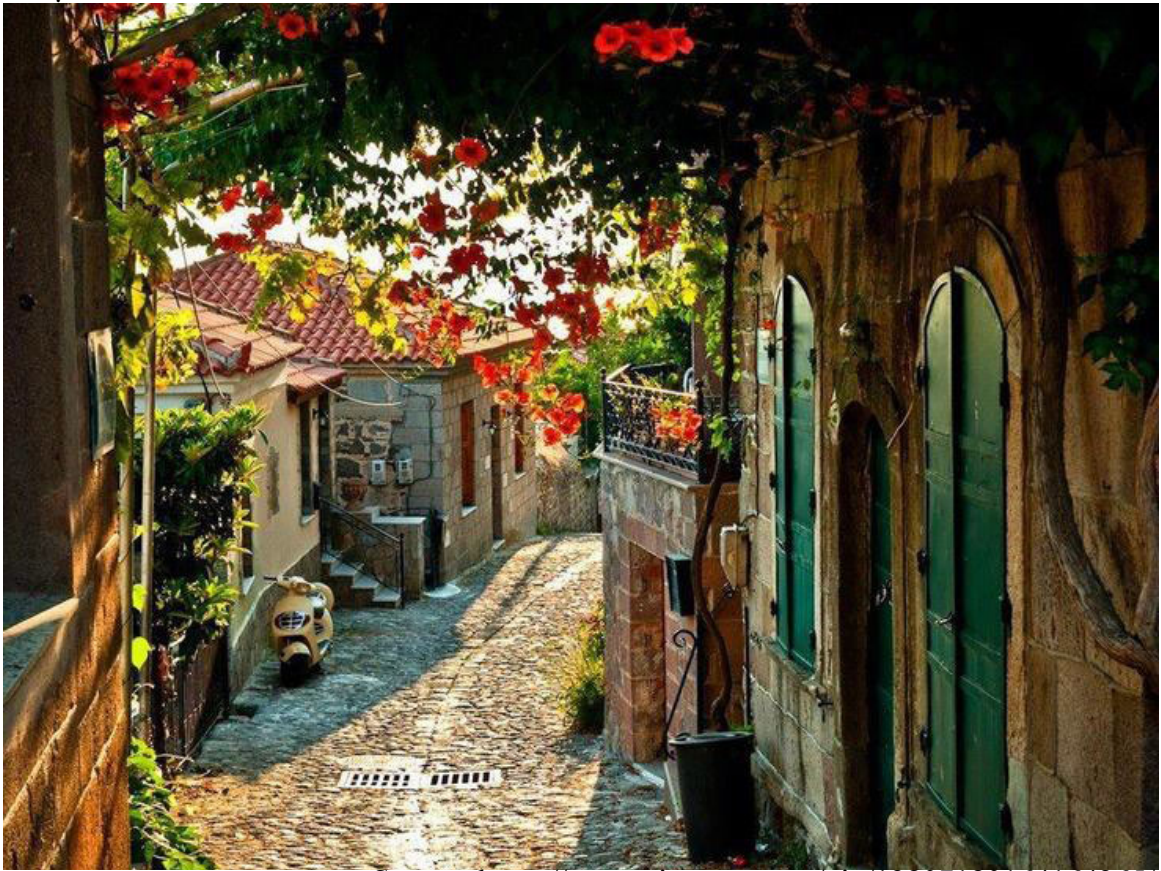
Source: <http://www.pinterest.com/pin/165225880050924048/>

Aegean islands
The alley is adventurous because of its form.



Source: <http://bungalowclassic.tumblr.com/post/50413874707>

Molybos, Lesvos Island



Source: <https://www.pinterest.com/pin/12807180164164265/>

Other

Alonissos Island



Source: http://www.greekimages.co.uk/sporades/alonissos/pages/2009-08-24_16.htm

Syros Island, Greece



Source: <http://lacrisalideinversa.tumblr.com/post/61107193671>

Santorini, Emporio village



Source: <http://24.media.tumblr.com/41a46279cd521fbd5d32adba82f14044/>

Serifos Island



<http://www.flickr.com/photos/31486920@N08/2941988247/>

Chania, Crete island, Greece



Source: <http://500px.com/photo/52990724>

APPENDIX D-23-2: Spain**Commercial**

Toledo, Spain



Source: <http://www.flickr.com/photos/josemariamorenogarcia/4697878070>

Residential

Marbella street, Spain

The alley shows good atmosphere for local retails and residents. The lines on the alley are identified by different materials, and each material has good effects on comfort. Small signs and parasols and even small furniture help to attract people.



Source: <http://500px.com/photo/15977523>

Street in Cordoba, Spain

Lines on the alley were made by difference of design pattern. Design of lumps, plants, building, and alley materials to help create a good atmosphere in the alley. The alley is curbed and there is a small skybridge, which makes the destination invisible. It also stimulates people.



Source: <http://500px.com/photo/37133222>

Flowers Street, Cordoba, Spain



Source: <http://500px.com/photo/5095476>

Luz de Sevilla, Spain



Source: <http://500px.com/photo/8628367>

Street in Cordoba, Spain
The alley is composed of same materials, which helps create unity. It also shows the neighbors' lives--which makes people feel warmer (emotionally).



Source: <http://500px.com/photo/3082531>

Streets of Castellar de la Frontera in southern Spain



Source: <http://www.flickr.com/photos/lotharwilhelm/5856249469/>

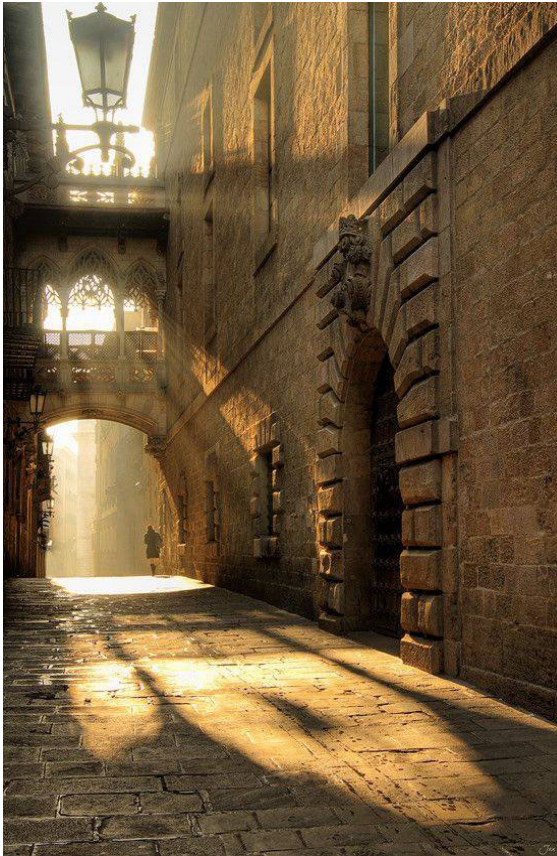
Mallorca, Valldemossa, Spain
Paving materials and building materials strongly influence on an alley's atmosphere.



Source: <http://www.flickr.com/photos/graef/3755423574/>

Other

Barcelona, Spain



Source: <http://500px.com/photo/35535664>

Barrio Santa Cruz, Seville, Spain



Source: <http://500px.com/photo/8629833>

APPENDIX D-23-3: France**Residential**

Rue des Fleurs, Eguisheim, Alsace, France



Source: <http://www.barloga.com/collections/france-alsace/products/rue-des-fleurs-egusheim-alsace-france-1>

The streets of Saint-Cirq-Lapopie, France
The alley of Saint-Cirq-Lapopie, elected the most beautiful village in France in the year of 2012, has unified signs and building materials.



Source: <http://www.pinterest.com/pin/272045633712248636>

Eguisheim, Alsace, France
Alleys in Eguisheim are full of green by the residents.



Source: <https://www.facebook.com/photo.php?fbid=583646488338830&set=a.276383019065180.58430.270474096322739&type=1&theater>

Riquewihr, France



Source: <http://www.flickr.com/photos/robphoto/2649051111/in/set-72157606049658606>

APPENDIX D-23-4: Ireland**Commercial**

Cobblestone street in Galway, Ireland

The lights, furniture, colors, buildings materials signs, and decorations work together to create this great atmosphere.

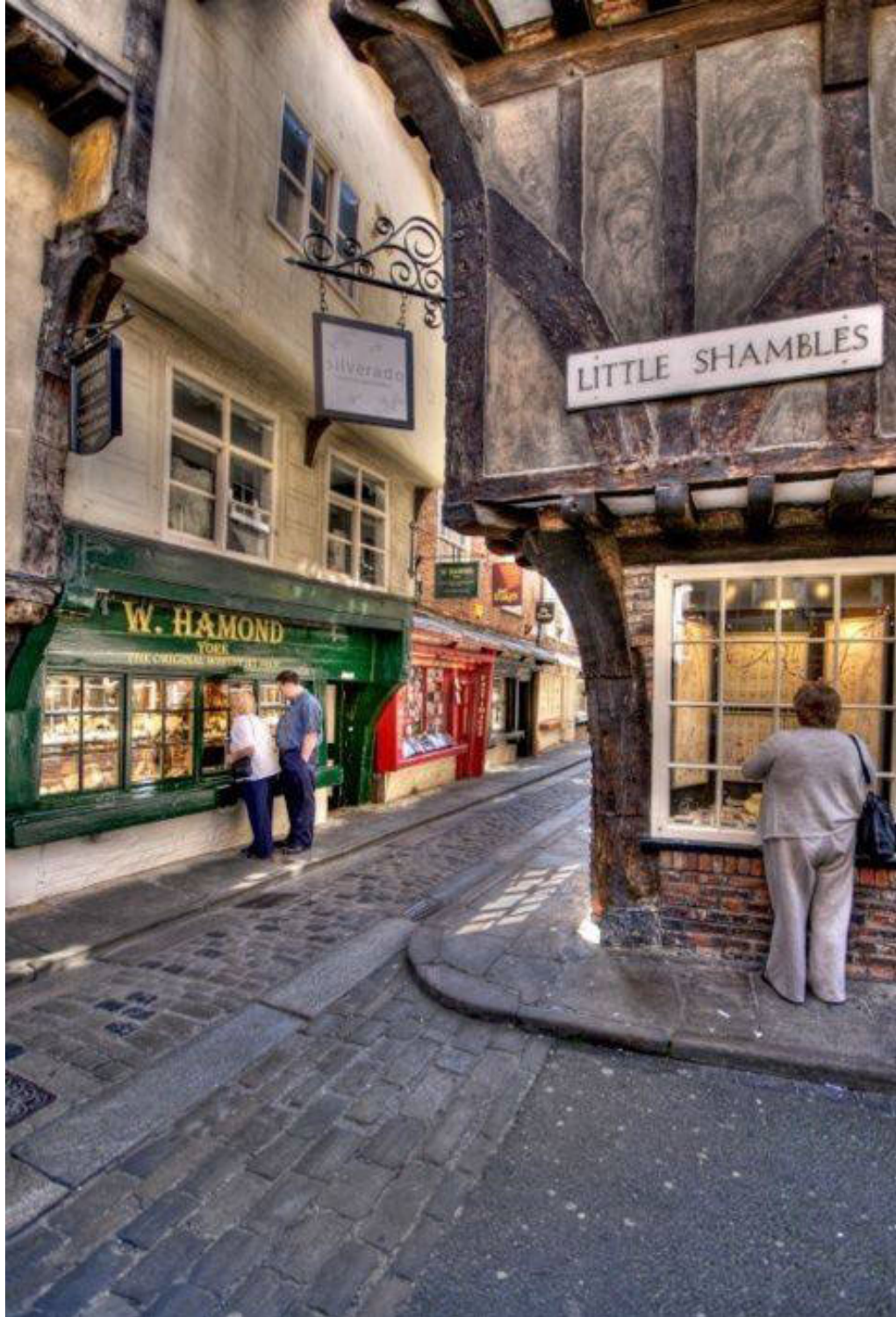


Source: <http://www.pinterest.com/pin/239535273901871519//>

APPENDIX D-23-5: England**Commercial**

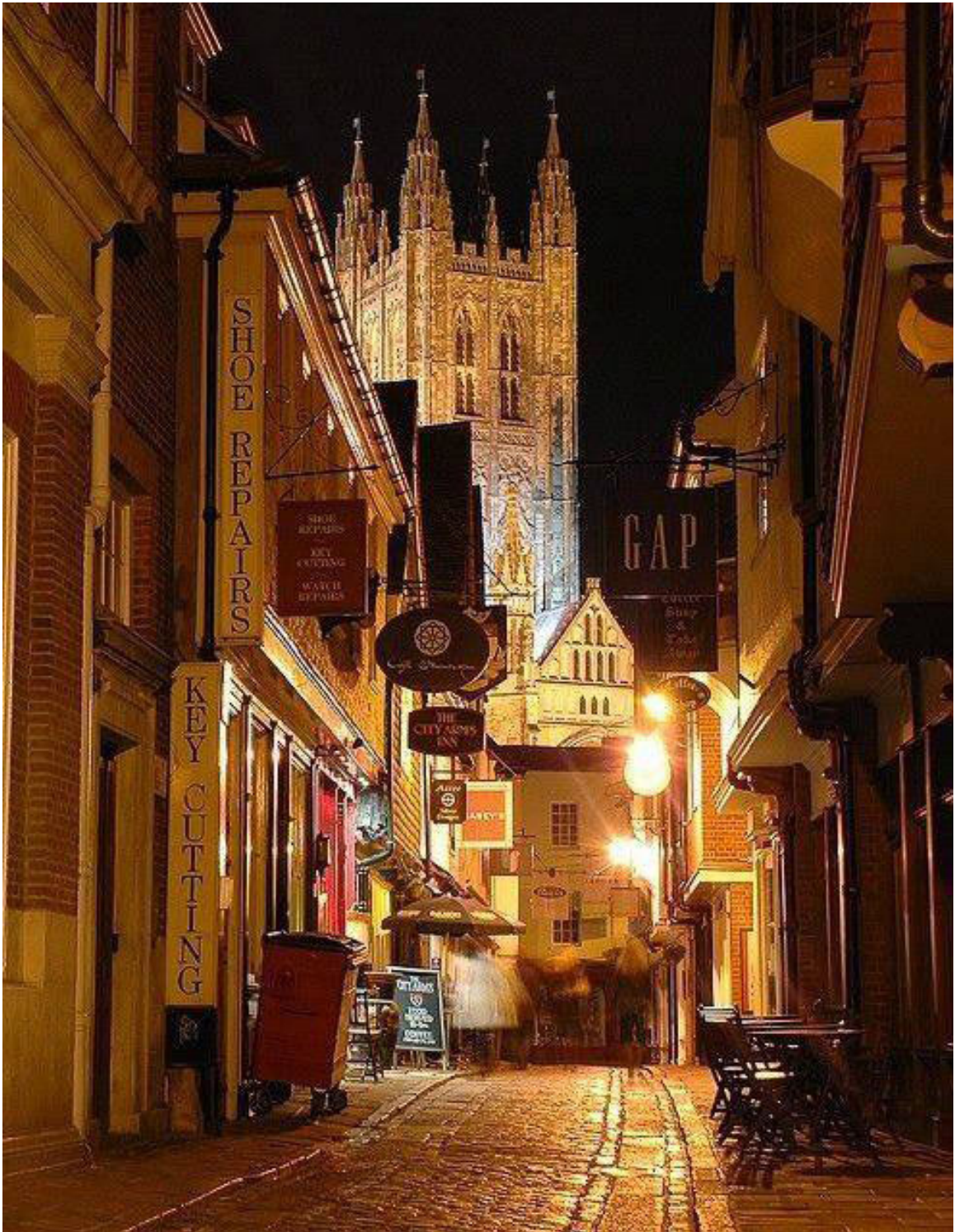
The Shambles Street, York, England

It is one ne of the best preserved medieval streets in the world.



Source: <http://www.pinterest.com/pin/239535273901867399/>

Canterbury, England



Source: <https://www.pinterest.com/pin/450922981412072207/>

Residential

Medieval buildings in York, England



Source: <http://www.talktyria.net/wp-content/uploads/2011/02/york.jpg>

The Cobbles Tea Room, Rye, East, Sussex, England



Source: <http://www.pinterest.com/pin/61291244901990806/>

APPENDIX D-23-6: Italy**Other**

Taormina Alley of Masks, Taormina, Italy



Source: <http://www.flickr.com/photos/74075989@N00/4822663045/lightbox/>

Venice, Italy



Source: <http://www.pinterest.com/pin/139541288425337103/>

Ancient streets of Locorotondo, Bari, Italy



Source: <https://www.facebook.com/photo.php?fbid=538481236237368&set=a.154773407941488.40075.153345424750953&type=1&theater>

APPENDIX D-23-7: Germany**Commercial**

Baden-Württemberg, Germany



Source: <https://www.facebook.com/photo.php?fbid=540365462709886&set=a.206969942716108.52647.205930019486767&type=1&theater>

APPENDIX D-23-8: Austria**Other**

Viena, Austria

Source: <http://www.pinterest.com/pin/234820568044620071/>

APPENDIX D-23-9: Turkey**Other**

Çeşme, İzmir, Turkey

The alley has many benches. Sittable spaces are important factor to attract people into a public space.



Source: <https://www.facebook.com/photo.php?fbid=627610173929156&set=a.253552468001597.57200.253478764675634&type=1&theater>

APPENDIX D-23-10: Tunisia**Other**

Sousse, Tunisia



Source: <https://www.facebook.com/Tunisia.Architecture>

Sousse, Tunisia



ROBERT JANOVSKI © 2008

Source: <https://www.facebook.com/photo.php?fbid=501623829935013&set=a.128201210610612.22351.127538147343585&type=1&theater>

Sousse, Tunisia



Source: <https://www.facebook.com/photo.php?fbid=503125809784815&set=a.128201210610612.22351.127538147343585&type=1&theater>

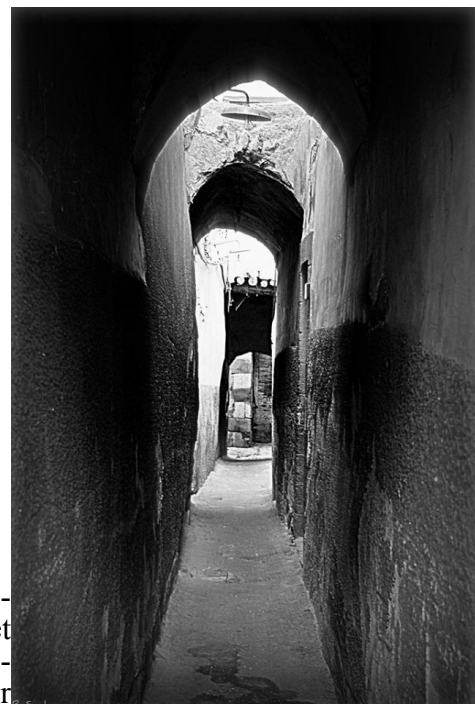
APPENDIX D-23-11: Syria**Other**

Damascus, Syria



Source: <https://www.facebook.com/photo.php?fbid=588104357921831&set=a.243935602338710.58530.210019169063687&type=1&theater>

Damascus, Syria



Source: <https://www.facebook.com/photo.php?fbid=595479973850936&set=a.243935602338710.58530.210019169063687&type=1&theater>

APPENDIX D-23-12: Romania**Other**

The Rope Street, Brasov, Transilvania, Romania

It was mentioned in the 17th century's documents as a simple corridor to help the fire-fighters. The Rope Street varies as width between 1.11 and 1.35 m (approximately 3.64 and 4.42 ft), which gives it the title of "The Narrowest Street of Brasov".



Source: <https://www.facebook.com/photo.php?fbid=747015468648061&set=a.752639328085675.1073741884.514994165183527&type=1&theater>

APPENDIX D-23-13: Australia**Events**

Chippendale, City of Sydney

BEAMS Arts Festival in Chippendale will showcase the incredible pool of talent and innovative business in one of Sydney's most energized creative local precincts



Source: <https://www.facebook.com/photo.php?fbid=10151702557783892&set=a.10151702557373892.1073741861.36002998891&type=1&theater>

APPENDIX D-23-14: Morocco**Commercial**

Morocco

Source: <http://www.pinterest.com/pin/272045633712244758/>

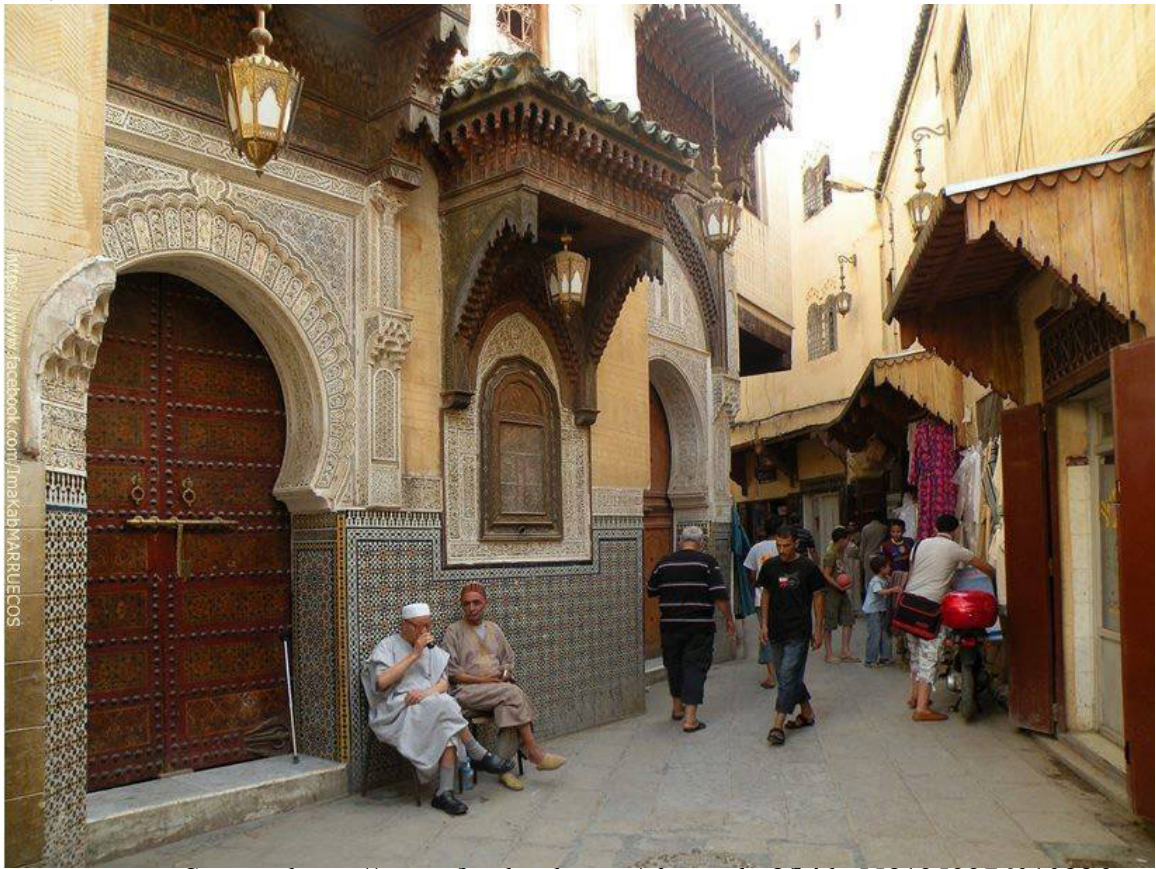
Other

Chaouen, Morocco



Source: <https://www.facebook.com/photo.php?fbid=563442357069385&set=a.181067561973535.48529.180868291993462&type=1&theater>

Fez, Morocco



Source: https://www.facebook.com/photo.php?fbid=558125327601088&set=a.181067561973535.48529.180868291993462&type=1&relevant_count=1

APPENDIX D-23-15: USA**Commercial****Historic Districts in Manhattan, New York, USA**

Sniffen Court is located on E 36th Street between 3rd Avenue and Lexington Avenue in Murray Hill. This alley is hidden by an iron gate at the end of the alley. There are ten carriage houses, built by John Sniffen between 1863 and 1864. They were eventually converted into apartments.

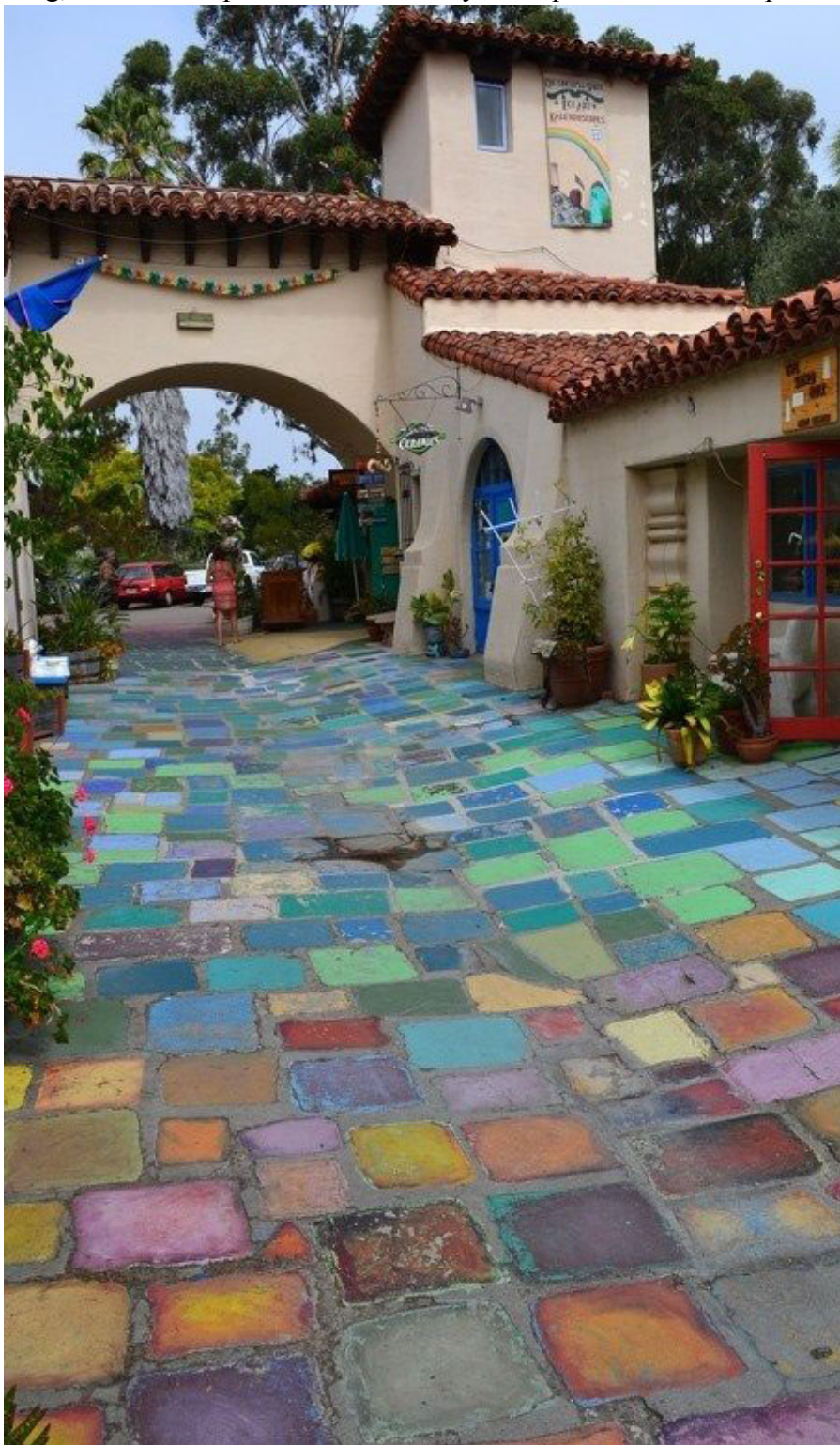


Source: <http://untappedcities.com/2013/09/11/8-of-the-smallest-historic-districts-in-manhattan-that-are-less-than-one-block/>

Other

Balboa Park in San Diego, California, USA

Colorful handmade tiles that are in harmony with the color of the door, the window frame, the flag, and the few plants make the alley a unique and attractive place.



Source: <http://www.pinterest.com/pin/164099980145819317/>

APPENDIX D-23-16: China**Commercial**

Beijing, China

Alleys in China are called Hutong. Alley in commercial districts are full of retails



© 2005 bartellonline.com

Source: <http://www.bartellonline.com/chinapic.php?i=5200>

Residential

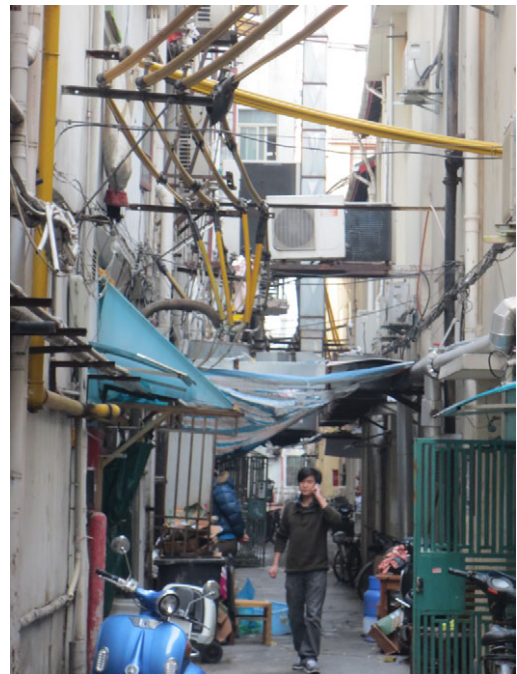
Shanghai, China



Source: <http://www.art.com/products/p13074460-sa-i2304252/brent-winebrenner-back-alley-card-game-shanghai-china.htm>

Shanghai, China

Alleys in residential district has full of lived-in feel. There are also certain built communities.



<http://someguyinchina.wordpress.com/2012/11/22/i-3-sh/zhengzhou-136/>