SIONS E

Looking Toward the Next 125 Years

Volume 1: Critical Maps

Research and design strategies for Aggieville by Kansas State University landscape architecture students

Edited by Blake Belanger and Howard Hahn

Visions in the VilleLooking Toward the Next 125 Years

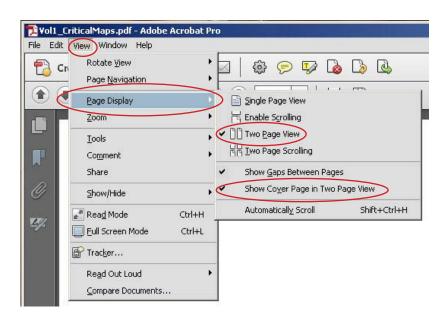
Volume 1: Critical Maps

Research and design strategies for Aggieville by Kansas State University landscape architecture students

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Visions in the Ville:

Looking Toward the Next 150 Years

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Kansas State University. College of Architecture, Planning and Design, Department of Landscape Architecture and Regional & Community Planning, LAR 646 Community Planning and Design Studio

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Introduction to Critical Mapping

Professors Blake Belanger and Howard Hahn

Introduction

Using Critical Maps to Classify, Correlate, Compare, Identify Opportunities/Dilemmas, and Strategize

"Visions in the Ville" Studio Background

In 2014, Aggieville is celebrating its 125th anniversary, the City of Manhattan is revising its comprehensive plan, and the Aggieville Business Association is ready to look toward the future. Although the district is thriving in certain respects, there is uncertainty for the future. Over the last few years, there has been significant development downtown, in Manhattan's "other" urban business district, including a conference center, hotels, new or relocated restaurants, and multifamily housing. These additions are changing the character and vitality of Poyntz Avenue and its surrounding blocks. By comparison, how might planning and design decisions shape a unique identity for Aggieville, building on its historic foundation, understanding its current place in time, and looking toward the future?

In 2009, students in the K-State Community Planning and Design summer studio examined strategies for accommodating population growth in Manhattan. The population of Manhattan has grown slowly but steadily since Manhattan's founding, but imminent changes may yield a sharp increase in residents. As construction continues on the federally-funded National Bio-Agro Defense Facility (NBAF), the extent to which this new facility will stimulate population growth for the region remains unclear. With Manhattan's development growth constrained by the Kansas River flood plain to the south, steep topography to the north, and Fort Riley to the west, new housing can only easily be developed to the east, into Pottawatomie County, most likely in low-density single-family units. What are the opportunities to accommodate some of the anticipated population growth through infilling and retrofitting Manhattan's already walkable urban districts? How does Aggieville fit into that scenario of the future?

The 2014 "Visions in the Ville" summer studio explored Aggieville's potential as the community looks toward the future. The studio proposals emerged from an iterative design process consisting of community engagement, research, critical mapping, strategic design, argumentation, and communication. Primary concerns included responding to the priorities of business owners, property owners, residents, and other stakeholders; identifying opportunities for appropriate infill and redevelopment; and building upon the identity and character unique to Aggieville.

The Visions in the Ville studio spanned eight weeks and was offered by the Department of Landscape Architecture and Regional & Community Planning at Kansas State University. It was directed by Associate Professors Blake Belanger and Howard Hahn, and involved fourteen mid-level landscape architecture students. Representatives from the Aggieville Business Association, the Manhattan Chamber of Commerce, the Manhattan City Commission, Kansas State University Community Relations, the Flint Hills Area Transportation Agency (ATA), and local architecture firms provided general input and review.

Critical Maps Inform Studio Proposals

Prior to studio work, the students spent three weeks following an extensive field investigation process called "Critical Mapping". More than simply gathering and mapping information, Critical Mapping seeks to classify, correlate, and compare site information across a broad spectrum of topics for the directed purpose of identifying dilemmas/opportunities leading to design strategies. Not all strategies were carried forward, but the Critical Mapping process helped students quickly understand site issues and significantly informed design proposals.

Some critical maps examined Aggieville in the broader Manhattan context relative to demographic trends, the ratio of renter vs. owner occupied properties, existing city planning documents, and nearby areas of significant economic investment such as the Kansas State University campus, NBAF, and Downtown Redevelopment (North End and South End projects). The vast majority of maps examined Aggieville itself under the broad categories of Business Composition and Operation, Perceptions and Identity, Building Stock and Infrastructure, Parking and Transportation, and Land Use and Redevelopment Potential.

Mapping relied heavily on Geographic Information Systems (GIS) data supplied by Riley County and the City of Manhattan. Students also walked Aggieville streets and alleys to collect much original data that has never been mapped before (to our knowledge) (Figure 1.1). Besides physical data, students also ventured into the social cybersphere to collect and analyze Twitter and Instagram messages to get a glimpse of social activity hotspots and better understand visitor perceptions and interests.

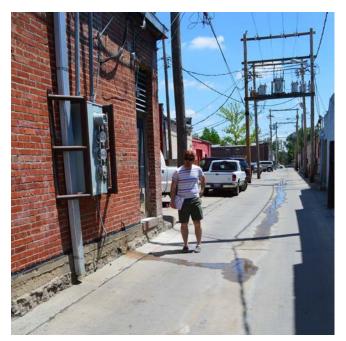


Figure 1.1: Field Investigation (Krehbiel 2014)

Several known, and some new, themes emerged through the Critical Mapping process:

- Significant infrastructure investment has occurred in Manhattan in the last decade, but improvements to Aggieville exceed 25 yrs.
- Aggieville is very walkable, but connections to huge visitor draws like the Downtown Conference Center and the KSU Sports Stadium are lacking or inconvenient
- Manhattan's population is growing, yet Aggieville offers virtually no residence component mix
- Nearly all blocks in the neighborhoods surrounding Aggieville are dominated by rental dwelling units (>60%).
- Bluemont is one of the most heavily traveled east-west streets in all Manhattan, yet Aggieville is not always recognized by visitors due to cluttered building frontage, signage, and parking
- Providing parking in Aggieville is not required under C-3 zoning, consequently parking is short which a recurrent issue
- Several Aggieville businesses utilize socialize media as a means to generate interest and attract customers
- Compared to other peer entertainment districts close to universities, Aggieville is the most compact and is directly adjacent to campus (an opportunity)
- Aggieville businesses are heavily skewed toward eating/drinking and the retail component is shrinking
- Aggieville streets are not comfortable for pedestrians due to poor sidewalk condition and lack of shade in summer
- Opportunities exist to form KSU and other partnerships to offer retail/marketing/studio space in a highly visible location
- There is very little green/civic space in Aggieville; impervious surfaces exceed 91%

Critical Mapping Process

Critical Mapping is a cyclical method of working requiring students to move quickly between critical inquiry, evaluation, creative design and planning, back to critical inquiry, and so on, thus allowing the studio to begin unfolding proposals as information is still becoming available. Each student created three maps each week in a particular order: Truth Maps, Evaluation Maps, and Proposal Maps. This process helped the class develop arguments for design proposals, and was adapted from the framework presented in the book "Writing Arguments: A Rhetoric with Readings." (Ramage et al 2012). Figure 1.2 details the inquiries, goals, and activities associated with each type of critical map.

Truth Maps

These maps draw out significant conditions from the expanse of available data. There are three types of truth maps: classification maps extract and categorize site conditions; correlation maps identify two or more variables on the site which correlate the phenomenon; and comparison maps compare study area conditions with an implemented design in another location or with practices being used elsewhere.

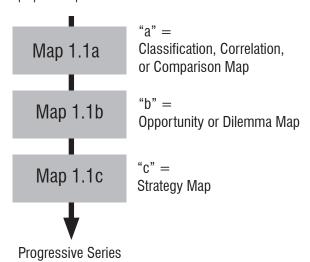
Value: Evaluation Maps

The second type, Evaluation Maps, build on the Truth Map findings and match existing conditions with community agendas. These finding are documented as **opportunity maps** or **dilemma maps**,

Value: Proposal Maps

Lastly, **strategy maps** identify ways to accomplish opportunities or overcome dilemmas.

These weekly maps were produced as a progressive and matched series, and are presented on the following pages, grouped by topic, The Map Number followed by a letter "a" corresponds to a truth map; a letter "b" corresponds to an evaluation map; and a "c" corresponds to a proposal map.



Critical Map Types

	Claim Type*	Research Inquiry	Critical Map Type	Description
Truth Maps	definitional	To what group does this thing (these things) belong?	Classification	Maps that extract and categorize things or conditions in a study area.
	causal	What conditions or processes correlate to phenomena?	Correlation	Maps that identify correlations and potential reasons why a certain condition has come to be in a particular place. Correlations have at least two related variables.
	resemblance	How is our site like another site?	Comparative	(1) Maps that compare current conditions with an implemented design in another location (precedent study). (2) Maps that compare current conditions or strategies of our site with conditions or practices that are being used elsewhere.
Value Maps	evaluation	What do these site conditions mean for the goals of our project?	Dilemma or Opportunity	Maps that apply the agendas of a client, stakeholder, or designer to current site conditions.
	proposal	How can we change undesirable conditions or introduce something new and desirable?	Strategy	Maps that make a claim about how to accomplish one or more project goals. Strategies proposed should be big moves that lay the foundation for future action, and often require additional research.

^{*}Critical mapping types are based on 5 claim types used for making arguments.

Ramage, John D., John C. Bean, and June Johnson. 2010. Writing Arguments: a Rhetoric with Readings. Vol. 8th. New York: Pearson Longman.

Figure 1.2: Critical Map Types (Belanger 2012)

Goal	Activities	Examples
Categorize things for the purpose of simplifying complex conditions and identifying relationships. Conclusions from this map should set the stage for identifying dilemmas and/or opporutnities.	Measuring, extracting, coding, plotting	Identifying differences in street types, building types, land use, or ecosystem health. Identifying proximity of extractions to one another.
Describe why something has come to be. OR - Describe the consequences of past actions. Conclusions from this map should set the stage for identifying dilemmas and/or opportunities.	Relating, extracting, coding, plotting	Explaining potential causes for vacancy in an area, erosion in a particular location, or land values.
Emphasize similarities and differences. Conclusions from this map should set the stage for identifying dilemmas and/or opporutnities.	Comparing, extracting, coding, plotting	Identifying an urban design proposal from another city and placing it in our study area to see how it might fit. Comparing budget spending in another city to that of our study area. (Later - comparing one of your strategies to those implemented in another place to evaluate cost, timeframe, or another unknown.)
Identify either (1) obstacles to achieving goals or (2) locations or processes well positioned for achieving goals. Conclusions from this map should set the stage for identifying one or more design strategies.	Applying, evaluating, abstracting	Dilemma: Infrastructure that limits desired growth expansion. Specific conditions that prevent desirable pedestrian environments. Developed areas that prevent ecological connections. Opportunity: Vacant or partially vacant parcels. Large contiguous parcels, or parcels that could be easily assembled for redevelopment.
Propose new ideas for accomplishing goals. Conclusions from this map should articulate how the strategy will overcome dilemmas or leverage opportunities, and should identify how to move forward. What additional information is needed? Should it be combined with one or more different strategies?	Projecting, proposing, abstracting	Proposing new infrastructure to bridge gaps in connectivity. Proposing new land use policy that will promote desired redevelopment. Proposing new forms of transportation. Proposing green infrastructure solutions that accomplish multiple goals.

Manhattan Context

Existing Demographics
Existing Planning Documents
Area Investments

Aggieville Serves a Majority Renter Population

Majority of rental occupied parcels are located on east side of town

W2_AR01_3k_Rental.PDF

12,914 Rental Units
7,836 Owner Units

21,077 16,526 6,523

Renters

Owners

Mixed

Population in majority rental / owner and neither majority regions of town. (26,914 renters / 19,140 owner occupied)

1,456 acres 3,884 acres

Area of rental and owner occupied parcels within Manhattan.

6:10

Proportion of rental units to total housing stock.

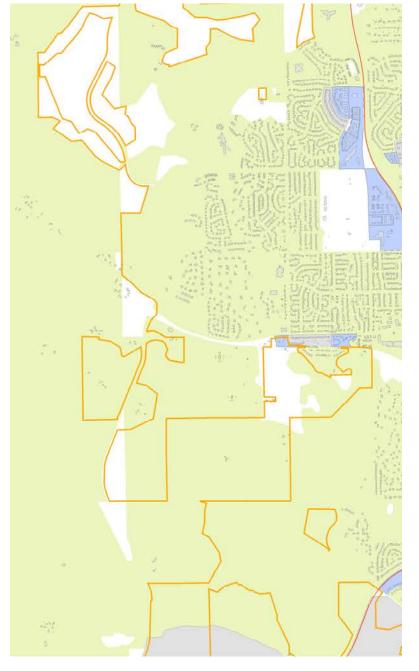


Figure 1.1 Majority Rental vs. Owner Occupied

Source: RLCo GIS, "RLCo Census 2000," "RLCo Parcels Mar2009," "Buildings," "StateHighways," "Citybounds"

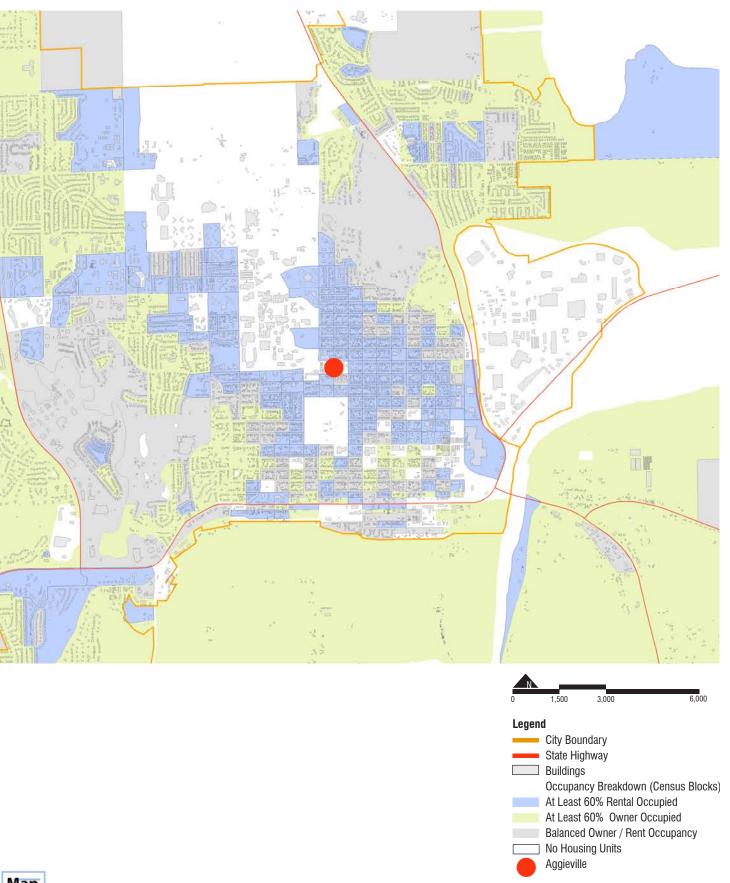
Inquiry: Location of Rental Units in Manhattan

Key Extractions: Parcel Data, Roads, City Limits, Buildings

Methodology: Utilizing Riley County 2000 Census Data, rental occupancy data was normalized by referencing housing units per parcel giving a percentage of rental to owner occupancy across the city. (Normalized data is derived from Rental / Housing Units)

Conclusions: Located in the eastern half of the city, Aggieville services largely a portion of renter occupants. This rental population dominance is attributed to close proximity to the University, lower housing costs, and limited transit options. It is reasonable to assume that a large portion of these rented units are occupied by students. This seasonal student population has a great effect on Aggieville businesses and activity.

Comparative





Aggieville Lacks Permanent Residents

For year round business, Aggieville must provide more options for local permanent residents.

W2_AR02_2k_Residents.PDF

23,000 Fall / Spring Students
7,100 Summer Students
K-State enrollment drops 70% over the summer period.

56,143 2013 populations estimate

14% Increase since 2000

Manhattan population was 44,831 in 2000 Census & 52,281 in 2010American Fact Finder (PEPANNRES)

3.7% Increase in Rental Units Increase in rentals from 2000-2010

American Fact Finder (PD-1 2000, 2010)



Figure 2.1 Permanent Residency

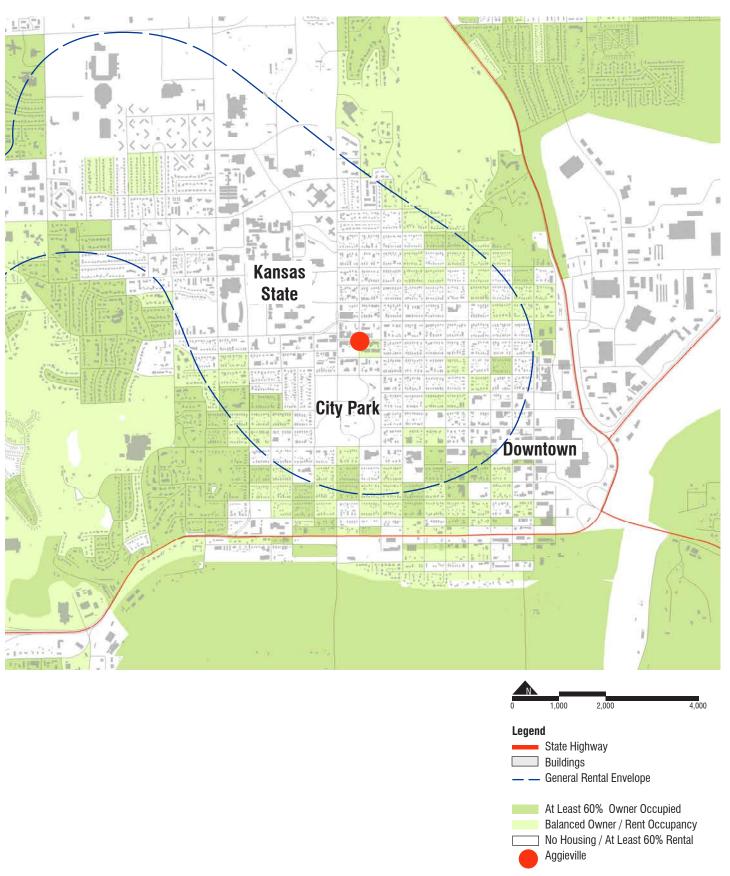
Source: RLCo GIS, "RLCo Census 2000," "RLCo Parcels Mar2009," "Buildings," "StateHighways," "Citybounds"

Inquiry: Location of Owner Occupied Units in Manhattan

Key Extractions: Parcel Data, Roads, City Limits, Buildings

Methodology: Utilizing Riley County 2000 Census Data, rental occupancy data was normalized by referencing housing units per parcel giving a percentage of rental to owner occupancy across Manhattan. From this data, rentals removed from the data to reveal the location of permanent residents within Manhattan.. (Normalized data is derived from Rental / Housing Units)

Conclusions: Due to fluctuations in the student population between normal and intercession classes, businesses must attract the local permanent population through the off months to maintain profitability. In the surrounding neighborhoods around Aggieville, there is a clear lack of permanent housing opportunities.





Denser & More Owner Occupied Housing Could Be Developed

Increased density and owner occupied housing better supports Aggiville business throughout year.

W2_AR03_2K_NewHousing.PDF

40% Ages 20-29

Manhattan has a high concentration of young professional residents how want to live in higher density developments

83% Households without child
American Fact Finder (DP1)

75% Workers live in Manhattan
American Fact Finder (S0801)

14% Use Alternatives to Car

11.8% Walked | 1.2% Biking | .4% Motorcycle / Cab | .3% Transit American Fact Finder (S0801)



Figure 3.1 Potential growth of new medium density residential buildings



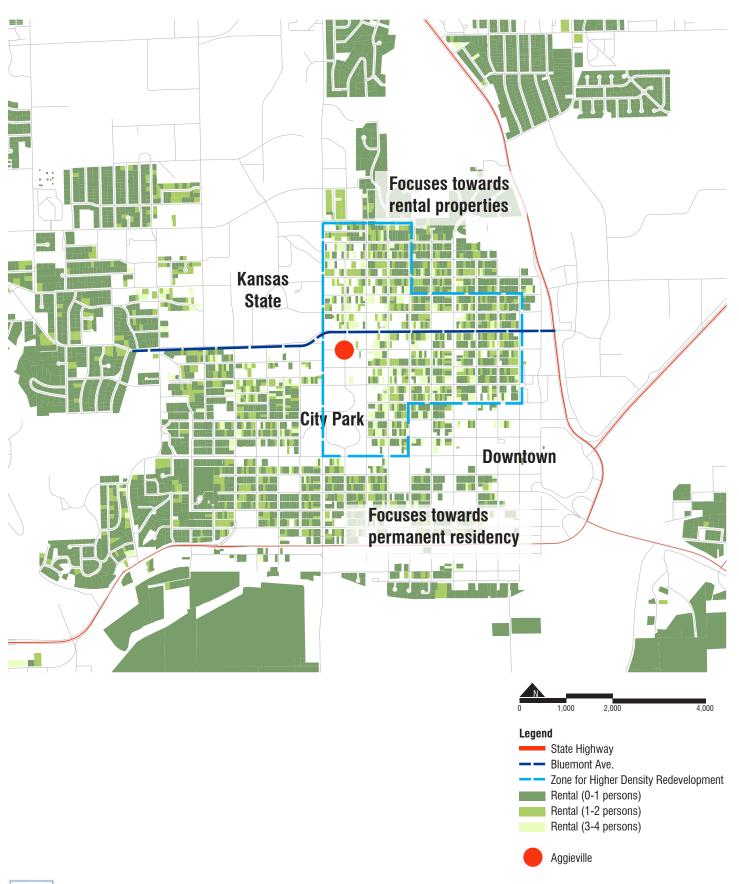
Source: RLCo GIS, "RLCo Census 2000," "Buildings," "RLCo Parcels June2014" "StateHighways," "Citybounds"

Inquiry: Potential for New Development District **Key Extractions:** Parcel Data, Roads, Census

Methodology: Utilizing previous maps, majority rental parcels where selected and limited to properties with low density (less than 4 persons per parcel)

Conclusions: In order to promote stable growth in Aggieville, a mixed variety of housing and business should be deployed in and around Aggieville. Immediate redevelopment of higher density housing in the surrounding neighborhood would provide an excellent opportunity to provide a more dense mix of rental and owner occupied residences around Aggieville and in close proximity to campus, downtown, and City Park. This new development would place Aggieville at the cross section of mixed residential properties in the city.



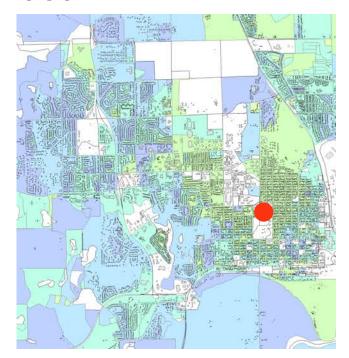


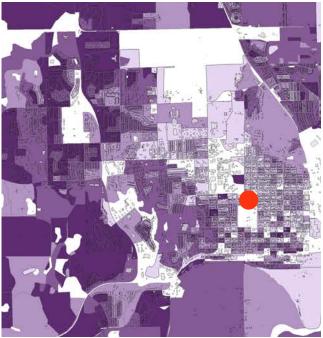


Radiating Out, Demographics Shift From Single Students to Families and Seniors

Manhattan population can be divided into 4 different maturity zones

W3_AR04_7.5K_Demographic.PDF





Age

Under 18 18-24 24-34 34-49 49 or Older

Average age increase with distance from the Ville, with the most continuity in the 18-24 age bracket.

Families with Children (Housing Units)

None 25 % 50% 75 % 100%

The majority of families with children are located West of Seth Child.

Figure 4.1 Median Age

Source: RLCo GIS, "Buildings," "Tiger2010_RL_Census_Block"

Figure 4.2 Families

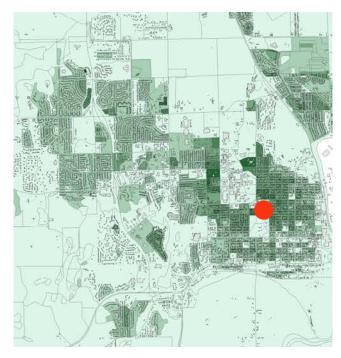
Source: RLCo GIS, "Buildings," "Tiger2010 RL Census Block"

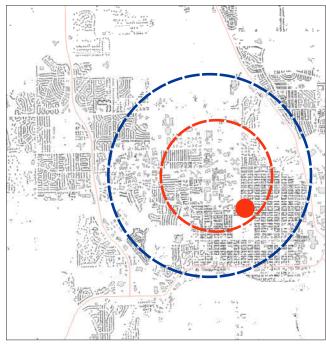
Inquiry: What are the demographic patterns in Manhattan

Key Extractions: Roads, Census Data

Methodology: Using census tabulated by changes by census block for key demographic changes and information was divided into appropriate, readable divisions to show the demographic patterns in the population.

Conclusions: In Manhattan, population groups are based on age and family status. Radiating out from Kansas State University, the age and family status generally transitions from young singles to family and post family seniors. Secondly, population density follows a similar trend with age, with the 18-24 group living in the most dense census blocks, but it is also relative to the location of the three primary commercial districts: West Loop, Aggieville, and Downtown.





Population (People per Census Block / Acre)

Less than 5 5 - 13

14 - 27

28 - 65

66 or more

Student

Young Professional

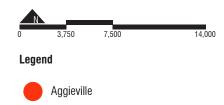
General Demographic Zones

Density correlates to both age and commercial districts, with the highest density surrounding the Aggieville - Campus area of town.

Aggieville is located within the student age zone of Manhattan.

Figure 4.3 Density Source: RLCo GIS, "Buildings," "Tiger2010_RL_Census_Block"

Figure 4.4 Zones
Source: RLCo GIS, "Buildings," "Tiger2010_RL_Census_Block"





Population Is Skewed Towards College Age Residents Around Aggieville

Businesses in Aggieville are likely to have more traffic from college age residents than other demographic groups.

W2_AR01_2K_Divide.PDF

18,325 College Aged7,100 Young Adults21,482 Older Residents

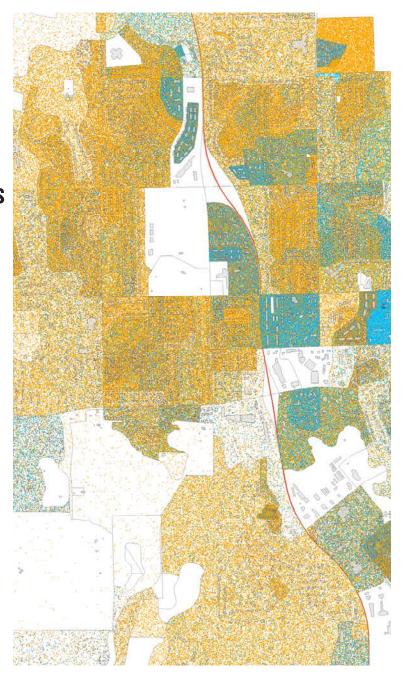


Figure 1.1 Age Divide

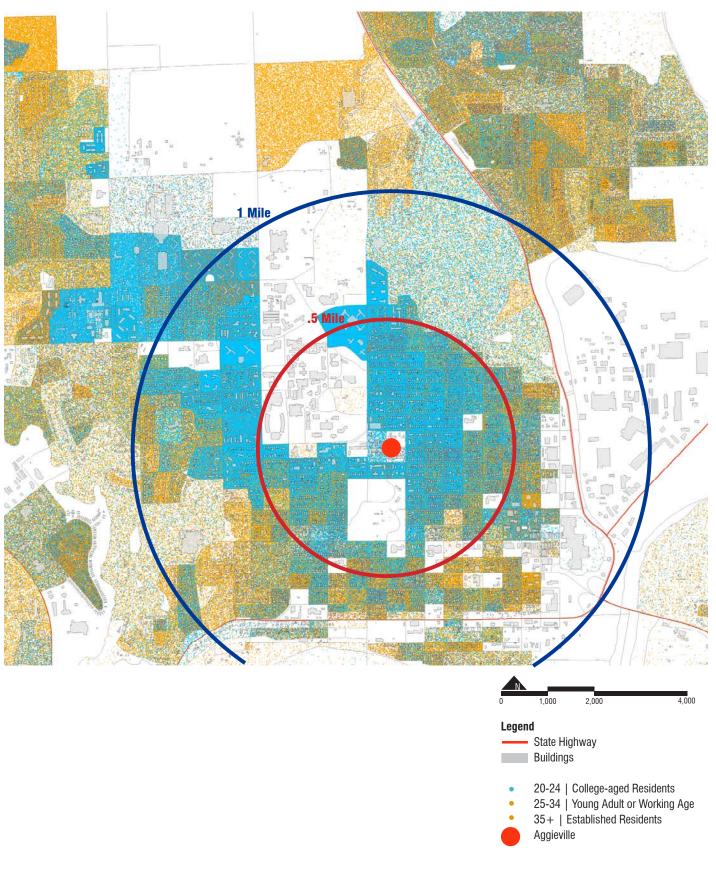
Source: RLCo GIS, "Tiger2010 RL Census Block," "Buildings," "StateHighways"

Inquiry: What is the population distribution of college age residents and long term residents. Because the map does not include children, the total number of people is less than the total population of Manhattan.

Key Extractions: Parcel Data, Roads, City Limits, Buildings

Methodology: Utilizing Riley County 2010 Census data, dot values where used to fill census blocks with proportionate values of dots according to number of people.

Conclusions: There is a sharp split between college-age and long term residents in Manhattan. Aggieville, due to its location, caters to a generally college-aged crowd which skews the business mix within the district and impacts adjacent neighborhoods through noise and parking issues.





Mixed Multistory Development Could Be Implemented on Main Roads

Bluemont and N. Manhattan should be developed to supply housing for new businesses $_{\rm W2_AR06_2k_ViileAge.PDF}$

1.8 mi along major entry roads8 blocks established commercial zones

300 acres potential development

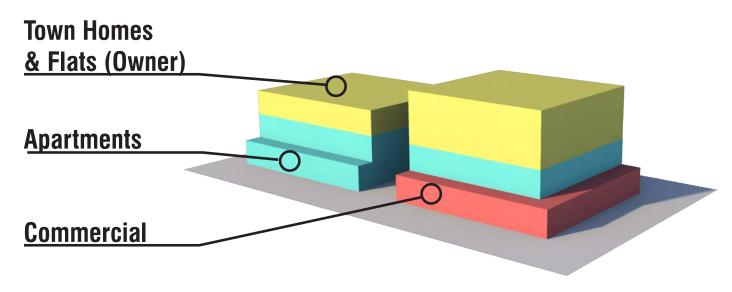


Figure XX.1 Building Composition Source: Rostek 2014

Inquiry: Can development along Bluemone and N. Manhattan balance the age divide.

Key Extractions: Parcel Data, Roads, City Limits, Buildings, Aggieville, NBAF

Methodology: Within a one mile distance of Aggieville, data fromt the Age Divide map is focused on a 4 bloack corridor along N. Manhattan and Bluemont Ave.

Conclusions: Through development of mixed housing type and commercial use, Bluemont and N. Manhattan can serve to balance the population divide in East Manhattan, bring year round commerce to Aggieville, and provide new housing for researchers and workers at NBAF facilities.

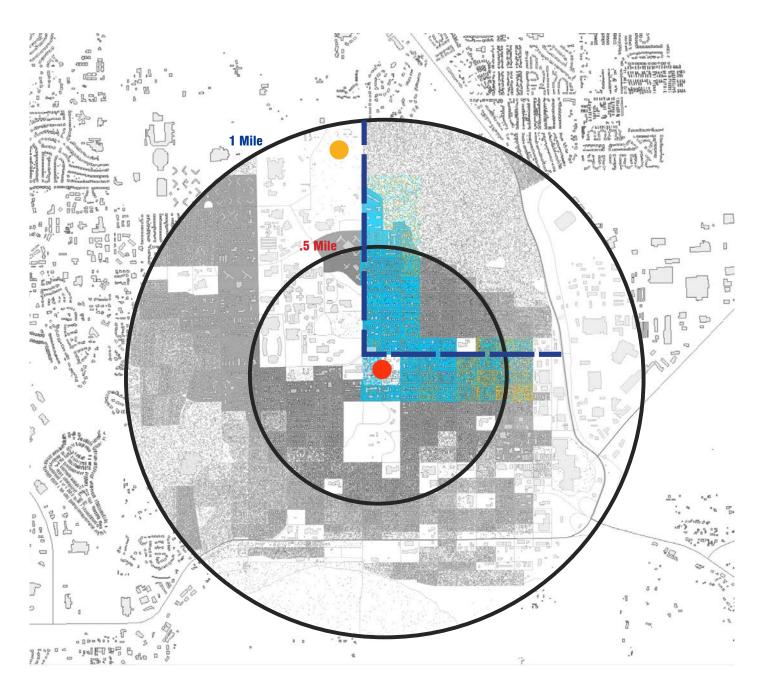


Figure XX.2 VilleAge Focus
Source: RLCo GIS, "Tiger2010_RL_Census_Block," "Buildings," "StateHighways"





Majority of Families Live Over 1 Mile From Aggieville and Downtown

Family density is higher to the northeast and northwest sides of the city

W4_AK07_3K_FamilyDensity.PDF

10,041
FAMILIES WITHIN MANHATTAN

20%

OF TOTAL FAMILIES LIVE WITHIN 1 MILE OF AGGIEVILLE

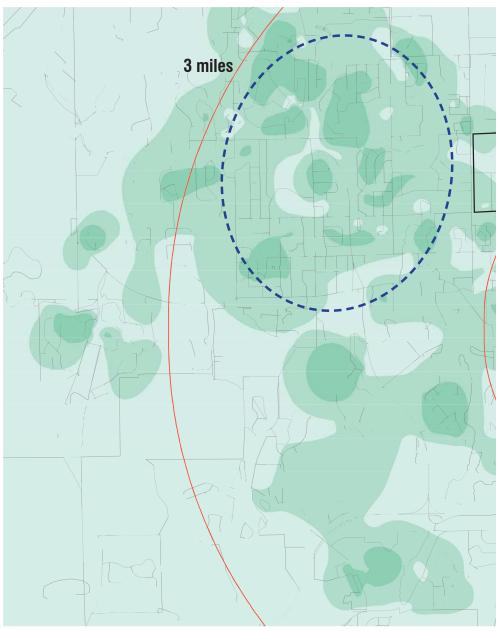


Figure 01. Family Density Distribution Source: Riley County GIS

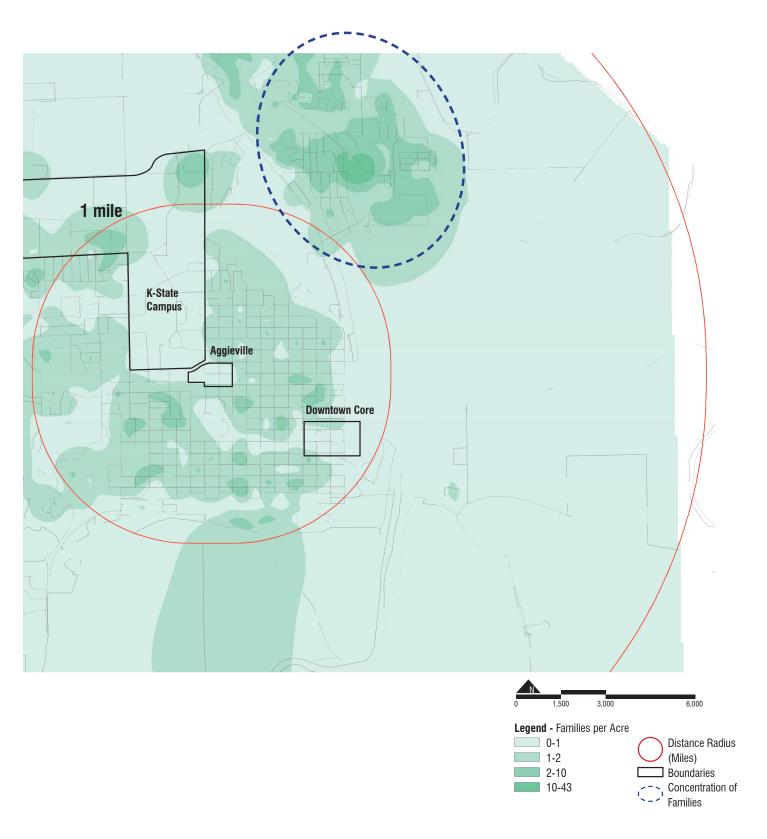
Inquiry: Where do families live in relation to the business districts?

 $\textbf{Key Extractions: "2010_riley_roads," "Tiger2010_RL_Census_Block," Families per square acre.}$

Methodology: Using Riley County GIS 2010 Census Block data, I calculated the family density of Manhattan by dividing number of families by the calculated acreage. Using the Feature to Point tool, centroids of each parcel were found to help even out the acreage of large versus small parcels. Using that newly created centroid layer, the Natural Neighbor tool was run with a z value field being family density and the output cell size of 100. This whole process allowed for a gradient classification of where high concentrations of families occur. Mile radii from Aggieville were created to help draw conclusions on where families live in relation to the business districts.

Conclusions: Higher concentrations of families per acre are located on the northeast and northwest portions of Manhattan. With over 10,000 families in Aggieville, only 20% or 2,027 families live within a mile of Aggieville, which also encompasses the Downtown and a part of the KSU Campus.

Classification





Aggieville Provides a Connection Between City Park Families and Activites

KSU campus's, Aggieville's and Downtown's family-oriented activities are not near concentrations of families

· Marianna Kistler

of Art

McCain

Auditorium

Beach Museum

W4_AK08_1K_Family-OrientedOpportunities.PDF

Manhattan Family-Oriented Activities

Parks

Playgrounds

PlaygroundsSport Courts

Boat RampsCamping

Fairgrounds

FishingGolfing

Ice Rink Off Road Vehicles

Overlook

Shooting Range

Swimming Pool

Concert StageTrail Systems

Skate Park

Disc Golf

City Park Pool

• Wildlife

Observation

Campu

Chester E Peters
 Recreation Complex

• Frank Myers Field

NatatoriumGoodnow House

Museum
• KSU Butterfly
Conservatory and

Insect ZooKSU Gardens

Downtown

· Flint Hills Discovery Center

• 4-H Club

· Boys & Girls Club

Manhattan Town Center

Manhattan Public Library

Blue Earth Plaza Splash Park

Other Locations

· Riley County Historical Museum

· Community Centers

Bowling

Sunset Zoo

· Manhattan Arts Center

· Carmike Seth Childs 12 Theater

• Wonder Workshop Children's Museum

· Wolf House Museum

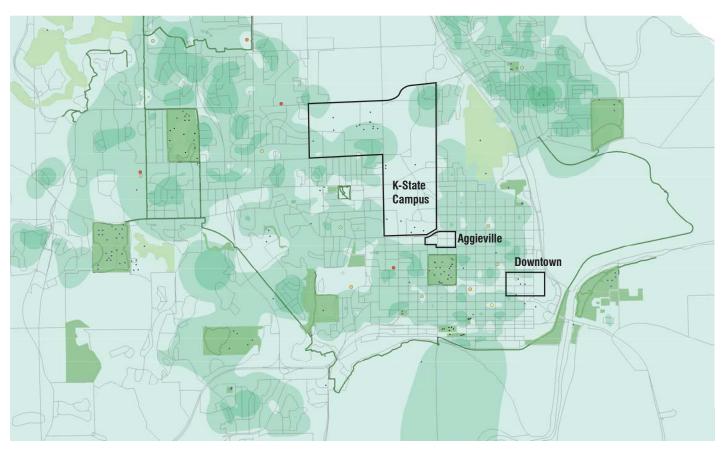


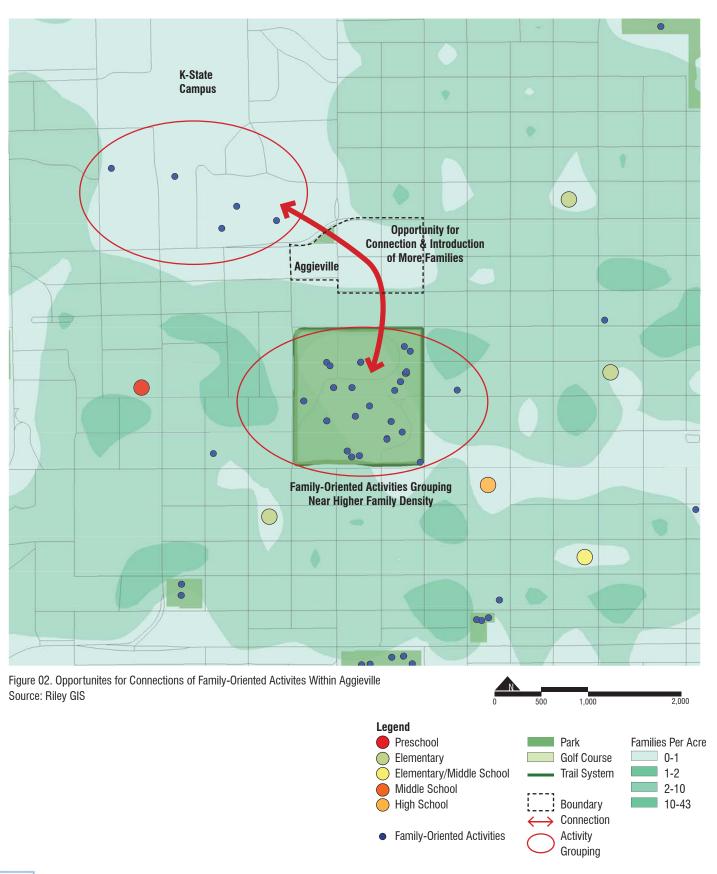
Figure 01. Relationships of Family-Oriented Activities, Schools, and Family Density Source: Riley GIS



Inquiry: What opportunities occur around the business districts related to family-oriented activities, schools, and family density? **Key Extractions:** "RecFacilityPoint," "Trails," "Golf Course," "Parks," "RLCo_RecSites," "2010_riley_roads," "Tiger2010_RL_Census_Block," "SchoolSite."

Methodology: Riley County GIS data provided the locations and types of recreational activities, which were shifted through determining if someone under 18 would participate with their other family members. School sites were located and classified by grade levels to determine their relationship to family density and activities. Parks and trails were overlaid to clarify some of the gaps in family densities. Opportunities were determined by areas potentially lacking connections between family-oriented activities and where families lived.

Conclusions: K-State Campus's and the two business districts' family-oriented activities are generally not near concentrations of higher family density, which creates opportunities for connections. Aggieville provides that connection opportunity from City Park and the K-State Campus due to the district's central location and the higher concentrations of family around City Park.





Underutilized Spaces Can Become Urban Areas of Family Recreation and Activity

Walls, rooftops, alleys, and parking lots are spaces that can incorporate recreational family activites in Aggieville

W4_AK09_Aerial_Family-OrientedStrategies.PDF

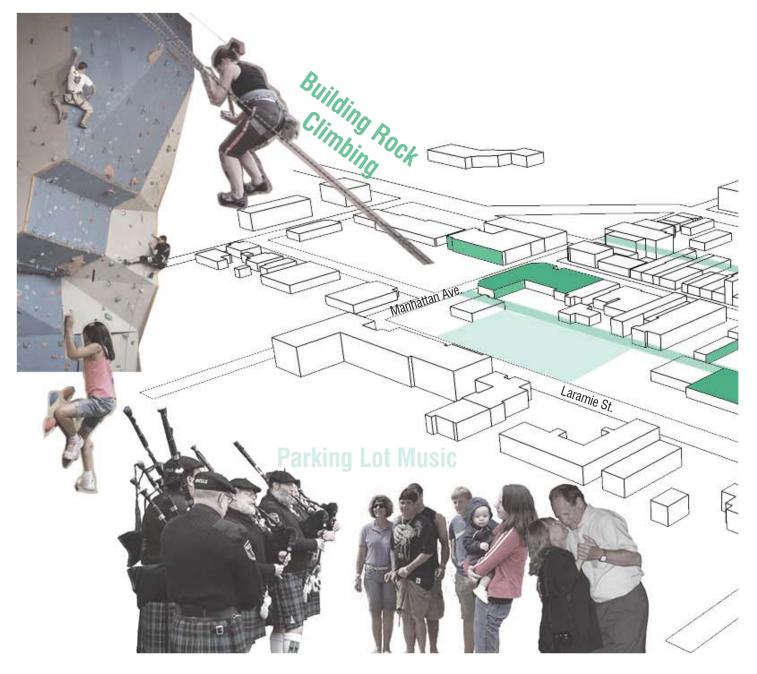
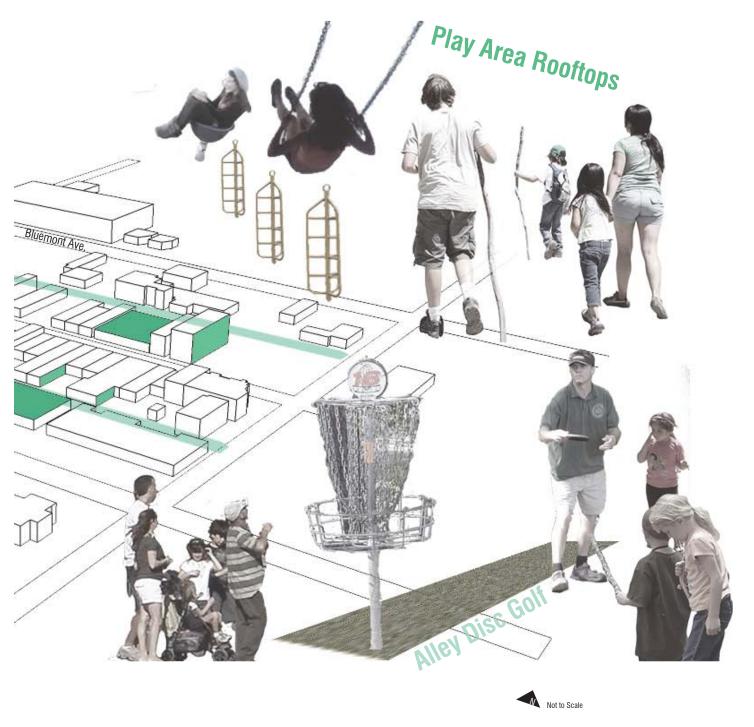


Figure 01. Family-Oriented Activities in Aggieville Source: Lauren Heermann, Amanda Kline, KSU Landscape Architecture Entourage

Inquiry: What locations and family-oriented activities could be implemented in Aggieville?

Key Extractions: Sketchup building outlines, KSU Landscape Architecture Entourage, Highlighted surfaces

Methodology: Recreational family activities were based on similar ones around the city, but adapted to more urban conditions. Underutilized surfaces, like alleys, parking lots, rooftops, and building walls, were chosen to house activities such as disc golf, music events, play areas, and rock climbing. **Conclusions:** Aggieville has opportunities in underutilized areas such as blank building walls like Varney's southside, large flat rooftops like the Randina's and Buffalo Wild Wings, large surface parking lots along Laramie Street, and alleyways behind every building. These spaces could incorporate family activities, like rock climbing, playgrounds, disc golf, and musical events, helping create a stronger connection between City Park's and the K-State Campus's family activities.



Legend

Play Area Rooftops

Building Rock Climbing

Alley Disc Golf

Parking Lot Music

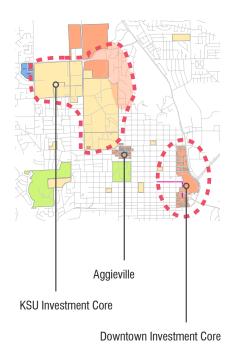


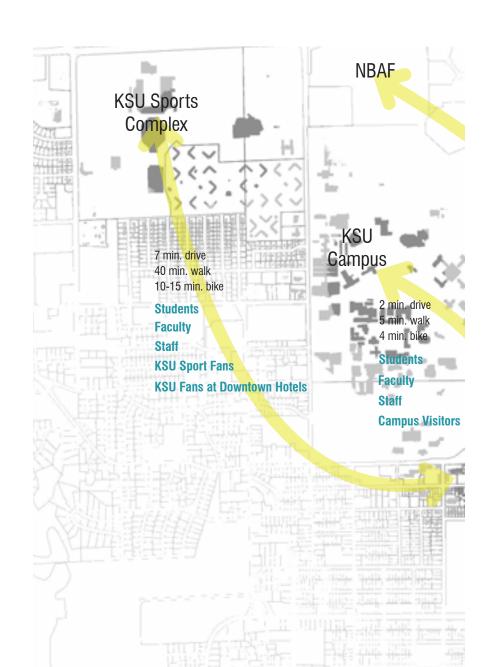
Aggieville is Centrally Located and Relatively Close to Several Major Investment Areas

Many K-State students and visitors pass through or near Aggieville

W4_BK07_KStateAggievilleUser.pdf

Figure 01. Extracted Recent Investment Areas Uniquely Situate Aggieville Source: Riley County GIS, GoogleMaps





Inquiry: How does KState spatially relate to Aggieville? **Key Extractions:** Extracted Development Cores

Methodology: Through conversations with Manhattan Chamber of Commerce employees informed of potential Aggieville users and estimated time using GoogleMaps.

Conclusions: It takes an average of 30 minutes to walk to key areas outside of Aggieville and at least 10 minutes to bike. Currently, Aggieville is most accessible by car.

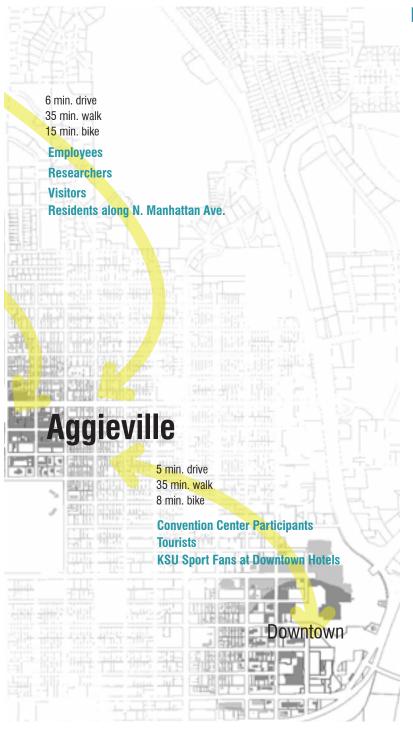


Figure 02. KSU Users Source: Riley County GIS, GoogleMaps

Estimated Travel Time to Aggieville from

Downtown- Convention Center

5 min. drive 35 min. walk 8 min. bike

KSU Campus- Student Union

2 min. drive 5 min. walk 4 min. bike

NBAF

6 min. drive 35 min. walk 15 min. bike

KSU Sports Complex

7 min. drive 40 min. walk 10-15 min. bike



K-State and City Planning Documents Highlight Contextual Relationships to Aggieville

Despite development inconsistent with the Campus Edge Plan, opportunity remains to implement key concepts.

W4_BK08_Opportunity.PDF

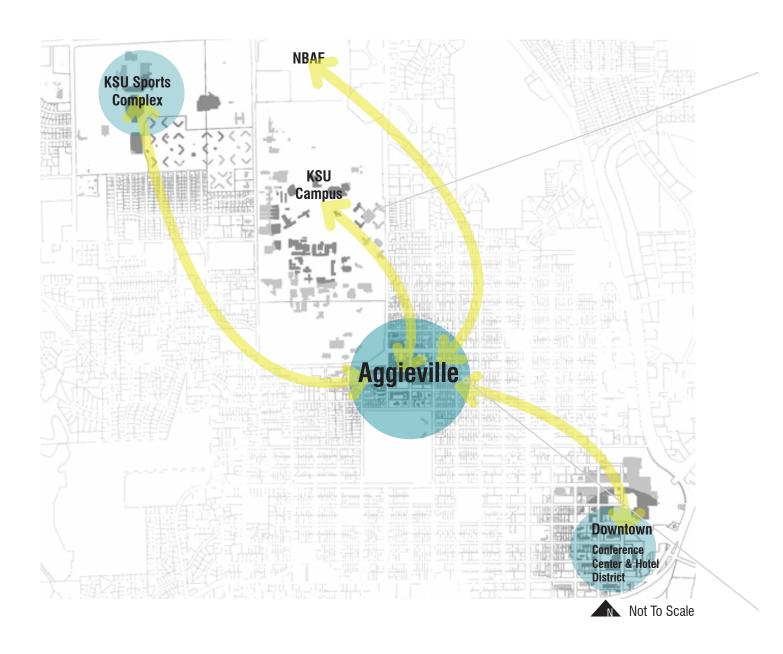


Figure 01. Aggieville's Relation to KSU Master Plans Source: Riley County GIS, KSU Planning Documents

Inquiry: How do K-State and City planning documents relate to the context of Aggieville??

Key Extractions: Aggieville, Downtown, NBAF, KSU Sports Complex, KSU Campus, KSU Campus Master and Edge Plan.

Methodology: Extracted Manhattan Investment Cores and compared them to the KSU Campus Master and Edge Plan.

Conclusions: Opportunties still exist within the Manhattan community to adhere to principles outlined in the KSU Master Plan and the Edge Plan as it relates to Aggieville.



Contextual Relationships

Campus Master Plan

Pedestrian Flow



Parking Garage- as many as 1,600 new spaces

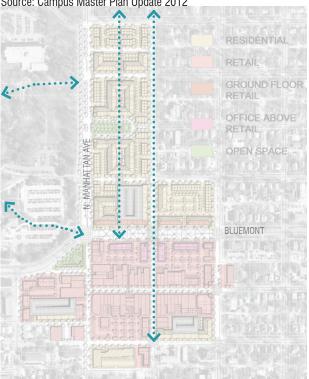
Student Housing

Wayfinding

KSU Parcel ownership on East side of North Manhattan Ave

Figure 02. Campus Master Plan

Source: Campus Master Plan Update 2012



Campus Edge Plan

Open Space

Pedestrian Flow

Parking Garage

Residential

Retail

Figure 03: Campus Edge Plan

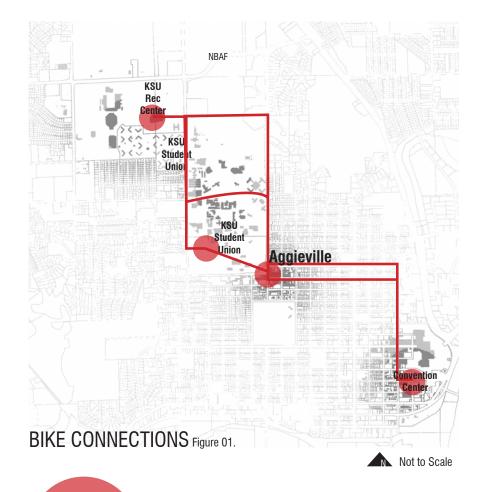
Source: Campus Master Plan Update 2012



Newly Identified and Promoted Corridors Can Improve Connections to Aggieville

Users have more opportunities to access areas in Aggieville

W4_BK09_Strategy.PDF





PEDESTRIAN CONNECTION

Bike Share Location

Dedicated Bike Lanes

Connection through new infrastructure and upgrade of existing

Convention Center Triangle Park KSU Union KSU Rec Center Ecological Nodes

Pedestrian Corridors

Connecting Cores tl

Extend Poyntz Developm City Park Triangle Park KSU-Owned Parcels adja KSU-Owned Parcels alor

Figure 01. Bike Connections

Figure 02. Pedestrian Connections

Figure 03. Shuttle Connections

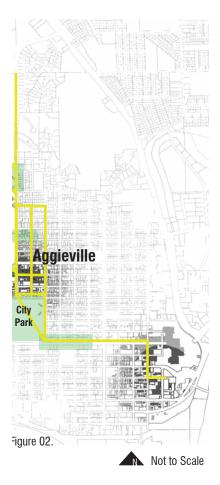
Source: Riley County GIS Data

Inquiry: What are strategies to implement servics and spaces that provide better connectivity for the users KState attracts to Aggieville?

Key Extractions: Aggieville, City Park, KSU Properties, Convention Center, Poyntz, NBAF, Mall

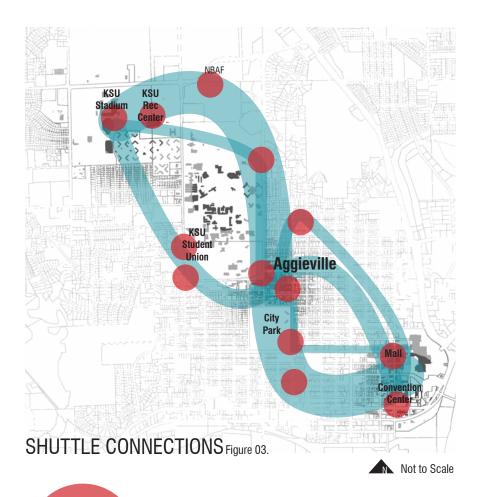
Methodology: Used previous maps in the series to locate areas in the Manhattan Investment Cores that could provide space for multple uses or have a draw for multiple users.

Conclusions: Building new infrastructure while upgrading the existing provides an opportunity to create corridors that serve the development cores Manhattan has recently invested in, drawing people to and through Aggieville.



jh new paving, lighting and wayfinding

N. Manhattan Ave. Denison



Shuttle Terminals

Frequent Shuttles

Shuttle Terminals transition people at regular 5-10 min intervals

Mall
City Park
Triangle Park
Convention Center
KSU Student Union
NBAF
KSU REC Center



Aggieville District Plan Calls For Well-defined Urban Edge Along Bluemont Avenue

Buildings, street trees and pedestrian cross walk at Bluemont and 12th Street among Urban design features

W3_RDP04_None_ConceptualVision.PDF

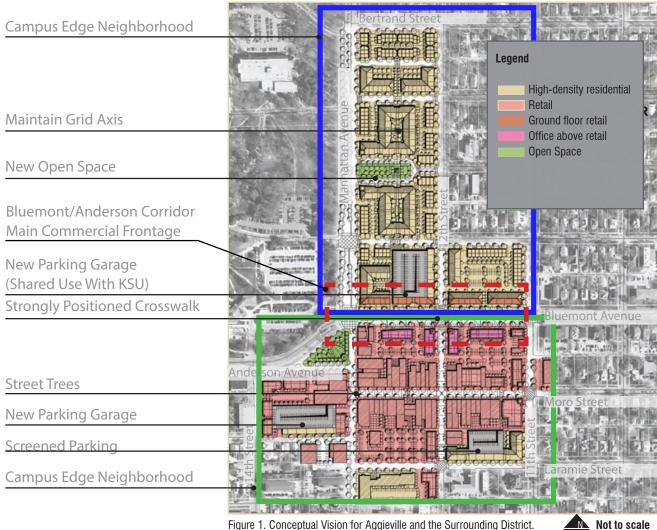


Figure 1. Conceptual Vision for Aggieville and the Surrounding District.

Source: Aggieville-Campus Edge District Plan. Modified by Richard Prudenti.







Figure 3. Increase Street Width



Figure 4. Improve Corner Building Look

Inquiry: What are the main recommendations outlined in the city's "Aggieville-Campus Edge District Plan"?

Key Extractions: Aggieville Campus Edge Plan

Methodology: Consulted the 32-page Aggieville Campus Edge Plan, adopted by city ordinance No 6498 on October 11, 2005, for an understanding city-defined boundaries of Aggieville for planning purposes, the conceptual plans for redevelopment within and just outside of Aggieville, and the overall character of changes in favor of an urban setting.

Conclusions: The plan identifies the Aggieville Business District south and the Campus Edge Neighborhood north. The Aggieville district would be the primary business center, and residential to the north would be earmarked for higher density to accommodate university students. An overlapping third subarea called the Bluemont/Anderson Corridor encompasses four blocks north and south of Bluemont Avenue. The plan calls for "knitting together" the areas through a highly urban design set that allows for a unified pedestrian-oriented shopping area; commercial buildings along the two block stretch north and south of Bluemont, an intensive line of street trees, conversion of one-way streets to two-way streets, wider sidewalks, gateways or landmarks at major intersections, and major pedestrian crosswalks including the corners of Bluemont and 11th and 12th streets.

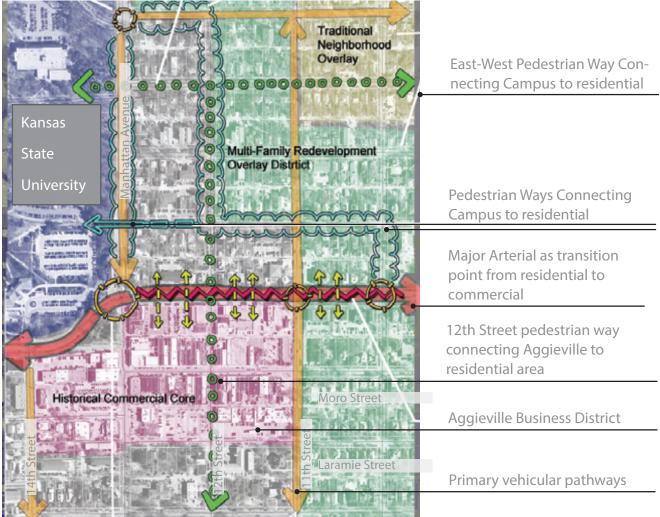


Figure 5. Conceptual Framework Plan. Bluemont as a zipper versus a barrier. Source: Aggieville-Campus Edge District Plan. Modified by Richard Prudenti.



Legend

Gateways at major intersections



Conceptual connection of the campus



Some Recent Development Conflicts With Intent of Conceptual Edge Plan

Renovations Fail To Follow Concept For Connection of Residential, Commercial Areas

W3_RDP05_None_Dilemma-Opportunity.PDF

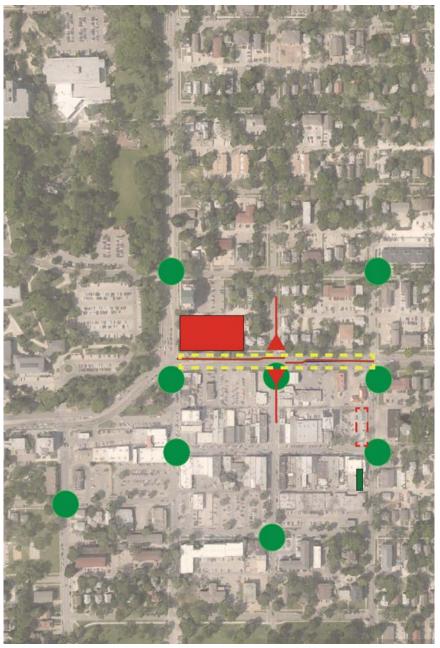


Figure 1. Derailing Plan: Potential Conflicts

Source: Google Earth



Lack of four-way crosswalk at dedocated turning lane inhibits pedestrian flow

New turn lanes prevents vehicular flow north-south

New hotel under construction close to Edge without stair-stepping architecture

New 4-lane avenue void of on-street parking

Multi-family residential units support edge as indicated in Aggieville District Plan

Opportunity to improve entrances

Inquiry: How has the city deviated from its Aggieville-Campus Edge District Plan, and where has it stayed true to or supported that plan. Where are there continued or new opportunities for following the concept plan in the future?

Key Extractions: Google Map

Methodology: Visited the Campus Edge and Aggiveille districts observing recent or current redevelopment efforts, taking photographs of changes that have taken place since the plan was adopted in 2005.

Conclusions: A few changes along Bluemont Avenue do not correspond to the vision or conceptual ideas in the plan, including the location of a strongly positioned hotel now under construction at the corner of Bluemont Avenue and Manhattan Avenue. The structure is appropriate for an urban environment, but the hotel is but a few feet from the street and therefore does not allow for street trees nor wide sidewalks as the Aggieville-Campus Edge document recommends. Nor does the architecture of the building suite the anticipated stair-stepping building form as noted in the plan. Dedicated turning lanes from a concrete medium also go against the plan that envisions through traffic and high pedestrian volumes across Bluemont at 12th Street. Nevertheless, there are opportunities to return to the original vision and follow its precepts.

Sampling of Properites Envisioned To Tranform On North Side of Bluemont (as identified in the 2005 plan)



Figure 2: House A at 1204 Bluemont Ave would be removed to accommodate an urban edge north of Aggieville (Prudenti 2014)



Figure 3: House B at 1126 Bluemont is among houses that would need to redeveloped for an urban edge. (Prudenti 2014)



Figure 4: House C is at 1122 north of Bluemont (Prudenti 2014)



Figure 5: House D is at 1116 Bluemont Avenue (Prudenti 2014)



Figure 6: House E is at 1112 Bluemont Avenue (Prudenti 2014)



Figure 7: House F is at the corner of 1100 Bluemont Avenue and 11th Street (Prudenti 2014)

Sampling of Properites Envisioned To Tranform On South Side of Bluemont (as identified in the 2005 plan)



Figure 8: The Arby's is one of several businesses that would need to be removed for redevelopment(Prudenti 2014)



Figure 9: Parking Lot A could be redeveloped to create an urban edge(Prudenti 2014)



Figure 10: Parking Lot B is at the corner of 12th Street and Bluemont Avenue (Prudenti 2014)



Figure 11: Business like this car wash on the other side of 12th Street is a car wash lacks urban feel on Bluemont (Prudenti 2014)



Figure 12: Larger Parking Lots could be converted into new building edge (Prudenti 2014)



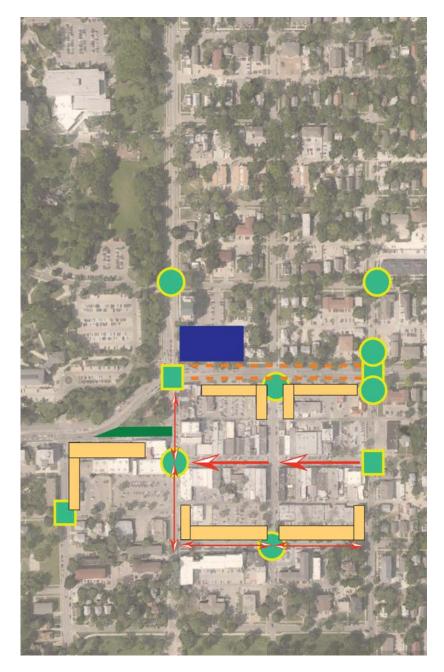
Figure 113: Starbucks could be one of the businesses occupying a building that provides an urban feel (Prudenti 2014)



Aggieville-Campus Edge Plan Can Be Force For Urban Redesign Despite Deviations

Gateway Proposed At Bluemont & 11th, With Moro Street Switching Traffic Direction and Two-Ways Added Elsewhere

W3_RDP06_None_Strategy.PDF



Reverse the one-way direction on Moro Street so vehicle traffic heads west

New hotel to be completed in the coming months

Convert traffic lanes into on-street parking on both sides of Bluemont Avenue

Close Street for Larger Park

Redevelop parking lots and commercial facilities so buildings are on edges of streets.

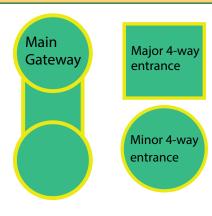


Figure 1. Resolution and Strategy Source: Google Earth

Inquiry: What can be done to return back to the concepts presented in the Aggieville-Campus Edge District Plan?

Key Extractions: Google Map

Methodology: Visited the Campus Edge and Aggiveille districts to consider options of what can be done with recent or current redevelopment effort to maintain vision established nine years ago, Pulled from the original documents and added design ideas.

Conclusions: Ideas presented in the plan can still be utilized and should be implemented moving forward. While the strong north-south through street is not possible because of the turning lane with median that divides Bluemont, this offers an opportunity for a main gateway that could be one of a series of majorand minor entrances.

Areas of Change



Figure 2: New Direction. Changing direction on Moro Street would allow Varney's marquee to become a greater landmark than it is currently with traffic flow headed away from it. (Prudenti 2014)



Figure 3: Parking Potential. Bluemont could eventually add on-street parking as commercial buildings are constructed and the need for parking increases, as currently exists on Moro Street (pictured). (Prudenti 2014)



Comprehensive Plan Projects High Density Adjacent to Aggieville

The City of Manhattan's plan for future growth accents the desire for walkable commerical access

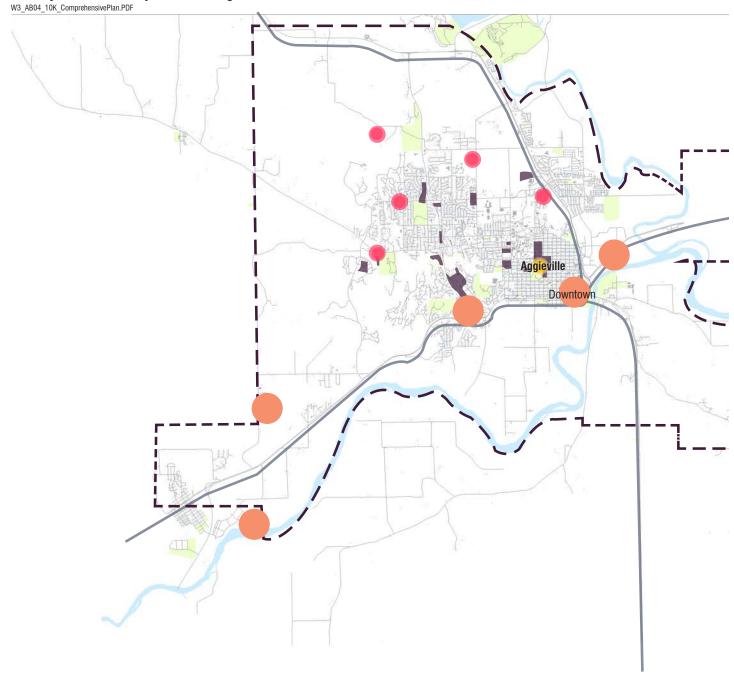


Figure 01. City of Manhattan's Plan for Future Growth

Source: Hahn. County of Riley GIS: Source data. "RICo Parks," "RICo Builidngs," RICo Streets." "RiCo River." June 13, 2014.

Inquiry: What is the City of Manhattan's Vision for future development and how does it impact Aggieville?

Key Extractions: Aggieville, Commercial Development, Corridors, Neighborhood Community Centers, Areas of High Density

Methodology: I read through the City of Manhattan's Comprehensive Plan and extracted key goals. The extracted goals were then produced into a map on Adobe Illustrator.

Conclusions: After reading the Comprehensive Plan, a major conclusion states that Manhattan population is expected to grow, and planning for growth is a primary goal. Promoting livability is a focus, and neighborhoods should provide commonity centers for use by all people. Another focus of the plan is to implement commercial districts at the entrance of the city on main corridors. High density is projected to be located adjacent to Aggieville, predicting Aggieville to have potential to be an accessible district to many people.

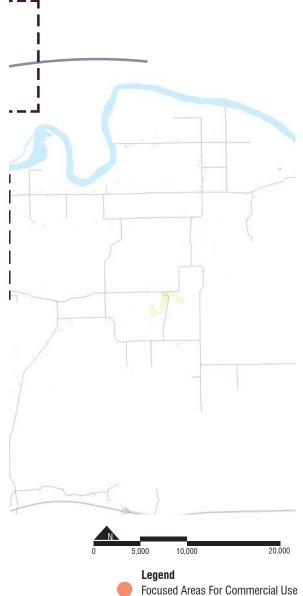
Comprehensive Plan Goals

Natural Resources protected from negative impacts by buffer between urban development and linkage between parks and environmentally sensitive areas.

Neighborhoods desired to be enhanced by the addition of mixed use community center and sense of character.

Projected Areas of Highest Density are adjacent to **Aggieville**.

Economic Development enhanced by the addition of commercial developments along significant **Corridors**.



Speical Planning Area Boundary

Neighborhood Community Center

Projected High Density

Corridors Aggieville

Parks



Aggieville the Ideal location for Social and Economic Developments

Due to location and adjacent density Aggieville has potential to be a social hub bringing the community together.

W3_AB05_3K_AggievilleDowntown_Connect.PDF



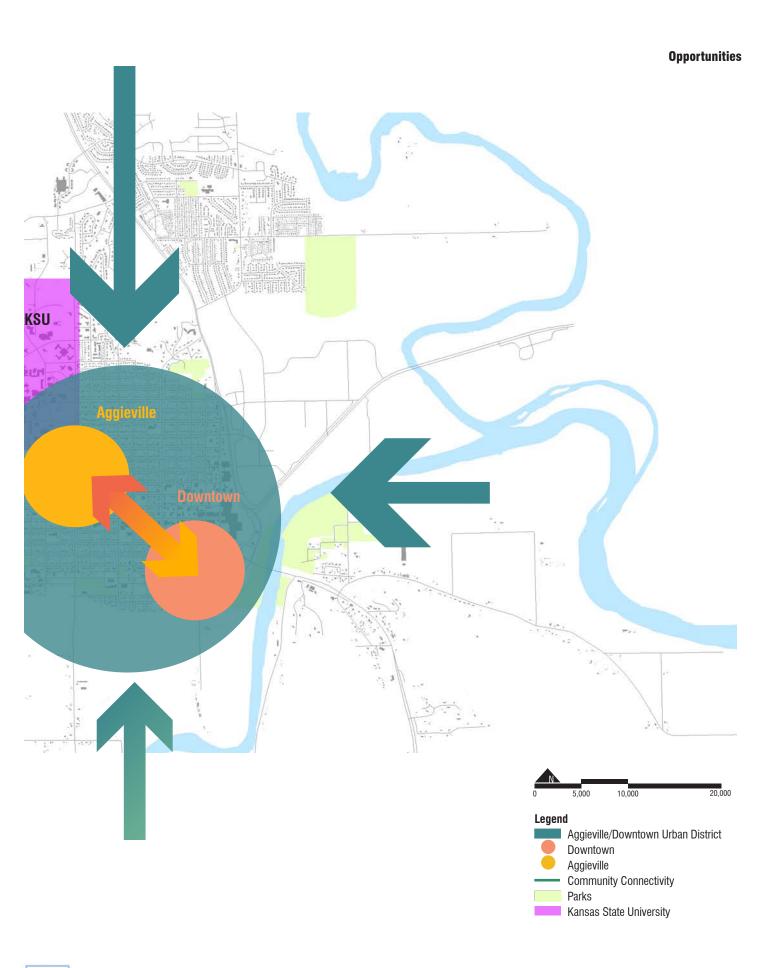
Figure 01. Potential Connection between Aggieville and Downtown Source: Hahn. County of Riley GIS: Source data. "RICo Parks," "RICo Builidngs," RICo Streets." "RiCo River." June 13, 2014.

Inquiry: How can Aggieville be beneficial to the City of Manhattan?

Key Extractions: Aggieville, Downtown, Connection of Parks, Aggieville/Downtown District, Community Connectivity

Methodology: I synthesized the comprehensive plan with more recent studies on urbanism. I applied those to Manhattan Kansas and the potential that Aggieville provides.

Conclusions: Aggieville is located at the core of the City of Manhattan. It's location provides an opportunity to present Manhattan with an urban environment that meets all of the needs of the surrounding high density neighborhoods. Aggieville is also located in close proximity to downtown and the K-State campus, which provides the chance to connect the the city's most vibrant hubs. Due to the unique character and urban setting Aggieville has the potential to bring the community together.





Aggieville Downtown Urban District

Connecting Downtown and Aggieville will create a continuous Urban District

W3_AB06_1K_UrbanDistrict.PDF

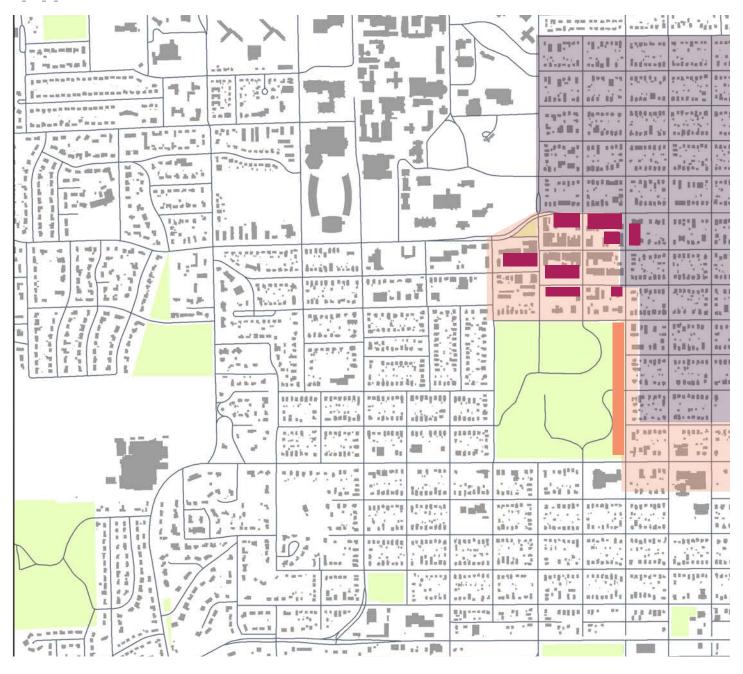


Figure 01. Aggieville Downtown Urban District

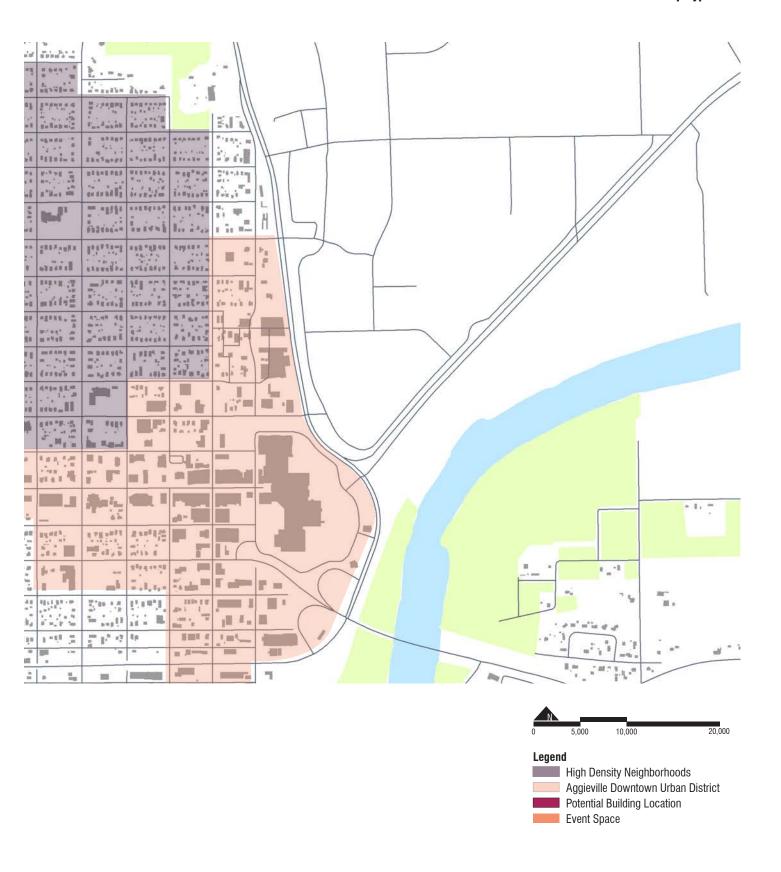
Source: Hahn. County of Riley GIS: Source data. "RICo Parks," "RICo Builidngs," RICo Streets." "RiCo River." June 13, 2014.

Inquiry: How could downtown and Aggieville be connected to create a successful urban district?

Key Extractions: High Density Neighborhoods, Urban District, Potential Commercial Buildings, Temporary Commercial

Methodology: I concluded the data received from the comprehensive plan and strategized a new urban fabric for Aggieville connecting to downtown. **Conclusions:** After analysis, I concluded that Aggieville and Downtown should work together as one urban district with a connection that consists of event space such a food trucks, markets, or festivals in City Park. Aggieville also should add additional buildings to continue the high density character of Moro Street. In addition, higher density neighborhoods should extend between downtown and Aggieville creating an urban living environment with pedestrian access to amenities.

Map Type Here





Inventory of Manhattan Regional Development Reveals Three Areas of Concentrations

Most major investments have occurred in last seven years (2007-2014)

W3_BK04_3K_FinancialInventory.PDF

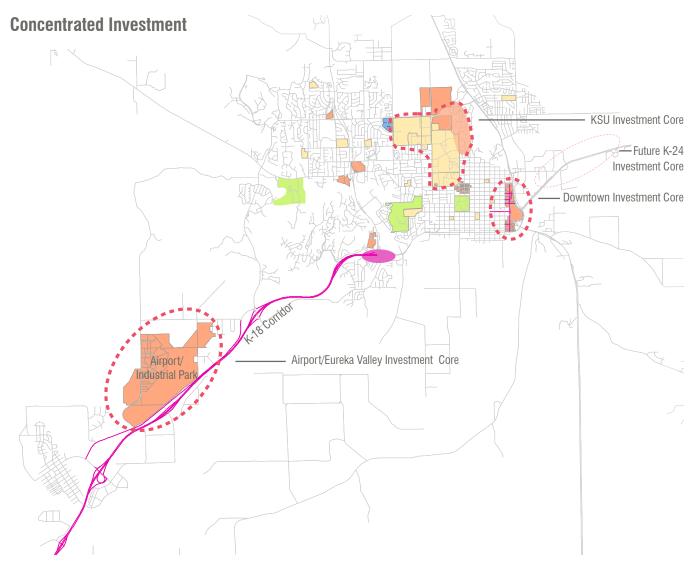


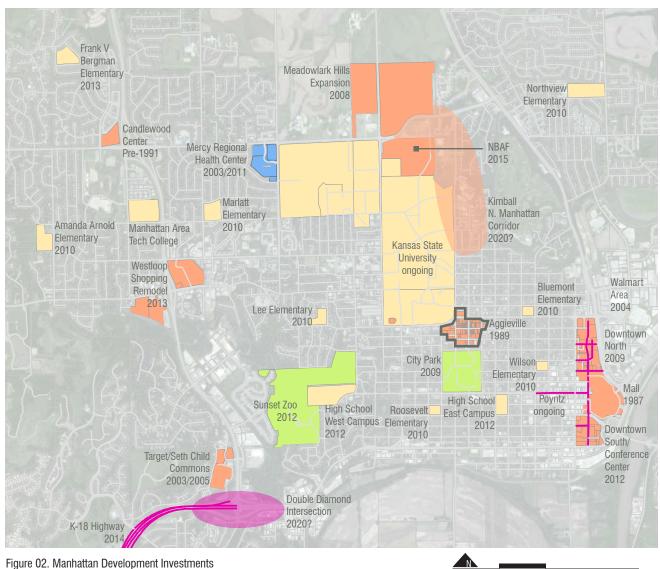
Figure 01. Manhattan Regional Development Cores Source: Riley County GIS Data, Chamber of Commerce, NBAF Economic Impact Report, Manhattan City Planning Documents, KDOT Website

Inquiry: Where has major economic investment occurred in Manhattan over the past 30 years?

Key Extractions: Investment Parcels, Aggieville District, Downtown District

Methodology: Used ArcGIS for parcel and transportation data; digitizing investment portions of each identified through Manhattan Chamber of Commerce interviews, literature and other various, cited references.

Conclusions: In 1985, Manhattan's choice to develop the Mall in downtown rather than near the Airport acted as a catalyst to concentrate further development in the city's core rather than the trending suburban sprawl model.



Source: Riley County GIS Data, Chamber of Commerce, NBAF Economic Impact Report, Manhattan City Planning Documents

Investment Timeline

Lee

Investment Timeline Inv					Investment Type
(dates are approximate)			2009	City Park- Splash Pool and Pavilion/	Health
2020?	Kimball N. Manhattan Corridor			Stage	Commercial
2015	NBAF		2008	Meadowlark Hills Retirement Center	Education
	Current Poyntz R	edevelopment		Expansion	Recreation
	Kansas State Unive	rsity	2004	Walmart Area	Transportation
2014	K-18 Highway partnered ARRA		2005	Seth Child Commons	
2013	Westloop Shopping Remodel		2003	Mercy Regional Health Center	
2012	Downtown South			Target	
	Sunset Zoo		1996	Middle Schools	
	High School West Campus			Susan B. Anthony	
2011	Mercy Regional Health Center			Eisenhower	
2010	School Improvement Bonds		Pre-1991	Candlewood Center	
	Amanda Arnold	Roosevelt	1989	Aggieville Streetscape	
	Bluemont	Wilson	1987	Mall- Manhattan Town Center	

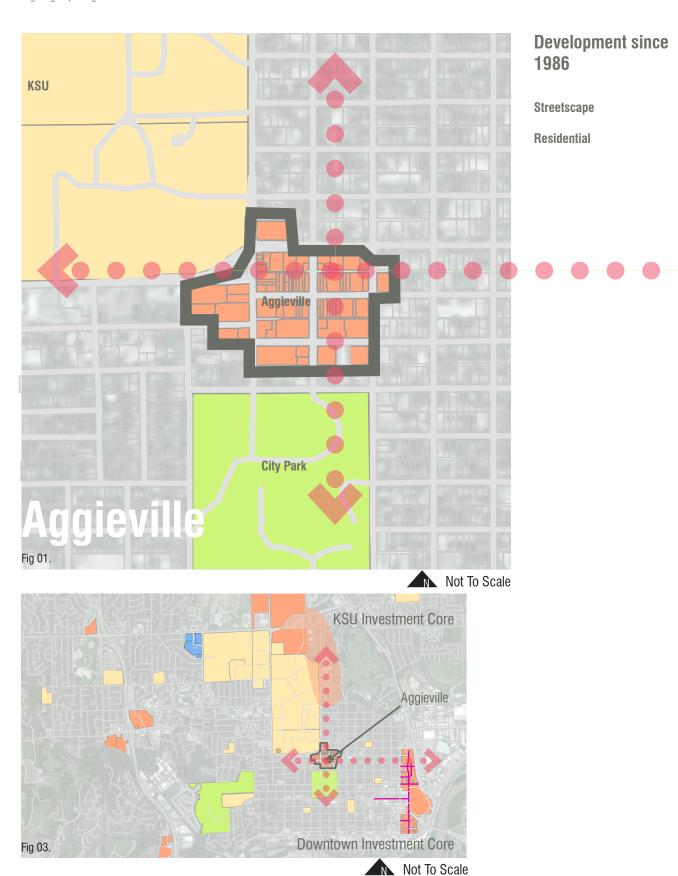


6,000

3,000

Aggieville Located as "Cross-Connection" Between KSU and Downtown Investment Cores Aggieville has received little city development attention since the mid-1980s.

W3_BK05_Comparative_Investment.PDF



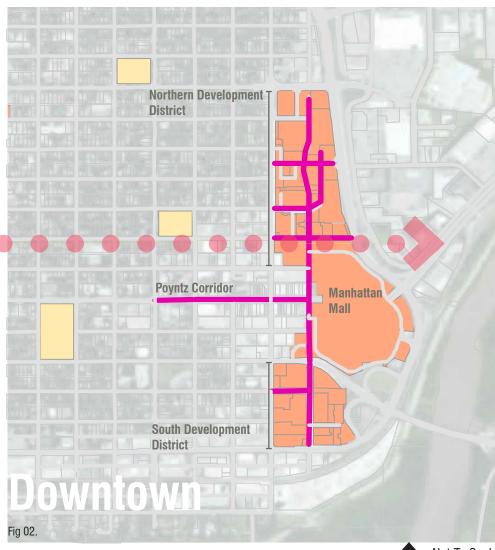
Development in Last 5 Years

Streetscape

Residential

Commercial

Infrastructure



Not To Scale

Figure 01. Aggieville

Figure 02. Downtown

Figure 03. Aggieville and Downtown Context

Inquiry: What areas of potential development link the KSU Investment Core to the Downtown Investment Core?

Key Extractions: KSU Investment Core, Downtown Investment Core, Aggieville

Methodology: Used ArcGIS, Adobe InDesign and Illustrator.

Conclusions: Lack of recent redevelopment in Aggieville offers opportunity to attract new investment due to Aggieville's proximity to KSU investment core and potential connection to Downtown investment core.



Strategic Routes Proposed to Enhance Aggieville's Connections and Increase Usage

Aggieville is uniquely situted to become a commercial core

W3_BK06_Strategy_Investment.PDF

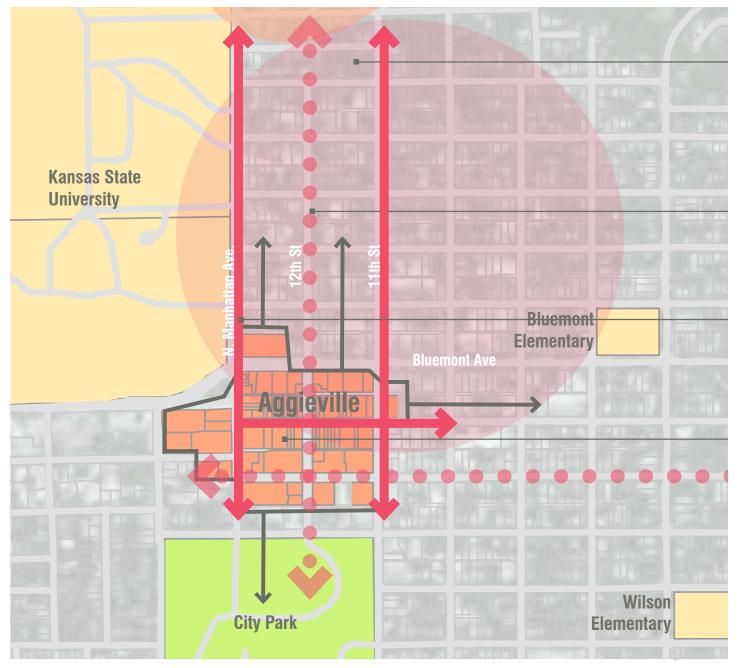


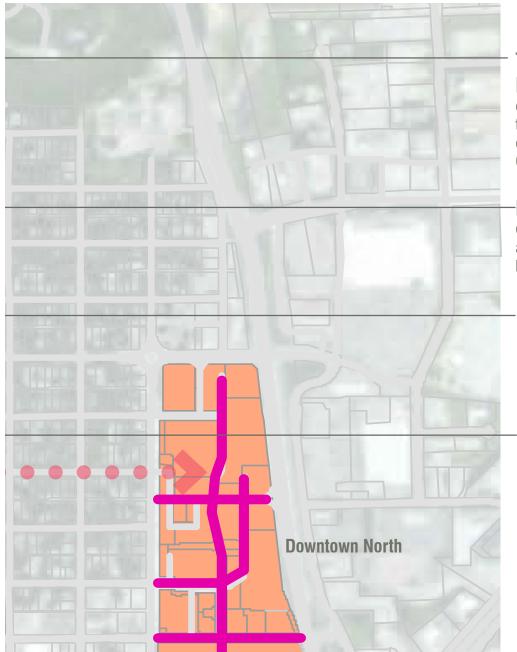
Figure 01. Aggieville Connects KSU Investment Core and Downtown Investment Core Source: Riley County GIS DATA

Inquiry: How might Aggieville link the KSU Investment Core and the Downtown Investment Core?

Key Extractions: KSU, Aggieville, Downtown, North Corridor

Methodology: Used ArcGIS, Adobe InDesign and Illustrator in addition to previous maps, in sequence, to locate potential corridors and connect through amenities not present or in need of redevelopment in Aggieville.

Conclusions: Aggieville is uniquely situated by Kansas State University where much of the recent development in Manhattan has taken place. Because of this proximity and its location between the North Corridor and downtown it can act as a mixed-commercial hub for Manhattan.



Targeted High Density Residential Growth Area

current city planning idenifies this area for denser residential development to support NBAF and Campus Research Park

Pedestrian Corridor

consistent with Campus Edge Plan and move towards more pedestrian linkages on campus

Bicycle/Bus Corridor

Commercial Infill

primarily to the north and east, but potential in all directions



Business Composition and Operations

Local, Regional, and National Business Mix Pearl St. Comparison Business Hours of Operation

2

Locally-Founded Retail, Restaurant, and Service Businesses Rule Aggieville

More local businesses exist in Aggieville than in other Manhattan shopping districts

W2_TL01_1K_LocalBusiness.PDF

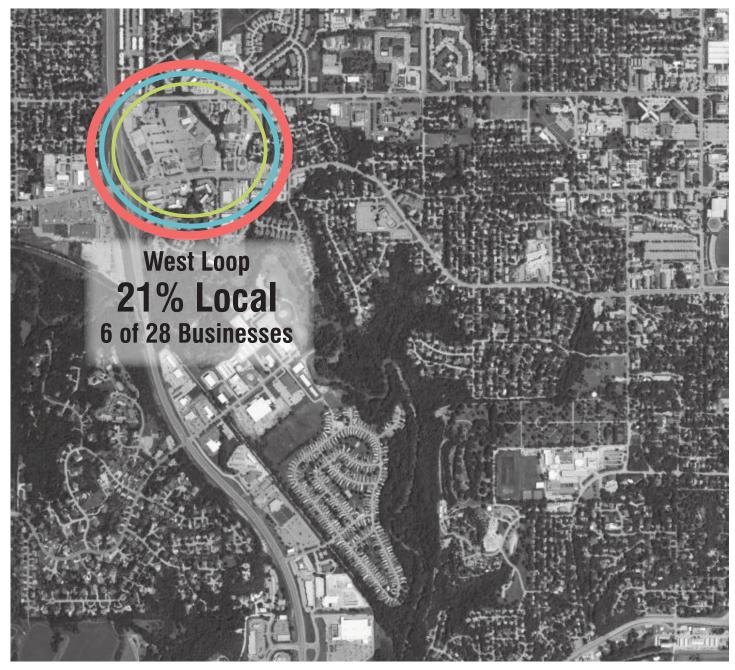


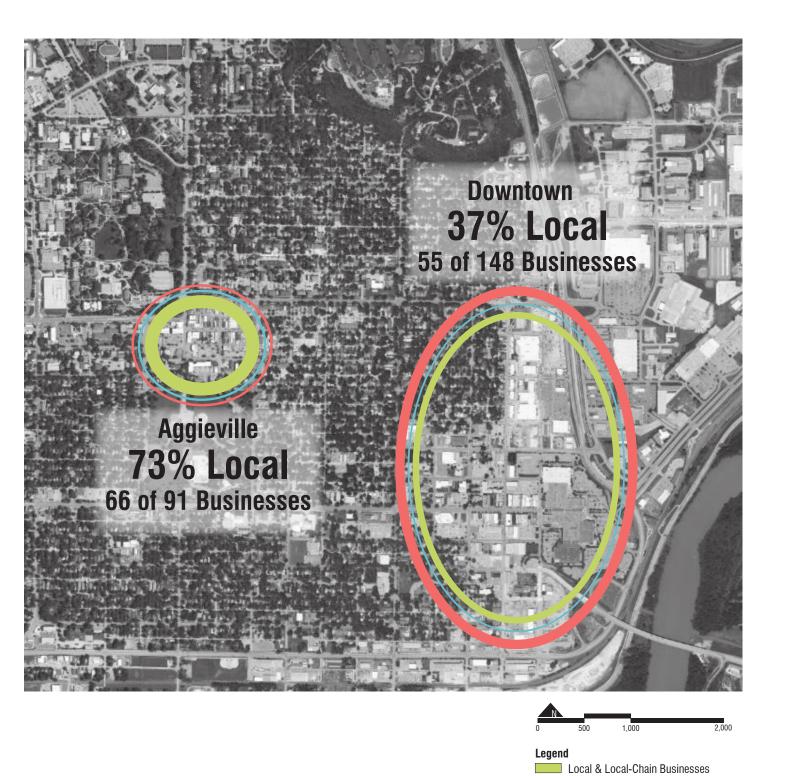
Figure 01. More Local Businesses Character in Aggieville Source: ArcOnline, downtownmanhattanks.com, aggieville.org

Inquiry: How does Aggieville compare to other shopping districts in Manhattan, in terms of business locality?

Key Extractions: Shopping Districts - West Loop, Aggieville, Downtown; Percentages of Single and Local-Chain, Regional-Chain, and National/International-Chain Businesses

Methodology: Using business directories from two shopping district-oriented websites, I listed and classified every retail, restaurant, and service business (excluding consulting offices) by identifying how many locations the business can be found in or out of Manhattan. Single and local-chain businesses occur once or multiple times in Manhattan, regional-chain businesses can have locations that occur several times in the states immediately bordering Kansas, and national/international-chain businesses can have locations beyond the "midwest" region. The thickness of the rings on the map reflect the percentage of each business scale for each shopping district.

Conclusions: Businesses in Aggieville tend to be predominately local. Manhattan's downtown district is predominately national-chains, but there is a considerable amount of local businesses present. It may be a competitive district to Aggieville as it improves and expands. The West Loop shopping district, however, does not seem to have enough local businesses to compete with Aggieville's character at this time.







Surface Parking and National-Chain Businesses Distract from Local Character

Parking lots in Aggieville are sporadic and large enough to attract some national chain stores.

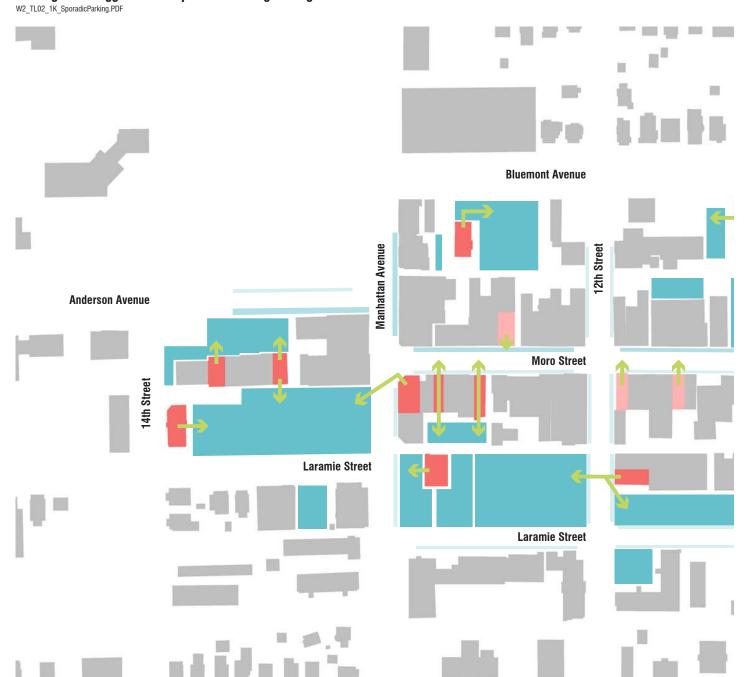


Figure 01. Sporadic Surface Parking Distracts from Local Character of Aggieville
Source: Google Earth; Lininger, Taylor. 2014. Aggieville Figure Ground. Source data: Riley County. "BLDGFTPRNTS." June 2014.

Inquiry: Are national-chain businesses in Aggieville adjacent to large surface parking lots?

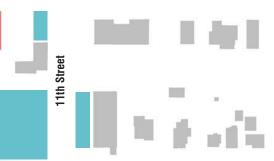
Key Extractions: National-chains adjacent to parking, other national-chains, building entries, surface parking, angled street parking, parallel street parking, and building footprints.

Methodology: Using Google Earth, I located each national-chain business in Aggieville and identified its location. I then used Google Earth to identify each of the three types of parking available in the area. Arrows were added to show the relationship of building entries to adjacent parking. **Conclusions:** More than half of the national-chain businesses in Aggieville are directly adjacent to large surface parking lots. Upon this realization, I calculated approximately how many parking spots were dedicated to or shared by those chain stores and found that the national-chains, which only account for 14% of businesses in Aggieville, use 31% of surface parking spots. This map also shows that surface parking lots are located sporadically throughout Aggieville, and distract from the denser character along Moro Street.





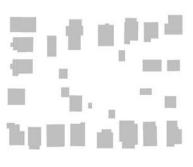
National Chains are Adjacent to Surface Parking Lots



165 of 525

Surface Parking Spots are Shared by National Chains

Parking Spots for Chain Stores



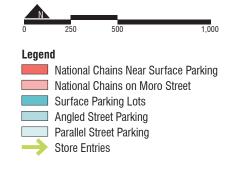


31%











Towards More and Better-Organized Parking in Aggieville

A parking structure and less surface parking could improve the character of streets through Aggieville.

W2_TL03_500FT_OrganizedParking.PDF



Figure 01. More Organized Parking in Aggieville

Source: Google Earth; Lininger, Taylor. 2014. Aggieville Figure Ground. Source data: Riley County. "BLDGFTPRNTS." June 2014.

Inquiry: Where should parking in Aggieville be located in order to provide more parking while simultaneously preventing large chain businesses from infringing on the local character of Moro Street?

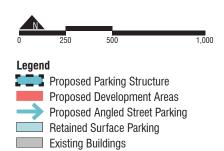
Key Extractions: Existing Buildings, Proposed Parking Structures, Proposed Development, Retained Surface Parking

Methodology: Using information from the first two maps in this series, this map was created by locating areas in Aggieville where parking could be removed and where it could be moved to. The map also outlines potential development areas in order to prevent the "Big-Box" model while Aggieville expands.

Conclusions: A parking structure at the southwest corner of Aggieville creates a defined urban edge on 14th Street while being accessible to traffic from Poyntz and Anderson avenues. The three-story parking structure would provide enough parking to remove some from the blocks along Bluemont Avenue and Laramie Street, allowing for more retail development to occur along important traffic-ways through Aggieville.



- Three-story parking structure, retail/restaurant & green space development along Laramie St.
- 2 Strong urban edge along Bluemont Avenue to represent Aggieville district.
- Removal of surface parking lots to create a retail environment on Laramie St.
- Unique "Aggieville" destination across from the new Bluemont Hotel.
- Residential development along Laramie St.





Aggieville's Business Landscape

Over Half of the Businesses in Aggieville Serve Food &/or Alcohol

W1_EW01_200_VilleBusinesses.PDF



Figure 1. Current Aggieville Businesses

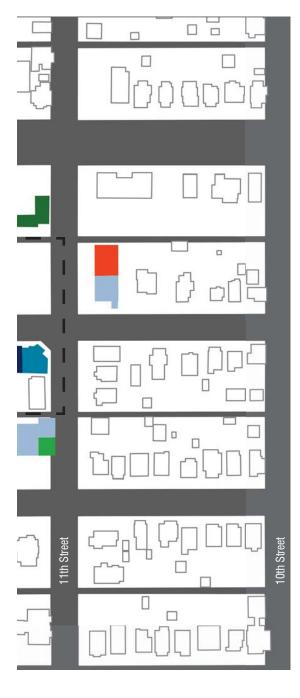
Source: Riley County GIS, "RLCo PArcels Mar2009," "Buildings," Infogroup Inc., "AggievilleBusinesses"

Inquiry: What types of businesses are located in Aggieville?

Key Extractions: Individual Businesses in Aggieville, Building Footprints, Building Parcels, and Streets

Methodology: Researched businesses within the BID (Business Improvement District) boundary on ReferenceUSA website. Validated business locations by an field visit. Missing businesses discovered on-site were added to the map. Each business type was classified by their original NAICS (North American Industry Classification System) codes. If no NAICS codes were available, business types were cross-referenced by company websites and social media. Six general categories were distilled from the individual business types.

Conclusions: Aggieville has a total of 99 businesses. Forty-three businesses are located along Moro Street. Of those, 29 of the 52 total eating and drinking establishments are highly concentrated between Manhattan Avenue and 11th Street. The density of businesses decreases as one moves away from Moro Street.



52%

Businesses in Aggieville serve food and/or alcohol

29%

Businesses in Aggieville are professional or personal services

18%

Businesses in Aggieville are stores/retail goods.

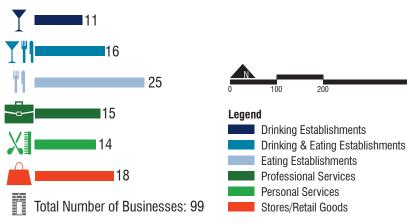


Figure 2. Aggieville Business Infographics Source: Infogroup Inc.



Opportunities to Change Aggieville's Business Landscape

Open Spaces Surrounding Moro Street Provide Canvas for Redevelopment

W1_EW02_200_VilleBusOpportunities.PDF



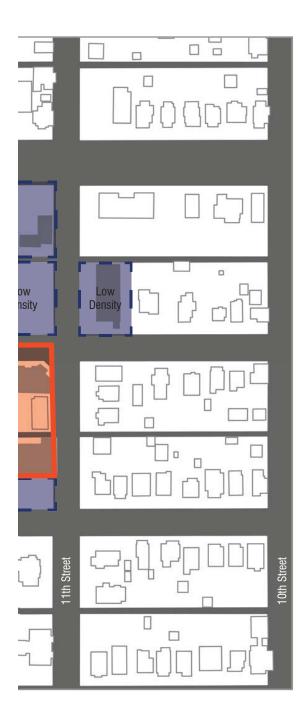
Figure 1. Location of Areas for Business Recombination and Opportunity in Aggieville Source: Riley County GIS, "RLCo PArcels Mar2009," "Buildings," Infogroup Inc., "AggievilleBusinesses"

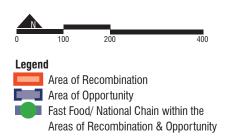
Inquiry: Where are opportunities for business redevelopment in Aggieville?

Key Extractions: Individual Businesses in Aggieville, Building Footprints, Building Parcels, Streets, and Identified Opportunities

Methodology: Delineated higher and lower business density areas from the previous map of Aggieville Businesses.

Conclusions: The high density area around Moro Street contains many of the same business types. The businesses in this area could be rearranged for a more diverse experience of Aggieville. A lot of these similar businesses are within close proximity to competition. Low density areas of businesses are located outside of the Moro Street core. These opportunity areas could provide the space for infill and redevelopment for a more densely-cohesive district. They can define the northern edge of Aggieville on Bluemont Street as well as define Laramie Street as a part of Aggieville.







Mimicking Moro

Replicating Moro Street as infill, the total number of businesses would increase from 99 to 145.

W1_EW03_200_VilleBusStrategy.PDF



Figure 1. Suggested Business Locations in Aggieville

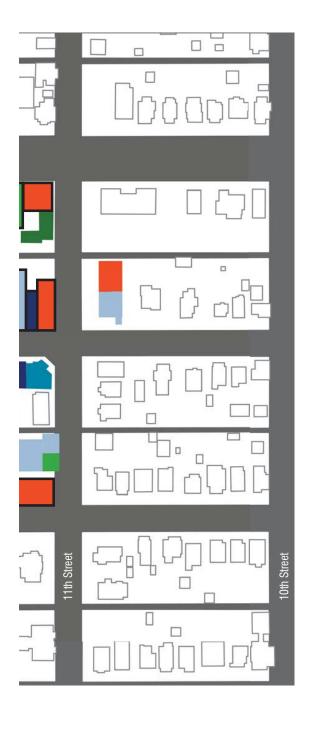
Source: Riley County GIS, "RLCo PArcels Mar2009," "Buildings," Infogroup Inc., "AggievilleBusinesses"

Inquiry: What would Aggieville look like if the fabric of Moro Street was continued throughout the district?

Key Extractions: Individual Businesses in Aggieville, Building Footprints, Building Parcels, and Streets

Methodology: Strategically placed new businesses within the lower density areas. New businesses along Moro Street were added to increase and balance the diversity of businesses.

Conclusions: Forty six new businesses were added throughout Aggieville to emulate the high density character of Moro Street. The number of drinking establishments would change from 11 to 19. The number of drinking and eating establishments would change from 16 to 19. The eating establishments amount increased by one business (25 to 26). Since the ratio of eating establishments was the highest, the amount of new eating establishments was reduced. Stores and retail good business numbers would more than double (18 to 39).



44%

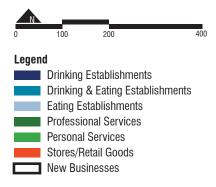
Businesses in Aggieville that would serve food and/or alcohol

29%

Businesses in Aggieville that would be personal and professional services

27%

Businesses in Aggieville that would be retail/goods stores





Manhattan is an Automobile Dependent Town

Aggieville lacks amenities to be a successful walkable neighborhood

W4_LT07_Walkability.PDF

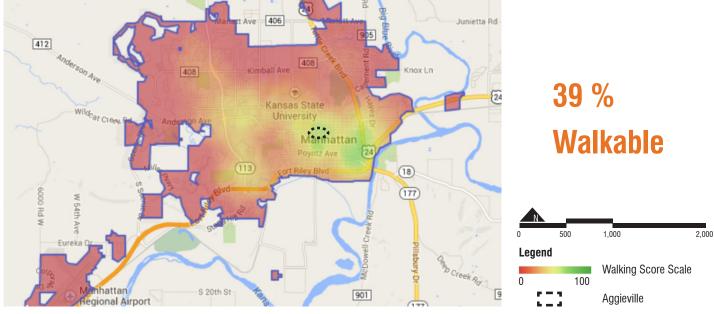


Figure 01. Walkability of Manhattan



Figure 02. Walkability of Aggieville District

Source: Walkscore. "Manhattan's Walkscore," 2014.

Inquiry: How do the amenities in Aggieville affect its walkability score?

Key Extractions: Walkscore of the entire city of Manhattan and Aggieville, Exacting amenities of Aggieville and surrounding area, Locating desirable walking distance.

Methodology: Research was done on Walkscore to measure the walkability of the city and locations throughout that measured the walkability on a scale from 0-100 based on walking routes to destinations such as grocery stores, retail stores, restaurants, services, schools and parks. This scale was based on the distance to each amenity and amenities within a 5 minute walk or .25 miles were given maximum points. The highest score is a walker's paradise where most errands could be accomplished on foot and low scores indicate dependence on the automobile.

Conclusions: Overall Manhattan is a car dependent town, but Aggieville's compact nature allows it to be very walkable where most errands could be done on foot. However, after exacting each amenity and analyzing its location in aggieville and surrounding areas to determine what amenities where walkable, I found that Aggieville lacked in providing any grocery stores and the number of retail was very limited. Many of these amenities were located in clusters within one mile of Aggieville but not in the desirable quarter mile range.

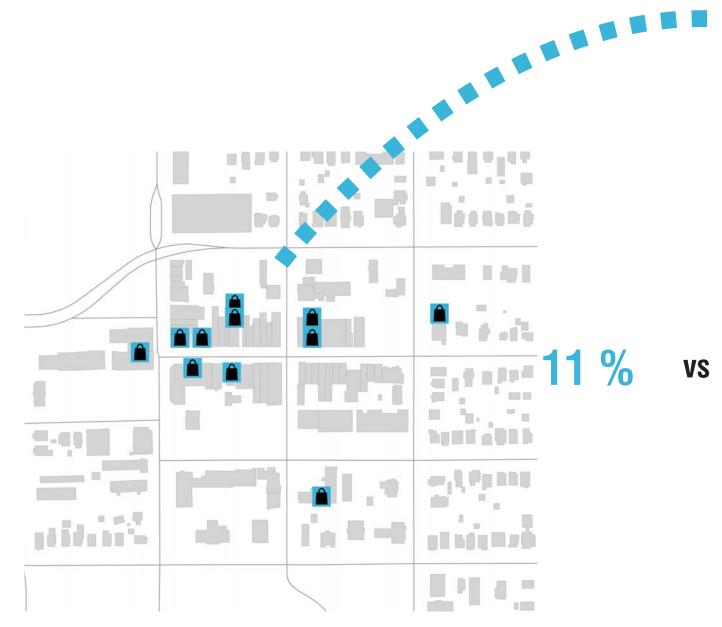
What makes a neighborhood walkable? **Public Spcaes** Retail **Workplaces Mixed-Uses Entertainment People Services Education Dining Parks Grocery/Drug Stores Retail Stores** 1 mile Figure 03. Proximity of Grocery Stores/ Drug Stores Figure 04. Proximity of Retail Restaurants/Bars Services 1 mile nanann n Figure 05. Proximity of Restaurants/Bars Figure 06. Proximity of Services Schools **Parks** 1 mile Figure 07. Proximity of Parks Figure 08. Proximity of Schools Source Figure 03-08: Hahn. GIS Data "Buildings. Legend Desirable Walking Distance Aggieville



Aggieville Lacking in Retail Business

Recent downtown development is attracting new and relocated businesses from Aggieville

W4_LT08_300_LackingRetail.PDF



Aggieville District

Figure 01. Percentage of Retail Businesses in Aggieville Source: Hahn. GIS Data "Buildings." Wilson Aggieville Business Database

Inquiry: How has retail diminished in Aggieville and shifted to the Downtown District?

Key Extractions: Location of retail businesses in Aggieville and Downtown; Percentage of retail business was compared in each district. Methodology: Identified the percentage of retail in the Aggieville and Downtown Districts by using the Manhattan's Chamber of Commerce business listing as well as Erin Wilson's Aggieville Business Database.

Conclusions: Aggieville currently supports a small number of retail businesses, whereas the retail comprises nearly hald of the business in the Downtown District. Currently the retail located in downtown is either in the Manhattan Town Center or on surrounding streets, which allows it to be a prime area for people by offering shopping variety and choices. Aggieville currently has a dilemma of not having a balanced mix of different retail options and other businesses, causing it not to be a prime destination for shopping.



Downtown District

Figure 02. Percentage of Retail Businesses in Downtown Source: Manhattan Kansas Area Chamber of Commerce. "Chamber of Commerce: Business Directory" Hahn. GIS Data "Buildings.

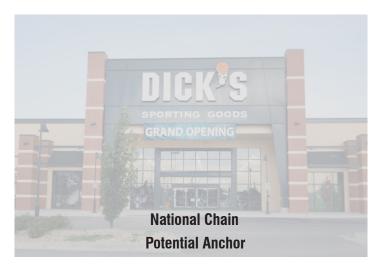




Adding More Retail Businesses in Aggieville Can Create a Better Mixed-Use District

By applying the right type of retail businesses, Aggieville can be a prime destination

W4_LT09_RetailInTheVIlle.PDF



National Model

VS

Local Model



Applying the Characteristics of a Successful Retail District

- Management
- Retail-Appropriate
- Pedestain-Friendly
- Parking Options
- Unified District
- Transit-Accessible
- Programed Events

Figure 01. Understanding National Chain and Local Businesses

Source: Delware Valley Regional Planning Commission. "Revitalizing Suburban Downtown Retail Districts: Strategies and Best Practices." "Dick's Sporting Goods: Manhattan Marketplace." "Fortuity Shopping and Retail."

Inquiry: What retail business model can best create Aggieville's identity and balanced mixed use?

Key Extractions: Local and national chain retail businesses, Building footprints

Methodology: Researched the characteristics of successful retail districts to help find out which types of retail would fit best in Aggieville. **Conclusions:** By researching what types of retail stores would best fit in Aggieville, it allowed a business and building location strategy to form. Aggieville has a strong local identity but recently lacks an array of amenities to help it become a successful walkable and mixed-use district. By optimizing the open space in Aggieville, new higher density buildings can be implemented to provide space for retail and other amenities. Placing retail and restaurants on the first floor will help activate the pedestrian life on the ground level while still offering other amenities in the upper levels such as office space, residential space, and parking structures.

Strategy



Figure 02. Proposed Spaces for New Mixed-Use Development to be Implemented Source: Hahn. GIS Data "Buildings.



Figure 03. Proposed Building Idea with Retail and Parking Source: Prudenti, Richard. 2014. Varney's Parking Lot (Manhattan, KS). Digital Photo

Legend





Pearl Street Mall Has 31% More Retail Than Aggieville

Only 18% of Aggieville businesses are retail.



Pearl Street Mall

Boulder, CO: Population About 102,000
University of Colorado
Pedestrian mall within a larger district
300 ft. blocks
Majority of buildings have 2 or more stories
Pedestrian-only mall provides opportunities
for kiosks and food carts
Higher density of businesses
(compared to Aggieville)

300

Figure 1. Pearl Street Mall Business Demographics Source: City of Boulder GIS, "parcels," "buildings," Downtown Boulder



Figure 2. Aggieville Business Demographics

Source: Riley County GIS, "RLCo PArcels Mar2009," "Buildings," Infogroup Inc., "AggievilleBusinesses"

0 150 300 600

Inquiry: How does the business demographics of Aggieville compare with Pearl Street Mall?

Key Extractions: Business Demographics, College Towns, Entertainment Districts

Methodology: Like Manhattan, Boulder is a college town that has an entertainment district called Pearl Street Mall. Both are well-known districts that serve students, visitors, and community members.

Conclusions: The business demographics between these two college town entertainment districts vary greatly. Pearl Street Mall has 31 percent more retail businesses than Aggieville in a higher concentration. Aggieville has 28 percent more drinking and eating establishments than Pearl Street Mall. Pearl Street Mall has only one drinking establishment/night club. However, Pearl Street Mall has the Boulder Theater as an entertainment venue unlike Aggieville. The percentage of services between Aggieville and Pearl Street Mall is relatively similar. Pearl Street Mall's services are more clustered together than Aggieville's services because Pearl Street Mall has taller, mixed-use buildings on smaller blocks.

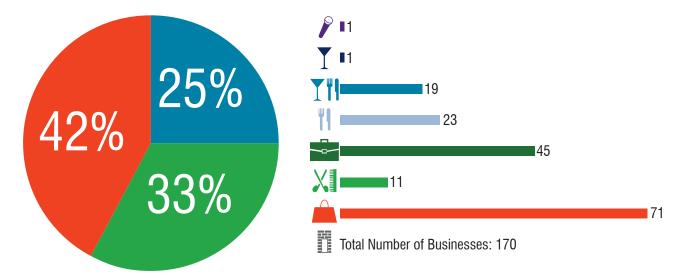


Figure 3. Pearl Street Mall Businesses Source: Downtown Boulder

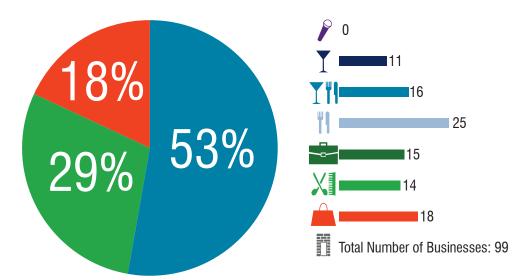


Figure 4. Aggieville Businesses Source: Wilson Aggieville Business Database

Legend





Opportunities for Aggieville to Adopt Pearl Street Mall Model

Moro Street could close to vehicular traffic for a more pedestrian friendly environment.

W4_EW08_0_PearlModel.PDF

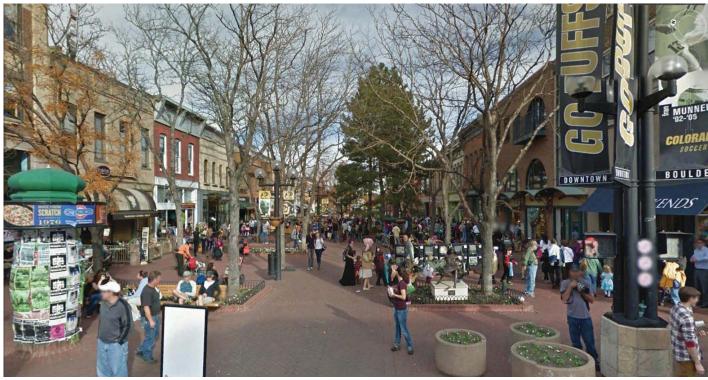


Figure 1. Pearl Street Mall Street View Source: Google Earth

Inquiry: If the Pearl Street Mall model was applied to Aggieville, what opportunities emerge?

 $\textbf{Key Extractions:} \ \, \textbf{Building Size, Pedestrian Mall, High Density}$

Methodology: Identified the differences between Pearl Street Mall and Aggieville. Applied high density, mixed-use buildings with services on second levels. Retail, restaurants, and bars were left on street level much like Pearl Street MalL

Conclusions: With taller buildings, Aggieville can increase the density of businesses. Service businesses are not as open as other types of businesses. With shops, bars, and restaurants on the street level, the pedestrian traffic and interaction would be seen more consistently along streets. Currently, Aggieville lacks a cinema or entertainment venue. Having a cinema on the second level above closed shops would provide an attration for diverse audiences, and a cinema could become a regional draw.



Figure 2. Changing Moro Street Source: Photo: Richard Dean Prudenti modified by Wilson

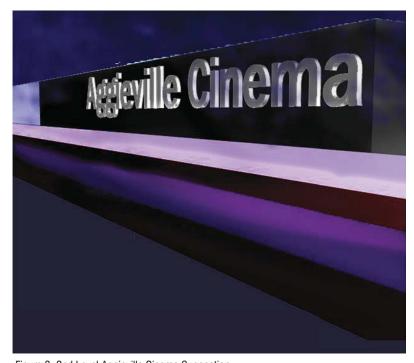


Figure 3. 2nd Level Aggieville Cinema Suggestion Source: Sketchup, Erin Wilson



Legend

- Drinking Establishments
- Drinking & Eating Establishments
- Eating Establishments
- Professional Services
- Personal Services
 - Stores/Retail Goods
 - Closed Moro Street

A Balanced Aggieville

Number of drinking and eating establishments reduced from 53% to 33%

W4_EW09_150_PearlandVille.PDF



Figure 1. Balanced Aggieville Business Demographics

Source: Riley County GIS, "RLCo_PArcels_Mar2009," "Buildings," "AggievilleBusinesses"

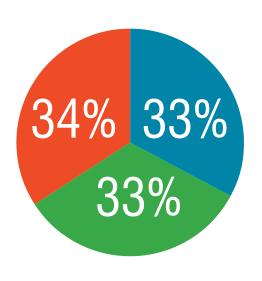
Inquiry: What would Aggieville look like if retail, services, and drinking/eating establishments were balanced?

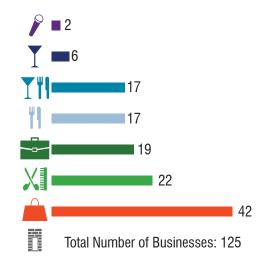
Key Extractions: Business Demographics, College Towns, Entertainment Districts

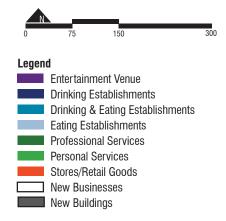
Methodology: Instead of infilling Aggieville with the same business ratio as Pearl Street Mall, the ratio of services to retail to drinking/eating establishments was equally split between the three categories. However, not every single business type is equally divided up. Pearl Street Mall's density and demographic patterns were applied toward the northern half of Aggieville.

Conclusions: The amount of bars and restaurants was reduced from 53 to 42. Service business numbers increased by 12. Retail number of businesses more than doubled going from 18 to 42. Two entertainment venues were added in response to adopting the Pearl Street Mall model. Now, Aggieville's bar scene has been reduced in quanitity and family-friendly business types have increased.











Most Aggieville Businesses Operate Between 11:00 AM and 1:00 AM

The number of open businesses increases by 25-30 between 10:00 AM and 11:00 AM.

W3 EW04 600 VilleHours.PDF



TUESDAY-FRIDAY: PEAK 4:00 PM

5:00 AM

1.00.7 NA 00:7

85 Businesses Open

MONDAY: PEAK 4:00 PM

74 Businesses Open

25% of Aggieville Businesses are Not Open

Figure 1. Monday Hours in Aggieville Source: Wilson Aggieville Business Database Aggieville Businesses are Typically Open

Figure 2. Average Weekday Hours in Aggieville Source: Wilson Aggieville Business Database



AGGIEVILLE: 7:00 AM

Monday-Sunday: Only 9-13% of Businesses are Open

Figure 5. Aggieville at 7:00 AM

Source: Wilson Aggieville Business Database, Riley County GIS "Buildings"

Doggood

Eating Establishments

Drinking & Eating Establishments

Drinking

1.00.1

Establishment

Stores/Retail Goods

Professional Services

Personal Services

Average No. of Businesses

AGGIEVILLE: 11:00 AM

Monday-Sunday: An Average of 30 Businesses Open at 11:00 AM

Figure 6. Aggieville at 11:00 AM

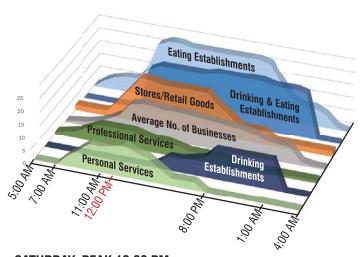
Source: Wilson Aggieville Business Database, Riley County GIS "Buildings"

Inquiry: When are businesses open in Aggieville?

Key Extractions: Individual Businesses in Aggieville, Building Footprints, and Operating Hours

Methodology: Operating hours for individual businesses in Aggieville were collected via online research and field visit. Referred to the Aggieville Business Association website for links to each individual business. Each link connected to a business website or social media business page for most businesses. If the operating hours for a business were unattainable online, a field visit was made to that business to retrieve data. All data was collected into a spreadsheet database for Aggieville businesses. Then, data was converted into various graphic representations for synthesis. Selected hour data was imported into ArcGIS for the hourly spatial representation of Aggieville.

Conclusions: The graphs above show that Aggieville businesses are generally open between Tuesday and Friday more than Saturday through Monday, Stores/Retail Goods, Professional Services, and Personal Services are generally open around 8:00 AM and close by 8:00 PM. A spike in the amount of business between 10:00 AM and 11:00 AM indicates an increase of open Eating Establishments and Drinking & Eating Establishments. A drop after 1:00 AM shows that Drinking Establishments and Drinking & Eating Establishments close at 2:00 AM. Peak amounts are listed above.

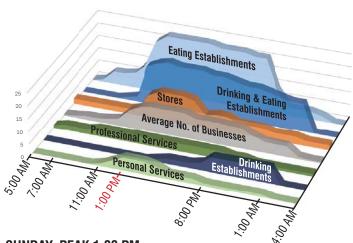


SATURDAY: PEAK 12:00 PM

75 Businesses Open

25% of Aggieville Businesses are Not Open

Figure 3. Saturday Hours in Aggieville Source: Wilson Aggieville Business Database

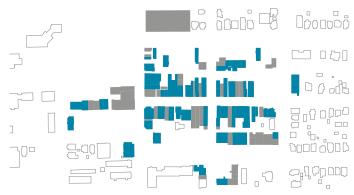


SUNDAY: PEAK 1:00 PM

60 Businesses Open

40% of Aggieville Businesses are Not Open

Figure 4. Sunday Hours in Aggieville Source: Wilson Aggieville Business Database

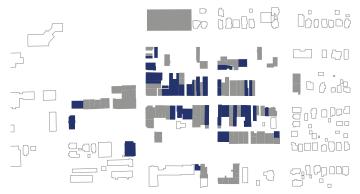


AGGIEVILLE: 8:00 PM

Monday-Sunday: An Average of 60 Businesses Open at 8:00 PM

Figure 7. Aggieville at 8:00 PM

Source: Wilson Aggieville Business Database, Riley County GIS "Buildings"



AGGIEVILLE: 1:00 AM

Monday-Sunday: Between 18-30 Drinking Establishments Close by 2:00 AM

Figure 8. Aggieville at 1:00 AM

Source: Wilson Aggieville Business Database, Riley County GIS "Buildings"



Business Categories

Drinking Establishments: Places that serve alcohol (Ex. Shot Stop and Auntie Mae's Parlor)

Drinking & Eating Establishments: Places that serve both food & alcohol (Ex. Rusty's, Kite's Grille & Bar, and Wahoo Fire & Ice Grill

Eating Establishments: Places that serve food only (Ex. Pita Pit, Cozy Inn, and Varsity Donuts)

Professional Services: Banks, Copying Centers, Dry cleaners, Property Management (FEDEX, Kansas State Bank, and Carson Property Management)

Personal Services: Salons, Barber Shops, Tattoo Shops, & Fitness Centers (Shaggieville, Twisted Apple Tattoo, and Sun Connection

Stores/Retail Goods: Places that sell goods (Varney's Book Store, Dusty Bookshelf, Threads, KWIK Shop, Acme Gift, and Wildcat Nutrition)

Average No. of Businesses: Combined average number of each business category throughout the day



Eastern Half of Moro Street Left Hungry for Morning Business

Morning businesses are concentrated near Anderson/Bluemont Avenue and the corner of Manhattan Avenue and Moro Street.

W3_EW02_100_VilleHoursOpportunities.PDF



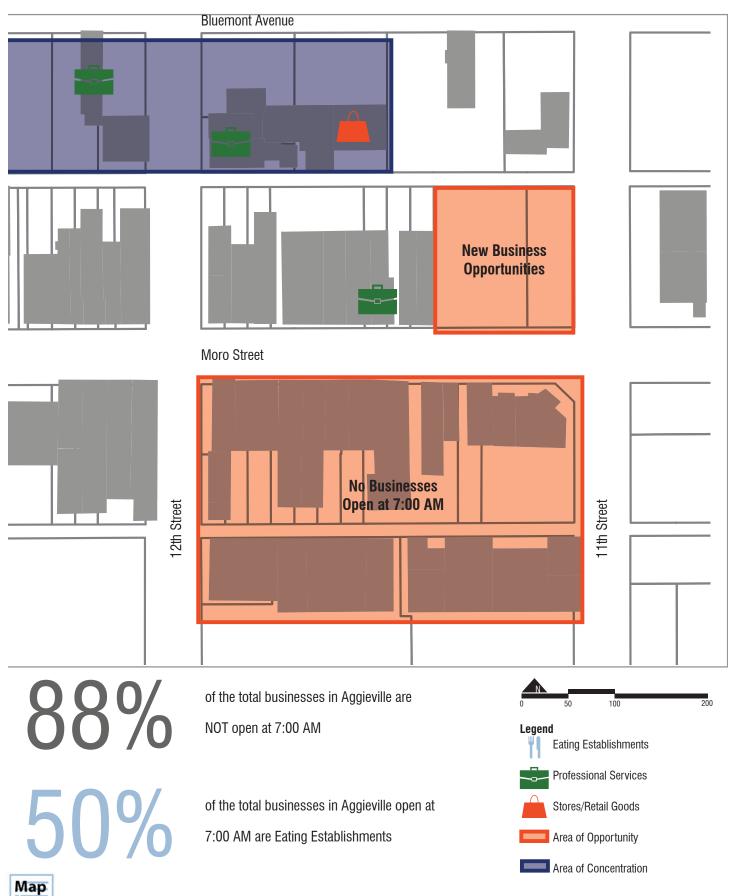
Figure 1. Location of Current Morning Businesses with Areas of Concentration and Opportunity Source: Riley County GIS, "parcels," "Buildings," Wilson Aggieville Business Database, "AggievilleBusinesses"

Inquiry: Where are there opportunities to activate Moro Street in the morning?

Key Extractions: Individual Businesses in Aggieville, Building Footprints, Building Parcels, Streets, and Identified Opportunities

Methodology: Located and identified the specific business type within the 7:00 AM Map. Focused on areas of where current morning businesses are and where new ones could be established.

Conclusions: The majority of morning businesses reside on the northern half of Aggieville. As a busy street during the evening hours, Moro is currently limited near to the corner of Manhattan Ave with only eating establishments. No businesses are open within the southwest block of Moro Street. Near Speedwash Laundry on Moro Street, an open parking lot can provide a space for new businesses to develop.



List

A New Morning on Moro Street

Number of businesses open at 7:00 AM increases to 13 within a half block of Moro Street.

W3_EW06_100_VilleMorningStrategy.PDF



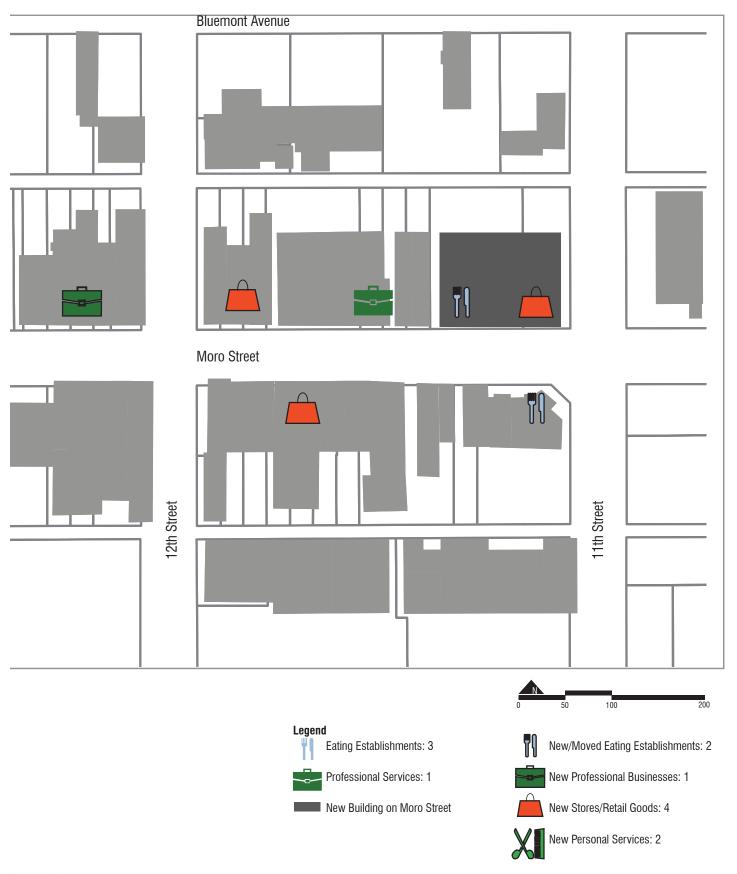
Figure 1. A New Morning on Moro Street

Source: Riley County GIS, "parcels," "Buildings," Wilson Aggieville Business Database, "AggievilleBusinesses"

Inquiry: How can more of Moro Street be active during the morning hours?

Key Extractions: Individual Businesses in Aggieville, Building Footprints, Building Parcels, Streets, and Identified New Buildings **Methodology:** Evaluated current business demographics of Moro Street. Moved certain businesses away from concencrated areas to evenly distribute throughout Moro Street. New stores/retail goods, personal services, and professional services were intermixed alond Moro Street. **Conclusions:** One eating establishment was moved to the western half of Moro Street to reduce the concentration of eating places at the corner along Manhattan Avenue. One new eating establishment, one professional business, four new stores/retail goods, and two personal services were added to balance and diversify the business demographic in the morning. These businesses could be fitness centers, sporting goods, pharmacy/drug store, grocery store, salons, banks, diner, health clinic, as well as many others.

Strategy





Perceptions and Identity

Visual Cues, Entrances, Edges, and Landmarks
Visibility, Awareness, and Perceptions
Events and Social Activities

3

Focal Points Integral To Aggieville's Unique Identity

Pilasters and Building Edge Define Manhattan Avenue and Moro Street

W1_RDP01_200_VisualCues.PDF



Figure 1: Aggieville Identity

Source: Riley County GIS, "RLCo Parcels Mar2009," Hahn GIS Data, Evan Tuttle, Executive Director of Aggieville Business District

Inquiry: Where are the visual cues that give Aggieville its unique identity?

Key Extractions: Aggieville Legal Boundary, Visual Cues, Building Footprints, Building Parcels, and Streets

Methodology: Inventoried visual cues while walking the perimeter and interior paths of the Aggieville Business Improvement District (BID) boundary. Defined visual cues as being key signage and landmarks, transition spaces or portals, material changes, and building edges. Missing buildings on-site were added to the map. Plotted these visual cues on a map overlaid with the BID boundary. The boundary is larger than originally defined by special concrete pavers used on primary pedestrian pathways within the district because of an addition of a parcel near Laramie and 11th streets.

Conclusions: Aggieville has three sets of pilasters at the principle points of arrival for pedestrians and vehicular traffic at the intersection of Manhattan and Anderson/Bluemont avenues, and at the corner of Anderson Avenue south of Triangle Park, and a third point of arrival, and a secondary point of arrival for pedestrians headed west in opposite direction of one-way vehicular traffic headed east on Moro Street at 11th Street. Consistent building edge exists along Manhattan Avenue and Moro Street. Ten parking areas, some with isolated buildings, contribute little to Aggieville's character as defined by those visual cues described in the map.

Visual Cues That Define Character Of Aggieville



Figure 2: Building Edge Near Moro and 12th Streets (Prudenti 2014)



Figure 3: Strong Street Enclosure At Moro Street and Manhattan Avenue (Prudenti 2014)



Figure 4: Aggieville Sign on the south wall of Varney's Bookstore (Prudenti 2014)



Figure 5: Concrete Pavers Introduced, Using Material Change To Define Business District



Figure 6: New and Old Pilasters At One Of Northwest Entrances To Aggieville (Prudenti 2014)



Figure 7: Year-Round Event Banner At Moro Street and 12th Street (Prudenti 2014)



Figure 8: Varney's Marquee As Principle Landmark In Aggieville Business District (Prudenti 2014)



Figure 9: Portal to Aggieville (Prudenti 2014)



Figure 10: Pedestrian Entrance at Moro and 11th Streets (Prudenti 2014)



Legend

Double Pilasters



i Ui lai



Welcome Sign (on building wall)

Buildings

→ ← Street Enclosure

Building Edge Defining Streets

 Change in sidewalk material (defining Aggieville's former legal boundary

Recent addition to legal boundary

Event Banner



Open Areas Offer Opportunities For Defining Visual Border

Seven of 10 Blocks Lack Strong Urban Edge Consistent With Moro Street and Manhattan Avenue

W2_RDP02_200_Opportunity.PDF



Figure 1. Opportunity

Source: Riley County GIS, "RLCo Parcels Mar2009," Hahn GIS Data, Evan Tuttle, Executive Director of Aggieville Business District

Inquiry: What opportunities exist to strengthen Aggieville's character and establish recognizable points of entry or arrival?

Key Extractions: Aggieville Legal Boundary, Parking Areas, Building Footprints, Building Parcels, and Streets

Methodology: All parcels were evaluated for potential opportunities to define Aggieville's boarder. Any block with side not defined by an urban edge such as building fronts, wall or thick planting material was determined to be an area of opportunity for application of similar or new visual cues. A walk along the perimeter of Aggieville's legal boundaries resulted in the decision to not count as "edge-defining" visual cues the sign posts aligning streets. Although serving a purpose for lighting and, possibly, information because of posters, these were deemed insufficient in providing a sense of place or enough material change to warrant further consideration as an edge-defining component of the landscape.

Conclusions: A total of 10 independent private or publicly owned parking lots lack the well-defined edge as provided by buildings and landmarks and along Manhattan Avenue and Moro Streets. Approximately 10 points of arrival or entry are without a recognizable form that speaks to the sense of place in Aggieville. Three general areas of opportunities exist to better define the north, west and southern borders of Aggieville.

Opportunity Areas For Enlarging Aggieville Identity (Building Development, Visual Cues)



Figure 2: Bluemont Avenue and 11th Street, northeast Aggieville (Prudenti 2014)



Figure 3: Bluemont Avenue and 11th Street, north Aggieville (Prudenti 2014)



Figure 4: Bluemont Avenue and 11th Street, north-central Aggieville (Prudenti 2014)



Figure 5: Laramie and 14th Street (Prudenti 2014)



Figure 6: Laramie and Manhattan Avenue (Prudenti 2014)



Figure 7: Laramie and 11th Street (Prudenti 2014)



Fig@@18) Fremont and Manhattan Avenue (Prudenti 2014)



Figure 9: Fremont and 12th Street (Prudenti 2014)



Figure 10: Fremont and 11th Street (Prudenti 2014)



Legend

Areas of Opportunity
Well-defined Aggieville

Existing Buildings
Parcels

Aggieville Business District Boundary



Stronger Visual Cues Would Clarify Aggieville's Border

New Landmarks and Desirable Visual Clues Would Extend Visual Boundaries North, South, East and West

W2_RDP03_200_NewCues.PDF



Figure 1. Visual Identity Extended Source: Riley County GIS, 2009

Inquiry: What should be done to solidify Aggieville's sense of place to coincide with its legal boundaries

Key Extractions: Aggieville Legal Boundary, Parking Areas, Building Footprints, Building Parcels, and Streets

Methodology: Inventory of Downtown Manhattan and various points of arrival here and throughout the city provided ideas thoughts on treating the edges of Aggieville with identifiable markers or more substantive treatments, including large singular pilasters, some connected to walls with writing; archways, statute or monuments, and other displays,

Conclusions: There is a need for building edge throughout the district, primarily along Bluemont Avenue, and at least one prominent identifiable marker on each side of the Aggieville District with Bluemont Avenue again showing the greatest needs because views from the street including primarily parking lots, exposed alleyways, and backs of buildings. Also a great need is a marker on the west corner of the district, where a Burger King currently stands contending only with a Chipotle restaurant sign ahead. Ideally this would be one of four locations for a point of entry marker on the south side of the district.

Sources of Inspiration from Manhattan, Kansas



Figure 2: Campus/Community Arch, Beach Museum of Art (Prudenti 2014)



Figure 3: City Park, Central Manhattan (Prudenti 2014)



Figure 4 : Redevelopment District, Southwest Manhattan (Prudenti 2014)



Figure 5: Manhattan Christian College, West of Aggieville (Prudenti 2014)



Figure 6: Kansas State University, looking from Bluemont Avenue (Prudenti 2014)



Figure 7: Kansas State University, Beach Museum of Art, from Anderson Avenue (Prudenti 2014)



Figure 8 Kansas State University, near Alumni Center, off Anderson Avenue (Prudenti 2014)



Figure 9: Hilton Garden Inn, Southwest Manhattan (Prudenti 2014)



Figure 10: Statue, traffic circle along Bluemont Avenue, seven blocks east of Aggieville (Prudenti 2014)





Well-defined Aggieville

New Buildings

Large Display (monument, statue, flags,etc.)

Single or double pilasters
Existing Buildings

Parcels





Businesses on Manhattan Avenue and Moro Street Have Stronger Online Presence

Storefront signs are only form of signage used to advertise businesses in Aggieville

W3_JS01_200_Advertisement

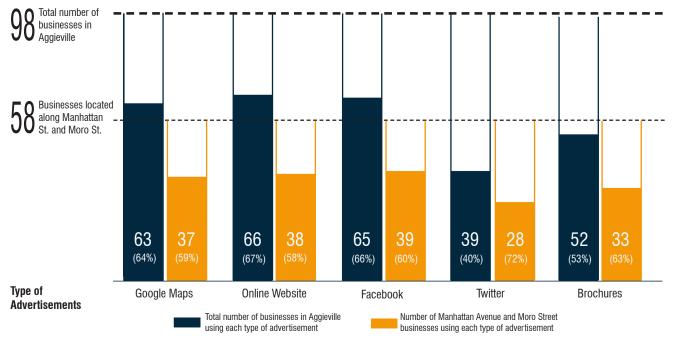


Figure 1.1: Types of Advertisement Source: (Sickmann, 2014)



Figure 1.2: Signage for Aggieville Business District Source: (Ruskamp, 2014)



Figure 1.3: Storefront Signage Source: (Sickmann, 2014)

Inquiry: Which businesses in Aggieville have a strong presence online and in hotel brochures? How might visitors find Aggieville when arriving by car? **Key Extractions:** Aggieville Business Improvement District, building footprints, Riley County street center lines

Methodology: Research was done on five different ways businesses in Aggieville advertise: through online websites, social media accounts, such as Facebook and Twitter, Google Maps, brochures, and signage. Bluemont Avenue, Anderson Avenue, Manhattan Avenue, and 17th Street were explored through Google Street View and by car to determine how signage was being used to advertise businesses in Aggieville.

Conclusions: Businesses located within Aggieville predominately advertise their location through online websites, social media accounts, and Google Maps. The location of the Aggieville Business District was advertised on signs in two locations, once at the intersection of 17th Street and Fort Riley Boulevard, and once again at the intersection of Bluemont Avenue and Tuttle Creek Boulevard. The only type of signage used to determine business location was storefront signs which were located directly to the front of the businesses. The businesses along Manhattan Avenue and Moro Street had the strongest online presence, while storefront signage is most beneficial for businesses along Bluemont Avenue and Anderson Avenue due to the high amount of vehicular traffic that travels on these two streets. No signage exists for directing drivers to Aggieville when arriving to Manhattan via I-70 from the east.

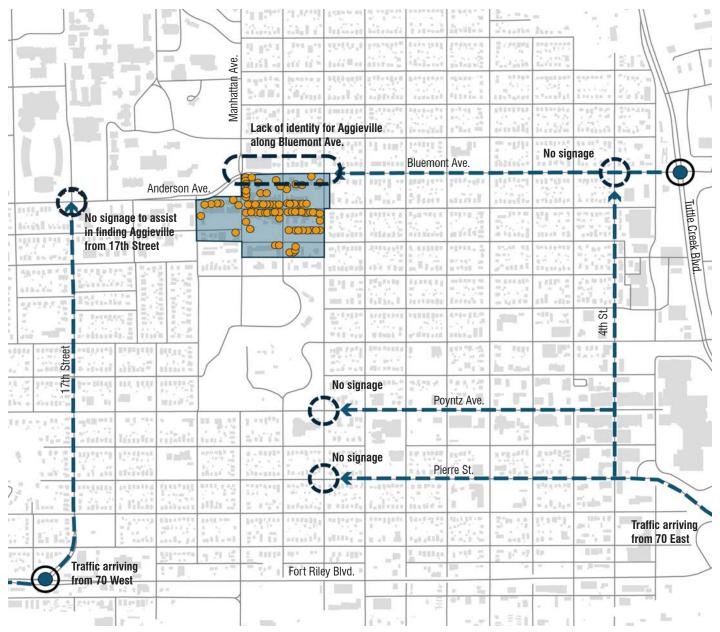


Figure 1.4: Signage for Aggieville Businesses Source: Hahn GIS Data, "RLCo_StreetCL," "BLDGFTPRNTS."





Identity of Aggieville is Overlooked As Individuals Pass on Bluemont and Anderson Ave.

Visual presence of Aggieville from Bluemont and Anderson Ave. resembles "strip development"

W3_JS02_200_PresenceofAggieville.PDF

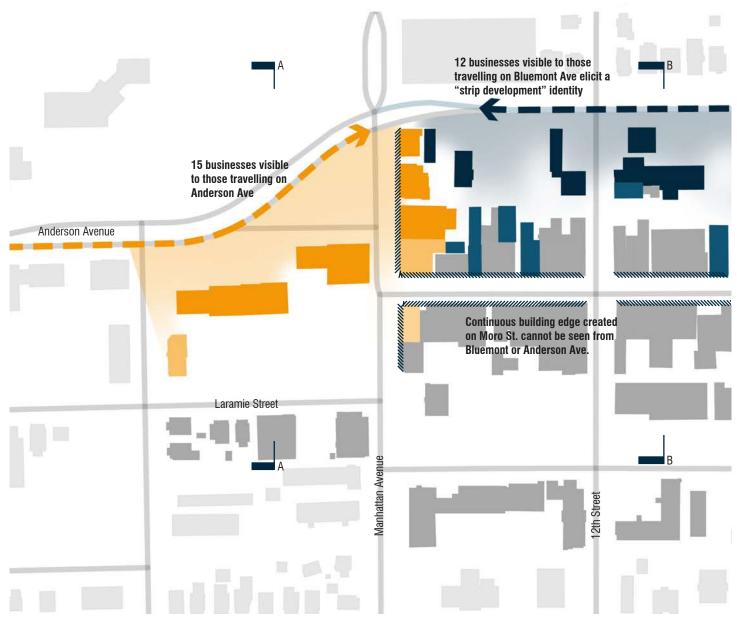


Figure 2.1. Presence of Aggieville on Bluemont and Anderson Source: Hahn GIS Data, "RLCo StreetCL," "BLDGFTPRNTS."

Inquiry: Is the identity of Aggieville overlooked by those travelling by on Bluemont and Anderson Ave.?

Key Extractions: Building footprints, Riley County street center lines, visible businesses from Bluemont Avenue, visible businesses from Anderson Ave. **Methodology:** Bluemont Avenue and Anderson Avenue, which were noted as two main arterial paths that travel to the north of Aggieville, were travelled by vehicle and by foot to determine which buildings within the Aggieville Business Districts were visible from the street.

Conclusions: Out of the 98 businesses located within the Aggieville District, fifteen are visible to those travelling on Anderson Ave. and twelve are visible to those travelling on Bluemont Ave. Businesses located along Bluemont and Anderson Ave. are set back with parking located directly adjacent to the street, which resembles the appearance of "strip development." The identity of Aggieville, which consists of a continuous building edge created on Moro St. and Manhattan St., is overlooked due to the lack of visibility of businesses as individuals pass by on Anderson and Bluemont Ave.





High volume of traffic on Anderson Ave. cannot see businesses located on Laramie St.

Businesses set back from Anderson Ave. resembles "strip development"

Figure 2.2: Visual Access along Anderson Ave. (Section A-A) Source: (Sickmann, 2014)



Figure 2.3: Identity of Aggieville District for passerbys on Anderson Ave. Source: (Sickmann, 2014)



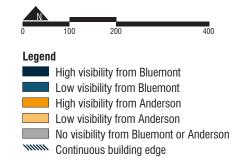
Identity of Aggieville is overlooked due to no visual access of continuous building edge created by businesses on Moro St. and Laramie St.

Businesses set back from Bluemont Ave. create "strip development" identity of Aggieville District

Figure 2.4: Visual Access along Bluemont Ave. (Section B-B) Source: (Sickmann, 2014)



Figure 2.5: Identity of Aggieville District for passerbys on Bluemont Ave. Source: (Sickmann, 2014)





Improving Identity of Aggieville by Creating a Defined Urban Edge

Increase building density along Bluemont and Anderson Ave. to reflect identity of the Aggieville core

W3_JS03_200_IncreasingDensity.PDF



Figure 3.1: Increasing Building Density
Source: Hahn GIS Data, "RLCo_StreetCL," "BLDGFTPRNTS."

Inquiry: How can the identity of Aggieville be improved along Bluemont Avenue?

Key Extractions: Building footprints, Riley County street center lines, proposed buildings

Methodology: Identify areas to improve the urban edge along Bluemont and Anderson Avenue by increasing building density.

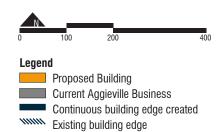
Conclusions: By increasing building density along Bluemont and Anderson Avenue, a strong urban edge is created which reflects the identity of the Aggieville core. By improving the identity of Aggieville along Bluemont and Anderson Ave, the district of Aggieville will be more apparent to visitors travelling on these two arterial streets.



Figure 3.2: Continuous Building Edge Along Bluemont and Anderson Source: (Sickmann, 2014)



Figure 3.3: Reflecting Identity of Aggieville Core Source: (Sickmann, 2014)





Higher Traffic Volumes Pass By Aggieville Than Downtown

A large arterial road borders Aggieville, but both have similar traffic volumes within the districts

W3_AK04_1K_TrafficVolume.PDF



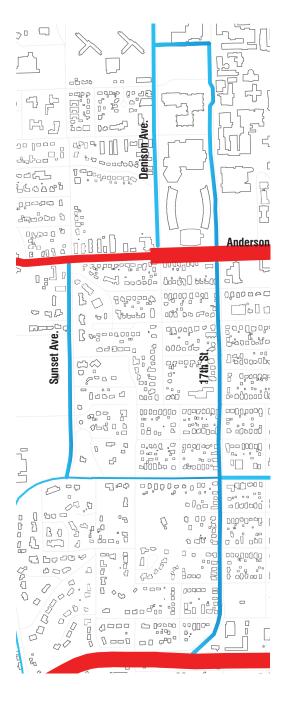


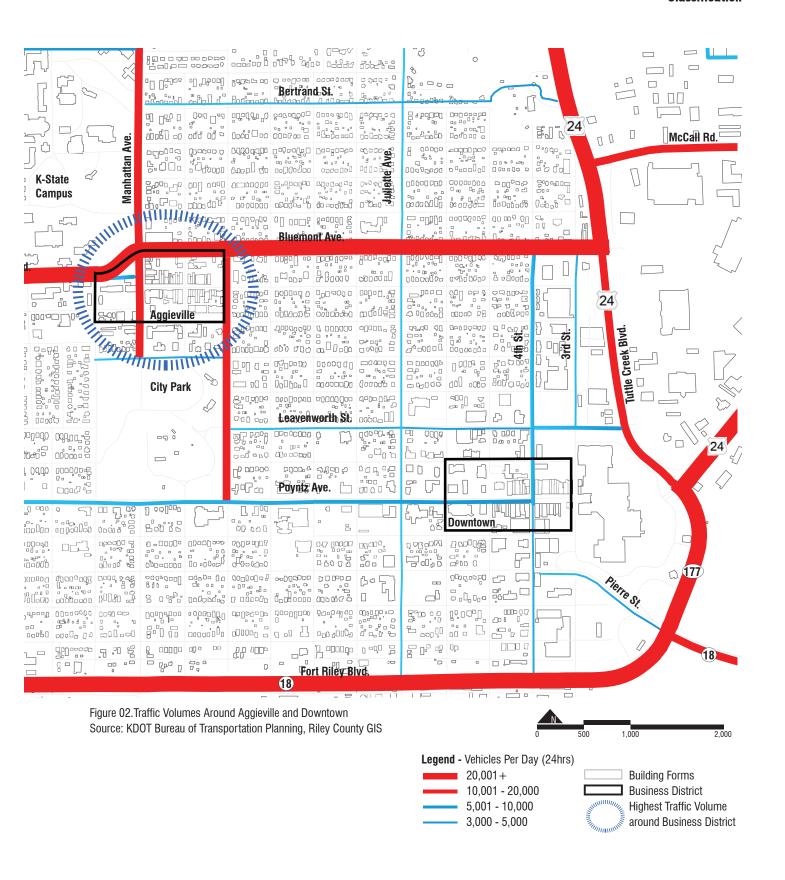
Figure 01. Traffic Volume Patterns in Manhattan Source: KDOT Bureau of Transportation Planning, Riley County GIS

Inquiry: How much traffic volume passes Aggieville versus Downtown along Poyntz? **Key Extractions:** KDOT Traffic Counts over 3,000, BLDGFTPRNTS, 2010 riley roads

Methodology: Using the KDOT's Traffic Count Map of Manhattan, Ks obtained from March to May of 2013, I extracted the roads and highways with over 3,000 vehicular trips per day. I then classified each segment of road from intersection to intersection with traffic counts. A largest red line indicates the highest traffic volume (20,000+), and smallest blue line indicates the lowest range of traffic volume from 3,000-5,000 vehicles per day.

Conclusions: The highest traffic volumes are along K-18 and HWY 24, but also along the part of Bluemont Ave. and Anderson Rd. nearest to the K-State Campus, Aggieville, and down to HWY 24. Compared to Downtown along Poyntz and the mall, Aggieville has higher traffic volumes around its business district, which means there is higher visibility opportunities and vehicular traffic for businesses around Aggieville.

Classification





High Traffic Volumes Create Opportunity for Stronger Aggieville Identity Along Bluemont Ave.

High visibility to over 20,000+ vehicles on Bluemont Ave. creates prime locations for businesses and stronger identity

W3_AK05_300_TrafficOpportunites.PDF



Figure 01. Existing Expansive Parking Lots and Chain Stores Along and Bluemont Ave. Source: Jared Sickmann



Anderson Rd.

K-State Campus

Figure 02. The Bluemont Hotel Represents the Start of Change and Higher Density Buildings Source: Amanda Kline

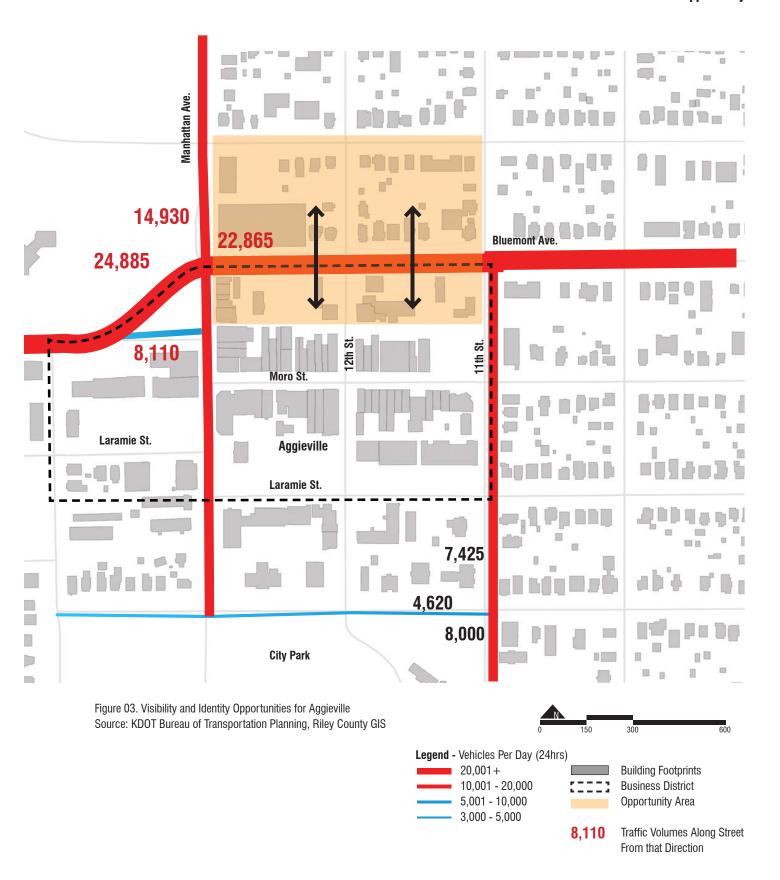
Inquiry: What opportunites are there with high traffic volumes around Aggieville?

Key Extractions: KDOT Traffic Counts over 3,000, BLDGFTPRNTS, 2010 riley roads

Methodology: Specific traffic volume counts coordinating with the intersection over 3,000 vehicles per day near Aggieville were collected from KDOT's Traffic Count Map. Opportunity areas were determined by low building densities and open space that do not create an urban identity for Aggieville, and the opportunity areas also needed to be near high traffic volumes for visibility.

Conclusions: Based on the lack of enclosure and density due to parking lots and strip-retail stores, the area adjacent on both sides of Bluemont Ave. create the greatest opportunities for businesses to expand and be highly visible, which would then create a stronger Aggieville identity along Bluemont Ave.

Opportunity



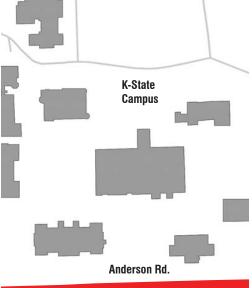


Extension of Dense Building Forms Creates Stronger Edges and Identity Across Bluemont

Increasing Bluemont Ave.'s building density similar to Moro St. gives Aggieville more visibility due to high traffic volumes

W3_AK05_300_TrafficStrategies.PDF







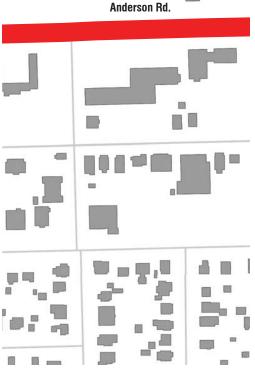


Figure 01. Moro St. Buildings with Continuous Urban Edge to Emulate Along Bluemont Ave. Source: Jared Sickmann

Inquiry: How can Aggieville adjust its identity along Bluemont Ave.?

Key Extractions: KDOT Traffic Counts over 3,000, BLDGFTPRNTS, 2010_riley_roads

Methodology: Building forms along Bluemont Ave. were based off existing urban conditions along Moro St. to define a better edge and follow ideas similar to the Aggieville-Campus Edge District Plan from the City of Manhattan.

Conclusions: By creating a higher building densities, Bluemont Ave. could have stronger urban edges forming more of an identity for Aggieville due to high traffic volumes allowing more visibility of the business district. Also by creating a stronger urban edge along Bluemont, Aggieville's business district could begin to extend further north.

Strategy





Aggieville has Numerous & Varied Building Forms

Moro Street is characterized by narrow, distinct buildings

W4_AH01_57_Moro building form comparison.PDF

Aggieville: Moro Street, Manhattan, KS

- Mostly 1 story buildings
- 10' pathway
- Facades have unique characteristics



Inquiry: How does Aggieville building forms compare to Maryland Ave. in St. Louis?

Key Extractions: Building forms; Building elements; Facades

Methodology: I traced photos (Moore, 2014) to come up with a section view of Moro, west of 12th. I then used Google Maps to find the distance of that street, and took the same length of street on Maryland Ave. and traced the building footprints to compare.

Conclusions: The building forms in Aggieville have a similar unifying characteristic while still having unique facades. Smaller building footprints along Moro allow shops to have unique presence compared to Maryland Ave. in St. Louis, MO, where larger buildings help define its character. The area in Aggieville where this characteristic is most evident is along Moro Street and Manhattan Ave.

Chase Park Plaza: Maryland Avenue, St. Louis, MO

- Mostly 2 story buildings, all have first floor retail
- 15' pathway
- Outdoor dining spaces are comfortable for pedestrian traffic
- Facades utilize similar material and building components
- Wider buildings



405 Feet = 3 Buildings

Figure 03. Maryland Ave. Comparison Source: Sketchup





Aggieville Buildings Need Stronger Connection Along Bluemont

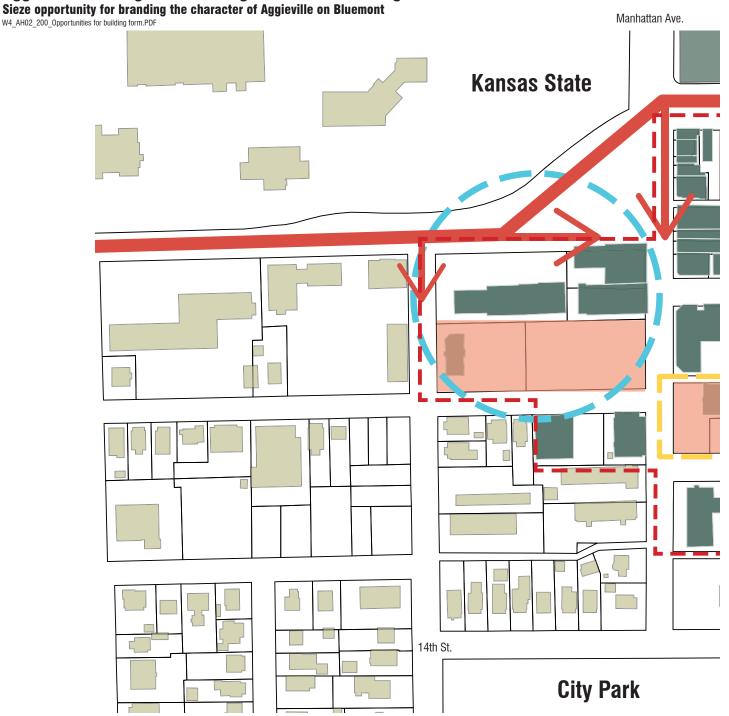


Figure 04. Opportunities for building forms

Source: Riley County GIS

Inquiry: Where could building form be used to define Aggieville?

Key Extractions: Buildings in the BID district; parcel Information; focus areas

Methodology: I traced areas that had less density of building footprints, labeling them as areas for infill. I overlaid major vehicular routes and highlighted where the routes were most exposed to areas where infill could take place to get an area of opportunity.

Conclusions: Opportunities for infill lie along Bluemont, Anderson, and Laramie. Since Bluemont and Anderson are the two major arterial roads that circulate by Aggieville, those sites have the highest potential for branding; therefore, buildings along those streets are what people will first associate the image of Aggieville with.

Opportunity





Unifying Aggieville character with Functional Building Form

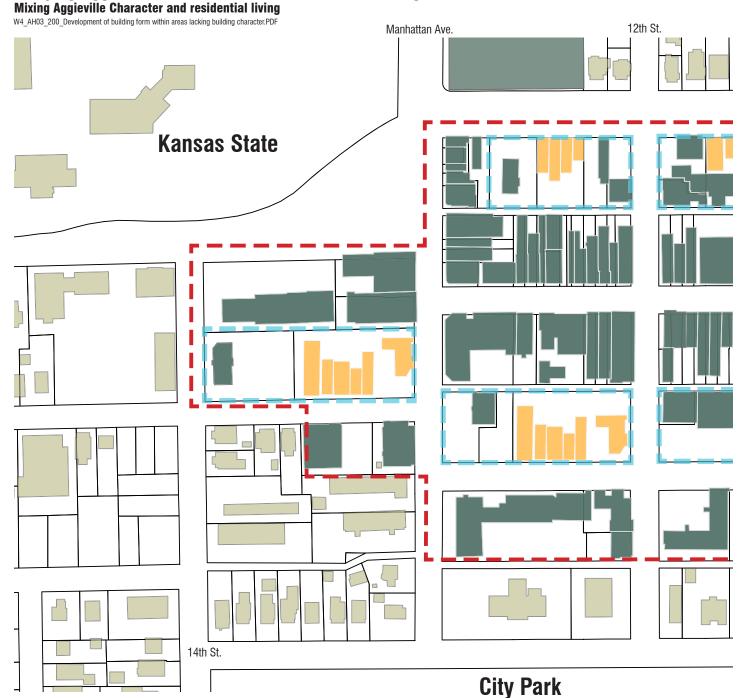


Figure 05. Development of building form within areas lacking building character Source: Riley County GIS

Inquiry: How can Aggieville incorporate new building design that ties into existing fabric?

Key Extractions: Buildings in the Business Improvement District (BID); parcel Information; potential building placement located in areas of focus **Methodology:**I I looked at the areas of focus and determined which parcels had the highest potential for buildings to be constructed based on building density within those areas and by lot sizes

Conclusions: The highest opportunity for branding is along Bluemont Ave. To re-envision the building form in Aggieville I am proposing to incorporate multiple stories for mixed uses, while also keeping the form of the existing building forms along Moro St. intact. Buildings should keep small footprints along the street where pedestrians can access them, but look to raise the number of levels of buildings, and increase building setbacks along walkways where feasible.





Students' Perception of Aggieville District is Centralized Around Moro Street

Building edges, nodes, and landmarks are concentrated around Moro Street

W2_JS01_200_PerceivedDistrict.PDF



Figure 1.1 Perceived Aggieville District

Source: Hahn GIS Data, "RLCo StreetCL," "BLDGFTPRNTS."

Inquiry: What is the perceived boundary of Aggieville?

Key Extractions: Building edges, activity nodes, landmarks, and district within the Aggieville region

Methodology: Four field studies were done by Amanda Kline and Jared Sickmann to identify four of Kevin Lynch's elements of the city in the Aggieville region: landmarks, nodes, edges, and districts. Two studies were done on Thursday and Friday afternoon from 11:00 a.m. - 3:00 p.m. and two more were done Thursday and Friday night from 9:00 p.m. - 12:00 a.m. These studies were done by walking through each street and alley from Bluemont Avenue to the north, Laramie Street to the south, 11th Street to the east, and 14th Street to the west while noting where building edges, activity nodes, and key landmarks were located.

Conclusions: The perceived boundary for the Aggieville district was determined using three different criteria: continuous building edges, popular activity nodes, and landmarks. Activity nodes and landmarks are concentrated around Moro and Manhattan Street, while building facades also create a distinct edge around these two streets.

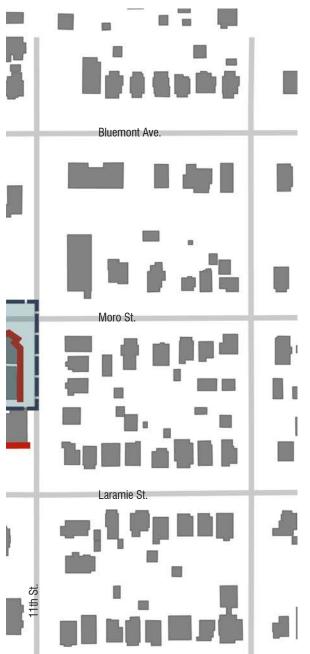




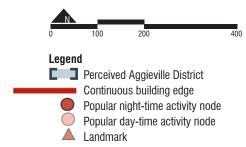
Figure 1.2: Varney's serves as a distinct landmark in Aggieville (Sickmann, 2014)



Figure 1.3: Radina's Coffee Shop serves as a popular day-time activity node (Prudenti, 2014)



Figure 1.4: Varsity Donuts Food Truck serves as a popular night-time activity node (Wilson, 2014)





Opportunity to Grow Aggieville Identity

61% of Business Improvement District could better reflect Aggieville's identity

W2_JS02_200_AggievilleFragmented.PDF



Figure 2.1: Fragmented Aggieville

Source: Hahn GIS Data, "RLCo StreetCL," "BLDGFTPRNTS."

Inquiry: How much of the Business Improvement District which defines Aggieville's boundary disconnected from the perceived Aggieville district? **Key Extractions:** Perceived Aggieville district, Business Improvement District (BID)

Methodology: After mapping the perceived Aggieville district, it was compared with the Business Improvement District (BID), which is considered as the boundary of Aggieville by the Aggieville Business Association. Once comparing the perceived Aggieville district with the BID, a percentage of land which holds opportunity to develop the Aggieville identity was found.

Conclusions: The perceived Aggieville District, as represented by nodes, landmarks, and continuous building edges, only consists of 39% of the Business Improvement District (BID). The remaining 61% of the BID has a different physical character consisting of scattered buildings, parking lots, and minimal gathering areas. This presents an opportunity for the identity of Aggieville to grow substantially within the BID in the future.

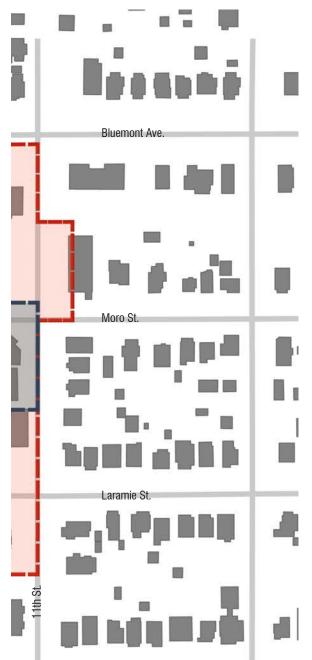




Figure 2.2: Strong urban edge along Moro Street created by continuous building edge (Sickmann, 2014)



Figure 2.3: Scattered buildings and parking lots create poor urban edge along Bluemont Avenue (Sickmann, 2014)



Figure 2.4: Parking lots create poor urban edge along Laramie Street (Sickmann, 2014)

Opportunity for Aggieville identity to grow

61% of B.I.D.

39% of

B.I.D.

Perceived Aggieville district



Legend

Perceived Aggieville District Business Improvement District



Vast Area for Development Within Business Improvement District

Numerous opportunities to incorporate activities, improve building edge, and establish landmarks

W2_JS03_200_ImprovingIdentity.PDF



Figure 3.1: Enhancing Identity in Business Improvement District Source: Hahn GIS Data, "RLCo StreetCL," "BLDGFTPRNTS."

Inquiry: How can the identity of the perceived Aggieville district be incorporated within the entire Business Improvement District? **Key Extractions:** Business Improvement District (BID), potential areas for improving building edge, activity nodes, and landmarks **Methodology:** Through site visits and studying figure ground maps, areas consisting of parking and other large open lots were identified as focus areas for development.

Conclusions: The set of criteria that determined the perceived Aggieville district was popular activity nodes, landmarks, and continuous building edges. This criteria can be used to ehance the Aggieville identity within the surrounding BID. Activity nodes can be incorporated where parking lots currently lie within the BID. Landmarks serving as reference points can be incorporated near the entrances to the BID, allowing visitors to orient themselves before entering Aggieville. Building edges can be improved along Bluemont Avenue and Laramie Street to reflect the strong urban edge represented along Moro Street.

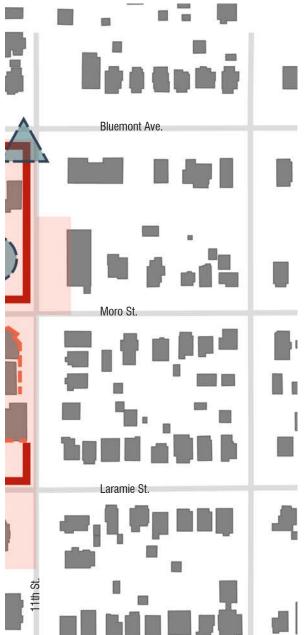
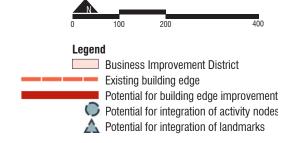




Figure 3.2: Parking lot currently lacks Aggieville's identity on Laramie Street. (Sickmann, 2014)



Figure 3.3: Mixed-use buildings and plaza spaces could serve as activity nodes while creating a strong urban edge on Laramie Street. (Sickmann, 2014)





Moro Street Has the Strongest "Sense of Place" within Aggieville

Most businesses are oriented to East-West and provide more spatial enclosure

W2_LT01_200_ContinuousFacade_Enclosure.PDF



Figure 01. Relationship Between Continuous Facades and Areas of Enclosure Source: Hahn. GIS Data "Buildings."

Inquiry: How do the relationships between continuous facades and areas of enclosure compare along streets in Aggieville?

Key Extractions: Building footprints, Length of facade frontage, Area of open space between the building facades

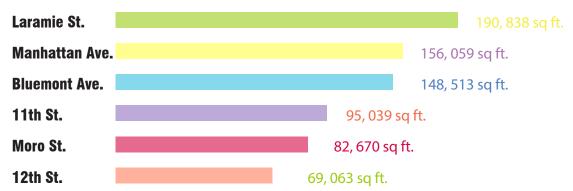
Methodology: Calculated the length of each street's building facades and the area of enclosed open space between the facades. Compared the six streets to determine which streetsand associated building massing defined pedestrian spaces.

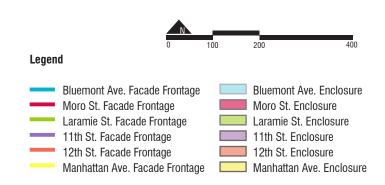
Conclusions: East to West streets: Moro had the highest amount of facade frontage and the greatest amount of enclosure. Laramie and Bluemont had a greater amount of open space with least amount of enclosure. North to South streets: 12th Street, like Moro, has the greatest amount of facade frontage and the greatest amount of enclosure. Manhattan Avenue and 11th Street are lacking wcontinuous facade frontage and enclosure. Both Moro St. and 12th St. are the inner streets of Aggieville and they have the greatest facade coverage as well as the highest amount of enclosure.

Continuous Facade Frontage Length



Area of Spatial Enclosure Between Facade Frontage







Most Unenclosed Areas in Aggieville are Allocated to Parking Lots

Surface parking lots diminish the continuity of building frontage along sidewalks

W2_LT01_200_SurfaceParkingLotArea.PDF



Figure 02. High Coverage of Surface Lots Deminishes Continuous Building Edge Source: Hahn. GIS Data "Buildings."

Inquiry: How does the amount of surface parking along the East and West streets effect the pedestrian to building experience?

Key Extractions: Building Footprints, Area of open space between the building facades, Area of surface parking lots

Methodology: Calculated the area of open space between the building facades on each street and the area of surface parking lots that were adjacent to the streets. After, the percentage of parking along each street and open space was determined.

Conclusions: Moro Street had the least percentage of surface parking due to the continuous amount of facade frontage along the street. Bluemont Avenue had a little less than half of surface parking compared to open space due to the new development on the north side of Bluemont. Laramie Street had the highest percentage of surface parking due to four parking lots located along the street of discontinuous building frontage.

Comparison of parking lot coverage to the amount of open space between facades along East to West streets

29% of Moro St. enclosed area is surface parking lots

of Bluemont Ave enclosed area is surface parking lots

60% of Laramie St. enclosed area is surface parking lots





Advancing Recessed Building Facades Closer to Street Would Strengthen Aggieville's Visual Character

Most dramatic improvements would be along Bluemont Ave and Laramie St.

W2_LT03_200_DefineBuildingEdge.PDF

Strategy 1: Advance Building Frontage to Define Streets (E-W)



Figure 03. Removal of Surface Parking Lots to Develope Buildings Source: Hahn. GIS Data "Buildings."

Inquiry: How can the removal of the surface parking lots allow opportunities for new buildings to be added to expand the unique character of Aggieville?

Key Extractions: Building Footprints, Area of Surface Parking, Area of open space between building facades

Methodology: First highlighted the areas of where surface parking was located and identified where the opportunities existed for the addition of new buildings.

Conclusions: Many of the existing surface parking lots were breaking up the continuity of the building facades in relationship to the to the street and sidewalk. These areas offered great opportunities for new buildings be implemented around the heart of Aggieville to enhance the unqunie character and experience of the user.

Bluemont Ave. Moro St. Manhattan Ave. 11th St. Laramie St. Fremont St. Figure 04. Proposed Buildings within Aggieville Source: Hahn. GIS Data "Buildings." 100 200 Legend Surface Parking Lot Area Bluemont Ave Enclosure Moro Street Enclosure Laramie Street Enclosure Bluemont Ave. Facade Frontage Moro Street Facade Frontage Laramie Street Facade Frontage Proposed Buildings

Strategy 2: Relocate Parking lots to block interrior access from N-S Streets



Varney's, Varsity Truck, and Character of Moro Street Are Photographed Often

Aggieville icons are the subject or identifiable background of 63 Instagram photos in 2013-14

W4_TL07_00_Instagram.PDF

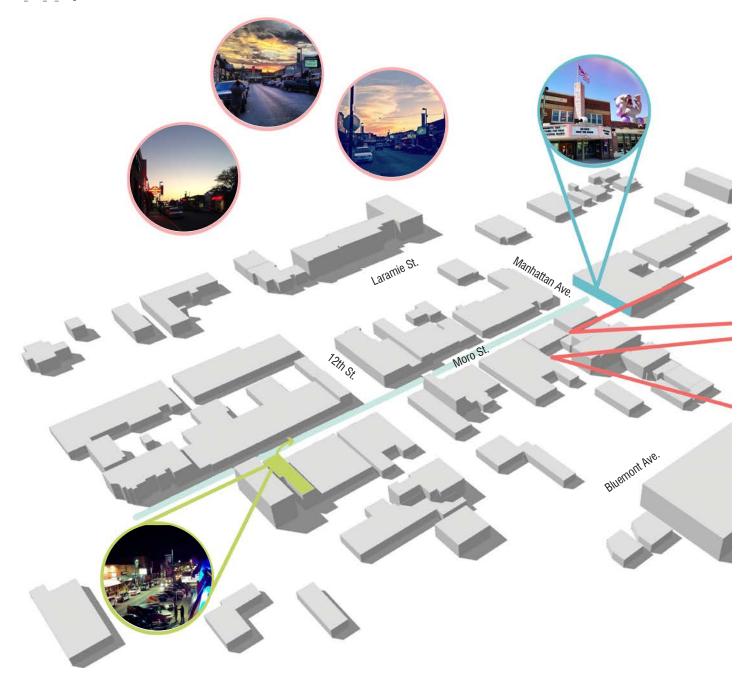


Figure 01. Landmarks and Locations Popular on Instagram Source: Instagram, worldc.am

Inquiry: What places in Aggieville are common recognizable backgrounds or subjects in Instagram photos?

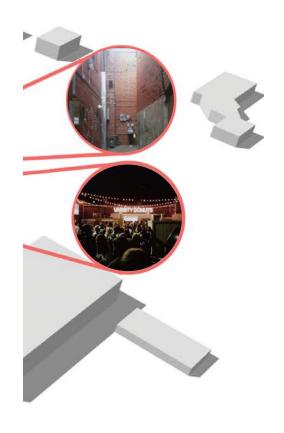
Key Extractions: Popular locations and subjects of Instagram photos, examples of photos, quantification of photo subjects.

Methodology: Using worldc.am and searching for images tagged in Aggieville, I documented photos from the last twelve months that had recognizable outdoor backgrounds and/or subjects. Out of the 63 photos found, only 42 fit into identifiable categories.

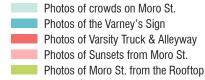
Conclusions: The five distinct categories include photos of crowds on Moro Street, photos of the Varney's Sign, photos of Varsity Truck and the adjacent alleyway, photos of sunsets on the horizon of Moro Street, and photos of Moro Street from the rooftop patio of Wabash Bar and Grill. All of these locations, it is important to note, occur along Moro Street. Other instagram images included photos of individual business signs, advertisements for certain events in Aggieville, and streetscape planting beds.

Instagram Photos (2013-2014):

- 12 photos of a crowd on Moro Street
- 1 photos of the Varney's Marquee
- photos of the Varsity Truck & Alleyway
- photos of a sunset from Moro Street
- photos of Moro Street from Wabash Rooftop



Legend





Aggieville Landmarks Not Widely Visible from Bluemont Avenue

Few visual cues attract traffic into the heart of the business district

W4_TL08_200_PhysicalLandmarks.PDF

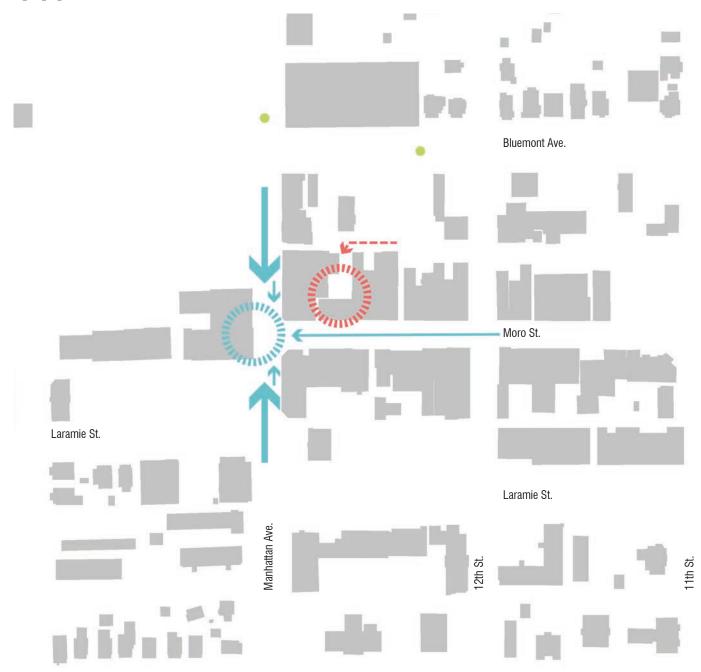


Figure 01. Existing Landmarks in Aggieville

Source: Sketchup

Inquiry: Are the existing physical landmarks in Aggieville visually accessible from Bluemont Avenue?

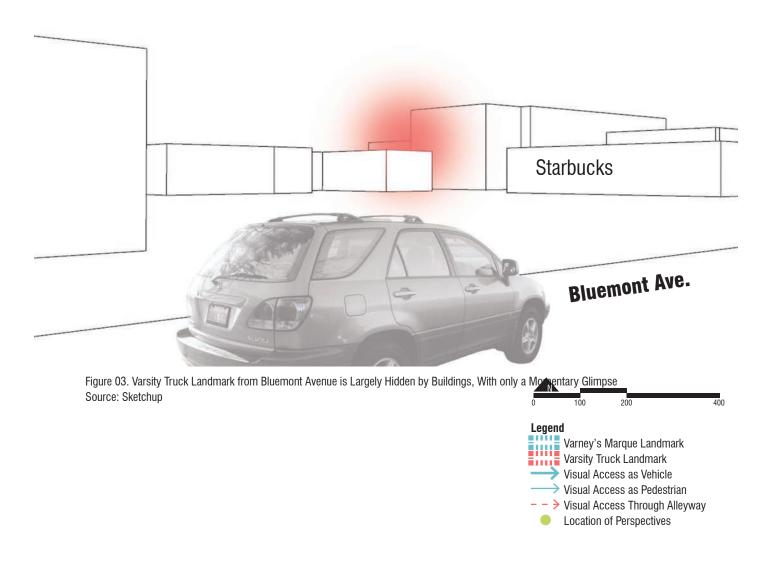
Key Extractions: Buildings, Landmarks (from Instagram data), Roads, Visual Access

Methodology: Using the two distinct landmarks identified by studying Instagram posts from the last year, I located the Varney's Sign and Varsity Truck/Alleyway and determined how they can be visually accessed by vehicles and pedestrians.

Conclusions: The Varney's Sign is the most visually accessible landmark in Aggieville, as it can be seen driving north or south on Manhattan Avenue and by walking towards it on Manhattan Avenue or Moro Street. However, it can't be visually accessed from Bluemont/Anderson Avenue, where most of traffic passes by the businesses district. The Varsity Truck is in a unique position, as it is located in an open space adjacent to the alleways between Moro Street and Bluemont Avenue. Therefore, it can only be seen by pedestrians that already know it is there and walk through the alleyways to get to it.



Figure 02. Varney's Landmark from the Manhattan/Anderson/Bluemont Avenue Intersection, Seen through Visual Clutter Source: Sketchup





Additional Landmarks Indicate Location of Aggieville

Visual cues attract attention from major traffic corridors.

W4_TL09_00_Indicators.PDF

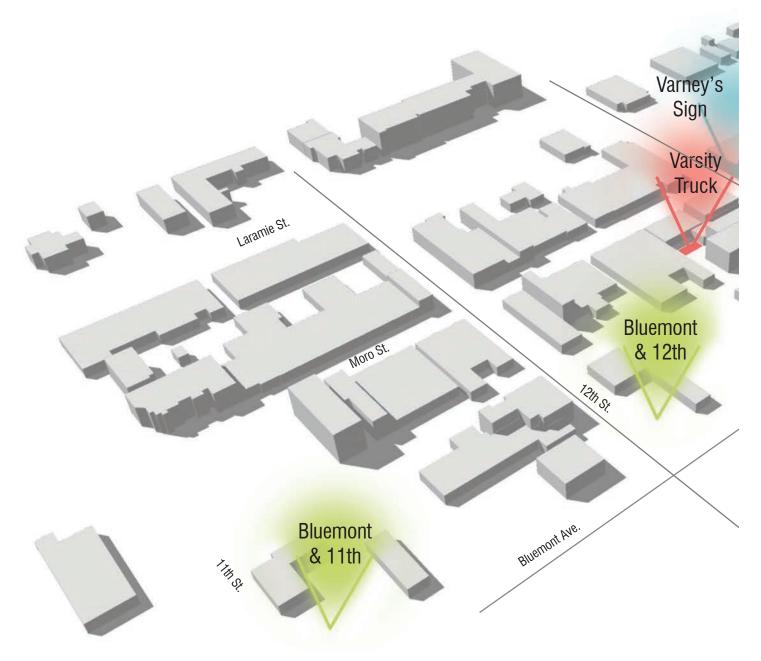


Figure 01. New Landmarks Along Bluemont and Anderson Avenues Source: Sketchup

Inquiry: Where should new landmarks be located in order to attract visual attention to Aggieville?

 $\textbf{Key Extractions:} \ \textbf{Buildings, Roads, Existing Landmarks, Proposed Landmarks}$

Methodology: New landmarks are proposed along Bluemont/Anderson Avenue.

Conclusions: The two existing landmarks in Aggieville are not sufficient in attracting visual attention from pedestrians and vehicles traveling on the highly-trafficked Bluemont/Anderson Avenue. Three new landmarks - at the eastern edge along Bluemont, near the intersection of 12th Street and Bluemont Avenue, and at the corner of Triangle Park on Anderson Avenue - would signify the location of Aggieville near important intersections that would bring potential visitors into Aggieville, rather than have them pass by it.

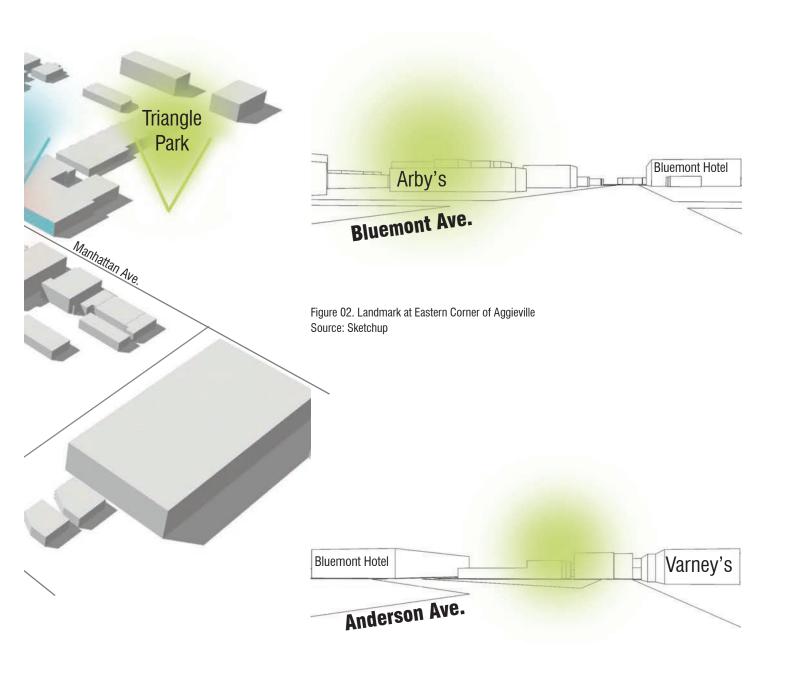


Figure 03. Utilizing Triangle Park as a Landmark Location Source: Sketchup

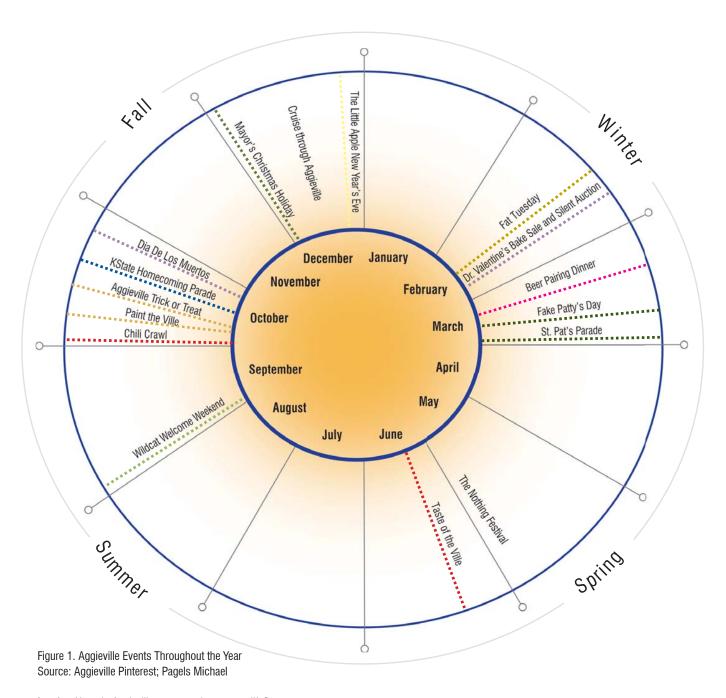




Aggieville Events Activate Life on Moro Street

Moro activities contribute to place-making and memorable experiences

W3_LH07_3K_EventAcitvity.PDF



Inquiry: How do Aggieville events activate street life? **Key Extractions:** Aggieville events, event routes

Methodology: Aggieville events, dates, and locations were recorded according to the Aggieville Pinterest media. The locations were tracked to depict a typical pedestrian path through Aggieville during the events.

Conclusions: Moro is highly active during the publicized Aggieville events. The east end of Moro Street in front of Varney's is a site of most event attraction, while pedestrian street experiences decrease closer west.

Classification

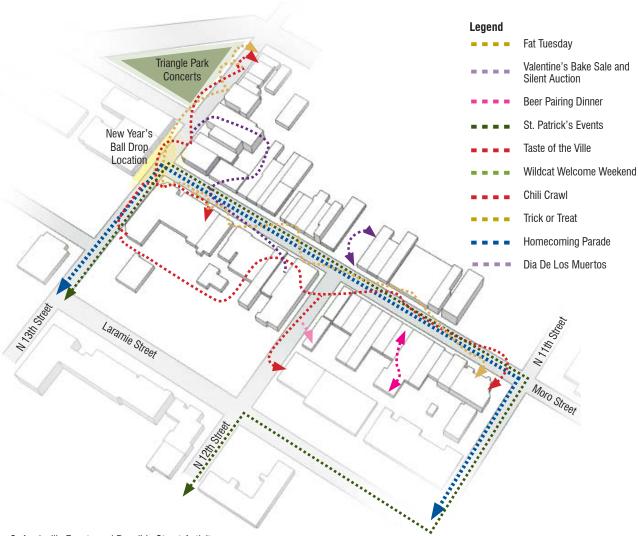
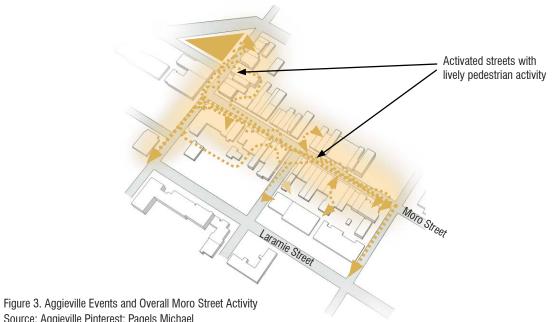
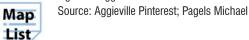


Figure 2. Aggieville Events and Possible Street Activity Source: Aggieville Pinterest; Pagels Michael





Lively Streets Could Expand along North and South Streets Adjacent to Moro

Moro's pedestrain life can spill onto adjacent streets and connect to activity in City Park and Bluemont Avenue

W3_LH08_4K_PedestrianActivityExpansion.PDF







Figure 1. Pedestrian Life Expansion along Streets Adjacent to Moro Source: Heermann, Lauren

Inquiry: Which Aggieville streets could feed off the pedestrian experiences along Moro Street? **Key Extractions:** Bluemont Ave, Manhattan Ave, Moro St, 11th St, 12th St, 13th St, the north alley along Moro St between Manhattan Ave and 12th St, City Park, Varney's street front, **Methodology:** Current activity along Moro Street was expanded to spill onto adjacent streets.

Predictions were made where pedestrians might walk based on immediate adjacency and site corridors.

Conclusions: If redevelopment were to occur in Aggieville, store fronts should directly link to current activity around the corner to Moro Street. Some adjacent street front facades have already taken advantage of pedestrain foot traffic off of Moro, but more space farther south and north allow for expansion.

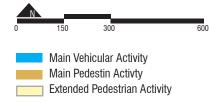
Legend

Existing Buildings on Activated Streets

Direction of Extended Pedestrian Activity



Figure 2. Pedestrian Life Expansion South to City Park and North to Bluemont Avenue Source: Google Earth; Heermann, Lauren





Interactive Street Fronts Adjacent to Moro Street Can Accentuate Social Experiences

Building form and location can activate streets beyond Aggieville's core

W3_LH09_4K_PedestrianInteraction.PDF



Source: Heermann, Lauren; Google Street View

Inquiry: How can streets feed off of Moro Street pedestrian activity through building form? Key Extractions: Direction of extended pedestrian activity, existing buildings on activated streets, proposed building fronts, existing buildings not on activated street, and all Aggieville streets Methodology: Pedestrian activity expanding from Moro Street was analyzed to predict successful locations for store fronts.

Conclusions: Store and restaraunt fronts will be more successful at the indicated locations. Pedestrian traffic flows will increase along buildings with interactive street fronts due to higher social interactions.

Legend

Possible New Building Locations Possible Elevated Vantage Points **Pedestrian Social Connections**



Figure 3. Pedestrian Social Experiences Feeding Off of Moro Activity to Manhattan Avenue Source: Heermann, Lauren; Google Street View

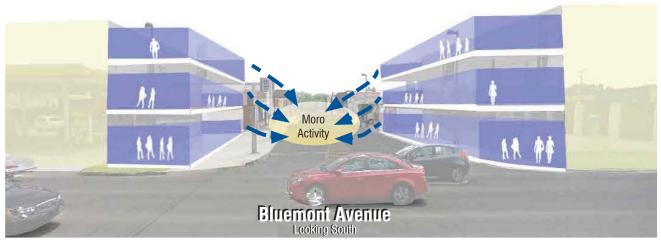


Figure 4. Pedestrian Social Experiences Feeding Off of Moro Activity to Bluemont Avenue Source: Heermann, Lauren; Google Street View

Legend Possible New Building Locations Possible Elevated Vantage Points Pedestrian Social Connections



Night-Life and Events are the Talk of Aggieville

Tweets from Aggieville users discuss night-life, events, food, and daytime activities.

W3_TL04_300_TwitterTalk.PDF

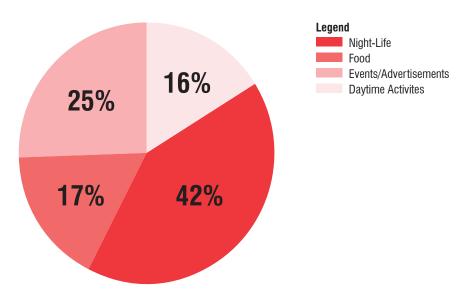


Figure 01. Aggieville is known for night-life Source: Twitter.com

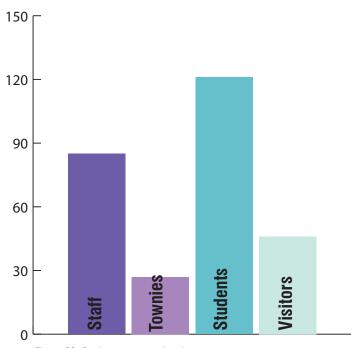


Figure 02. Students are tweeting the most Source: Twitter.com

Inquiry: What types of Aggieville users are posting about Aggieville on social media, and what are they talking about?

Key Extractions: Buildings, Streets, Tweet locations, Tweet Topics, and Twitter Users

Methodology: Inspired by Mitch Loring's Master's Report from 2013-2014, I did an advanced search on twitter for tweets including the word "Aggieville" or the hashtag "#Aggieville," and recorded the location, topic, date, time, and poster information for 279 tweets from June 9, 2013 - June 9, 2014. This information is reflected in graphs that depict the ratios of who is posting about Aggieville, what they are posting about, and where the posts originated.

Conclusions: Students are using twitter to discuss Aggieville happenings more than townies, visitors, or staff members. Perhaps it is for that reason that the most discussed topics are night-life and events like The Nothing Festival, Fake Patty's Day, Halloween, and the New Years Eve Celebration. An analysis of the geolocation associated with each tweet supplied the findings shown in Figure 03, that Varsity Donuts, Kite's, and Aggie Station are nodes of virtual activity; people are using social media to talk about their experiences at these places.





Aggieville Phenomenon Affect Twitter Topics

Tweet topics and type of user change to reflect certain events and seasons.

W3_TL05_00_SocialPhenomenon.PDF

August 26, 2013 - May 16, 2014

Kansas State University classes are in session

August 30, 2013 - December 28, 2014

Kansas State Wildcats Football Season

March 8, 2014

Fake Patty's Day in Aggieville

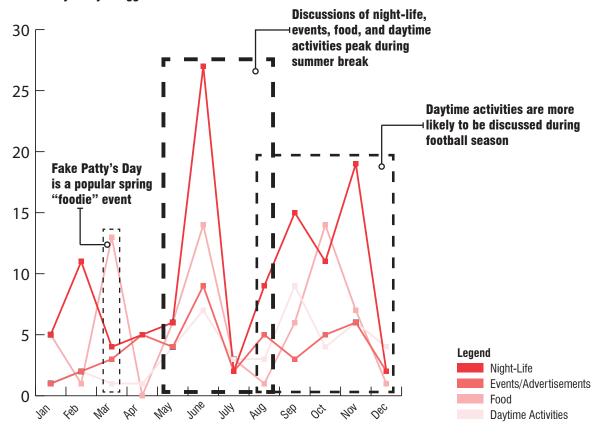


Figure 01. There are many things to talk about in the summer Source: Twitter.com

Inquiry: How are topics discussed about Aggieville on Twitter affected by time?

Key Extractions: Twitter users and topics by month, tweets during different times of day, seasonal/temporal phenomenon.

Methodology: Using the same tweets from the previous map, these charts delve further into the data and analyze user type and tweet topic alongside month and time of day. Assumed "seasons" are identified and then used to determine whether specific events or times of year are more prevelant in the social media realm that concerns Aggieville.

Conclusions: Aggieville phenomenon (special events like Fake Patty's Day, The Nothing Festival, New Year's Eve, "From the 'Ville to the Bill and Back," etc.) are opportunities for Aggieville to brand itself as a multi-use district. It is clear that there are options for families, students, and townies to enjoy Aggieville, but it is perceived as a place prevalently used for drinking and partying. Twitter is heavily used as a marketing tool, especially in the summer months. By identifying certain phenomenon in this map, it is made clear that Aggieville has the opportunity to make a new name for itself.

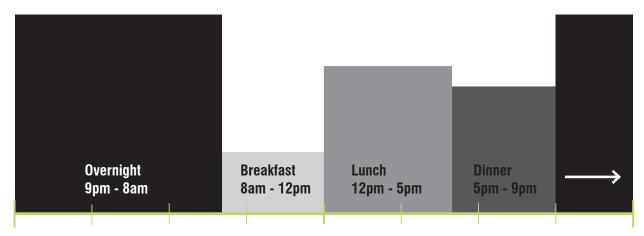


Figure 02. Few tweets sent during breakfast hours

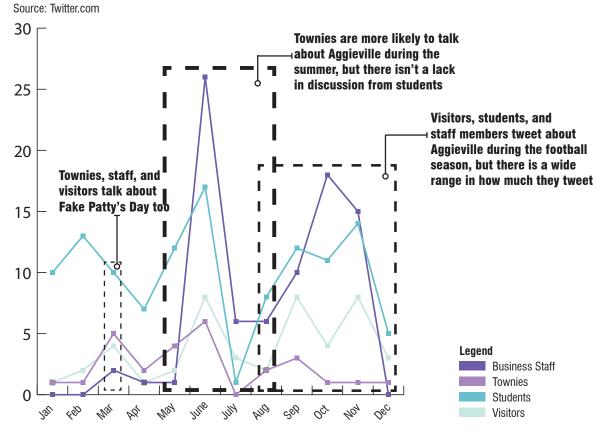


Figure 03. Townies come out when the students are away Source: Twitter.com



An Encompassing Aggieville Brand on Moro Street

Aggieville is a place of variety, and is recognized as such.

W3_TL06_00_AggievilleBrand.PDF

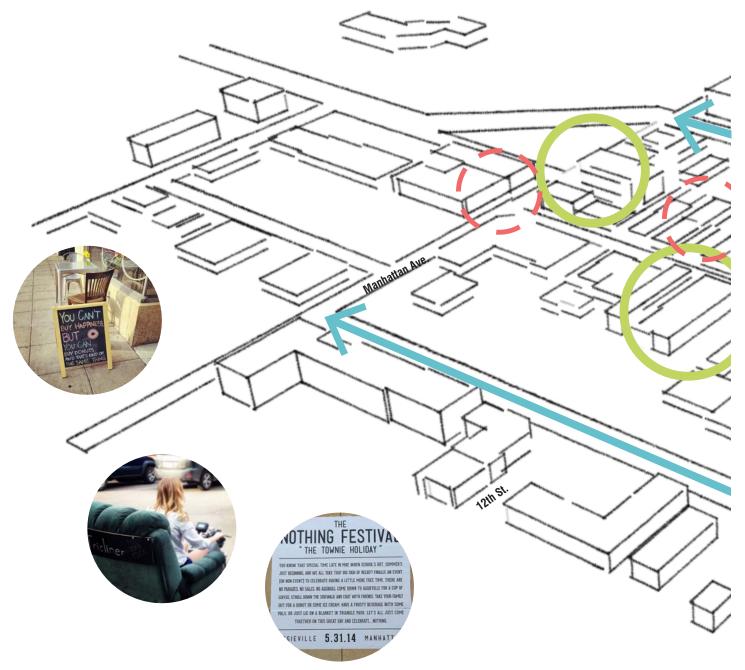


Figure 01. Only businesses along Moro Street are part of the current Aggieville brand. Source: Sketchup, Twitter.com

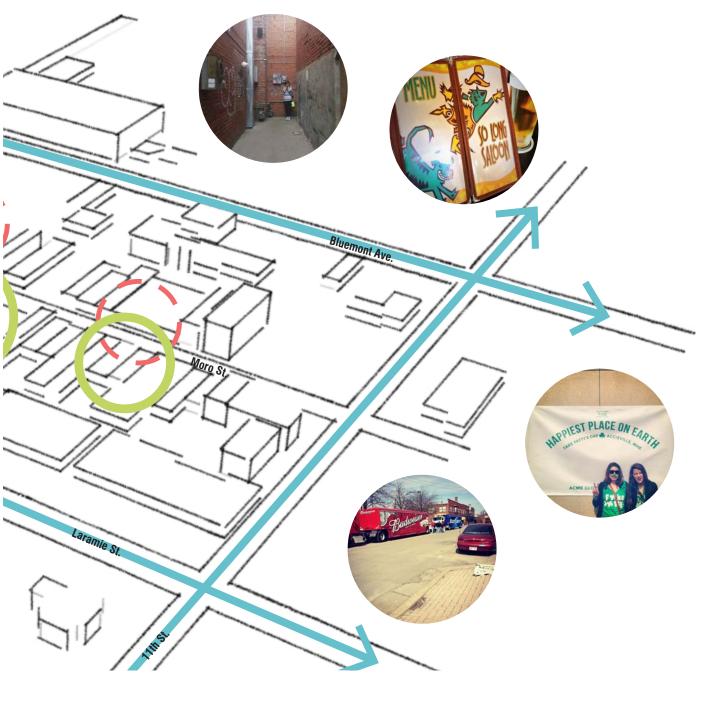
Inquiry: Where are the well-known places in Aggieville, and where are they not recognized by social media?

Key Extractions: Popular locations for georeferenced tweets, preconcieved "popular" destinations, areas with little mention.

Methodology: Using data from the first and second map in this series, as well as pictures and hashtags from twitter, I located places that were popular based on the amount of tweets georeferenced to the business' location. Using previous knowledge and pictures from the tweets I've analyzed, I located places that don't prove to be popular, but are well-known. Areas that lacked in both of those features are highlighted so the Aggieville brand knows where it can spread.

Conclusions: All proven and assumed popular locations for social media activity and recognizability exist along Moro Street. Few businesses along Bluemont Avenue and Laramie Street are discussed or pictured on social media, though there are significant businesses along both roadways. Through social media (a sort of "virtual signage") and physical signage, these roadways and the businesses along them can become part of the Aggieville brand, and will help it to appeal to more people in and outside of Manhattan.

Strategy



Legend

Tweet Location Nodes
Well-Known Establishments
Roadways Needing "Brand"



Building Stock and Infrastructure

Architectural Character and Materials
Peer District Comparison
Streetscape and Amenities
Lighting and Security
Alleys and Service Areas
Stormwater Run-off

4

Evolution of Aggieville

Development of Aggieville Business District dates back to 1889

W4_JS01_Timeline_AggievillesHistory.PDF

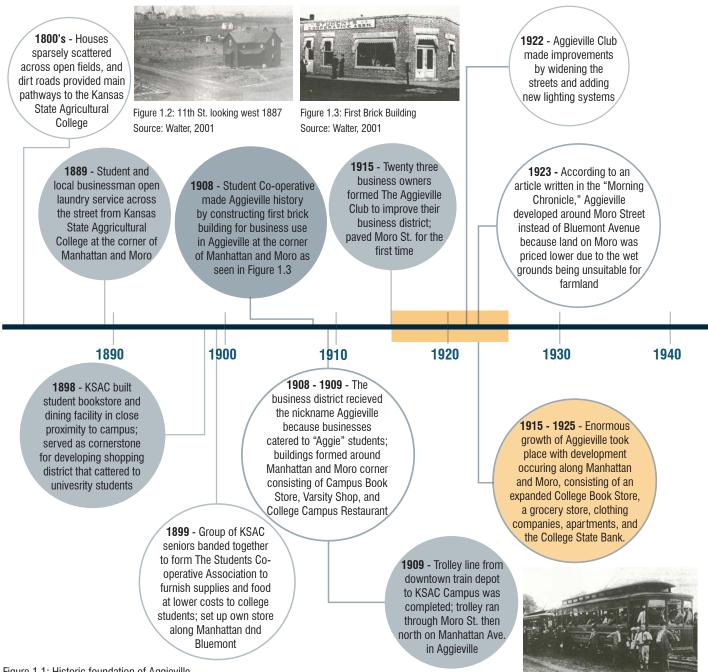


Figure 1.1: Historic foundation of Aggieville

Source: Walter, 2001; Aggieville Business Association, 2014

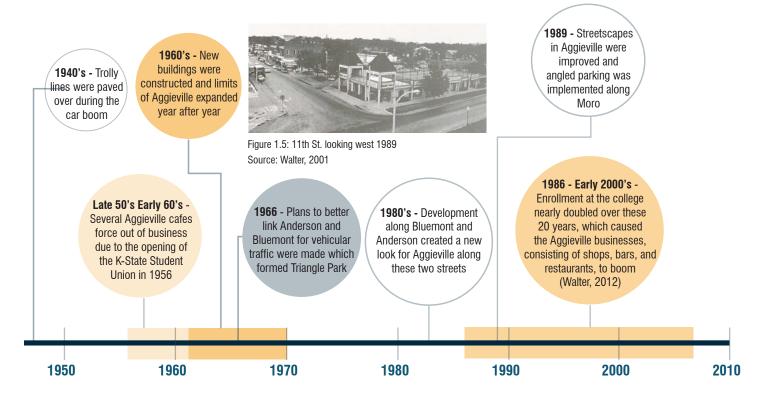
Figure 1.4: Trolley line Source: Walter, 2001

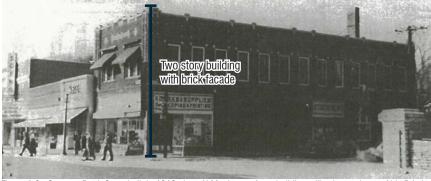
Inquiry: How has the Aggieville Business District evolved? **Key Extractions:** Aggieville's history over the past 125 years

Methodology: Research was done to discover the development history of the Aggieville Business District. All timeline information gathered from Dan Walter's Aggieveille 1889-1989: 100 Years of the Aggieville Tradition (Walter, 2001) unless otherwise noted.

Conclusions: The Aggieville Business District dates back to 1889, when a local businessman and student opened up a laundry service for students attending Kansas State Aggricultural College. During the early 1900s, book stores, grocery stores, clothing companies, restaurants, and apartments began developing within Aggieville, mostly concentrated along Manhattan and Moro Street. During the 1960s, new buildings were constructed and the limits of Aggieville expanded. As enrollemnt at Kansas State University doubled from the late 80s into the early 2000s, the Aggieville businesses experienced another period of substantial growth, and the result of this development consisting of retail shops, bars, and restaurants can be seen in Aggieville today.

Classification





One to two story mixed use buildings with storefront windows and brick facades serve as the historic character for Aggieville. Many brick buildings constructed in the early 1900s with first floor business and apartments above still exist today, with new businesses occupying the spaces.

Figure 1.6: Campus Book Store built in 1916 along N Manhattan Ave.; building still exists today as Able Printing Co. Source: (Photo altered by Jared Sickmann)

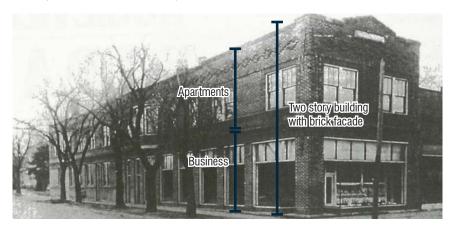


Figure 1.7: Brick building completed in 1918 on the south side of 12th and Moro; building still exists today as Kite's Source: (Photo altered by Jared Sickmann)



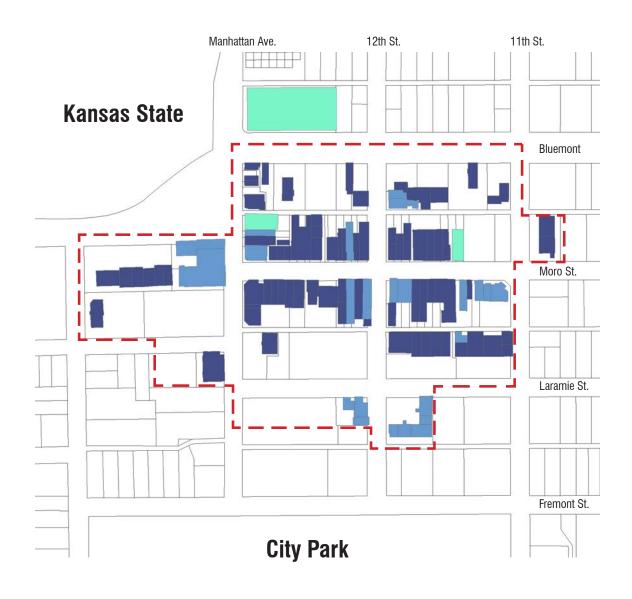
Legend

- Significant turning points in history
- Significant growth/decline of Aggieville

Aggieville Character Defined Through Building Characteristics

Determined through building height and facade analysis

W3_AH01_300_Building Height rating.PDF



3 Story



Inquiry: What is the building quality in Aggieville?

Key Extractions: Building height (in stories); Building facades; Parcels; BID Boundary

Methodology: I documented building heights and facades by hand and color coded each building using GIS.

Conclusions: Most buildings in Aggieville are one story. The primary facade utilized is new red brick, interspersed with old multi-colored brick and other materials from wood to stucco. There are only 30 buildings that exceed 1 story, and of those, only 3 are taller than 2 stories.

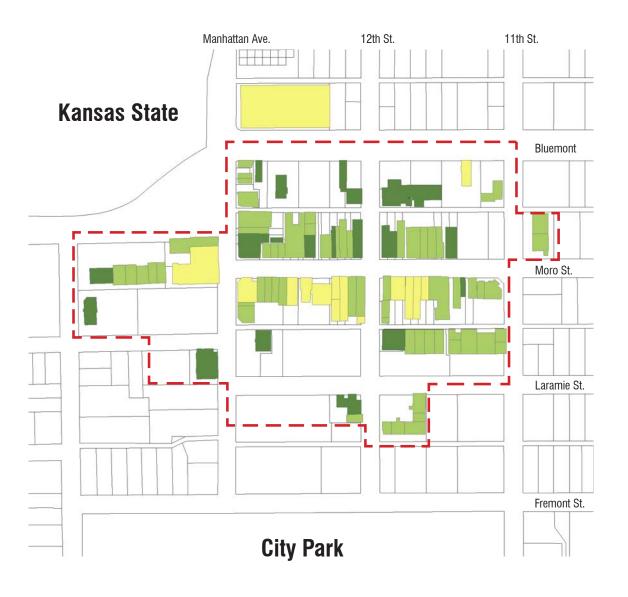
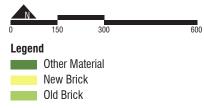


Figure 02. Building Facade Rating Source: Riley County GIS



72% Single Story 58% New Red Brick



Defining Aggieville's Historic Architectural Character

Building height, facade, and storefront appearance define Aggieville's historic character

W4_JS01_200_Aggieville'sCharacter.PDF



Figure 1.1: Building facades along Moro Street looking north

Source: (Sickmann, 2014)



Figure 1.2: Building facade between 11th and 12th looking South

Source: (Sickmann, 2014)



Figure 1.3: Building facade on Manhattan looking east

Source: (Wilson, 2014)

Figure 1.4: Building facade on Manhattan looking west Source: (Heerman, 2014)

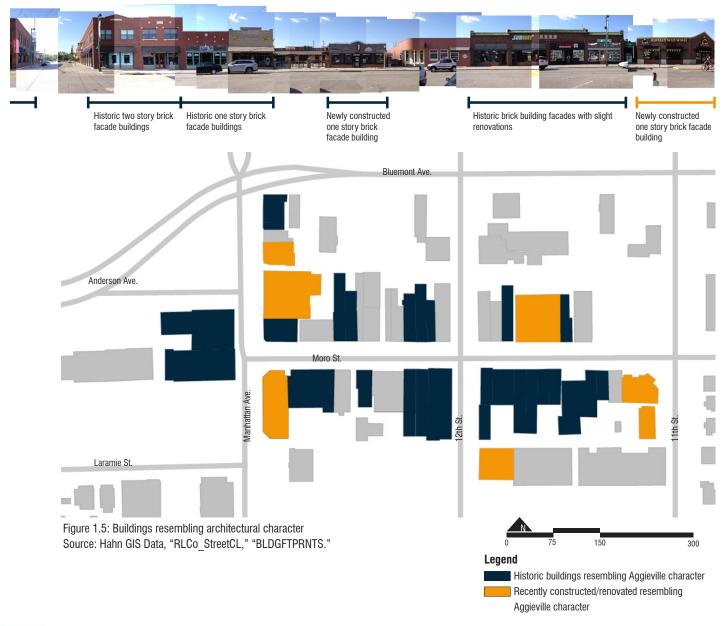
Inquiry: What is the historic architectural character of Aggieville?

Key Extractions: Building facades, building footprints, Riley County street center lines,

Methodology: A visual analysis of existing buildings in Aggieville was completed to determine the architectural character of Aggieville.

Conclusions: The architectural character of Aggieville consisted of buildings with brick facades, storefront windows, and were one to two stories tall located directly on the sidewalk edge, with retail/residential on ground level.







Maintaining Historic Character With Future Development

Development along Bluemont, Anderson, and Laramie has potential to resemble historic character

W4_JS02_200_PresenceofCharacter.PDF

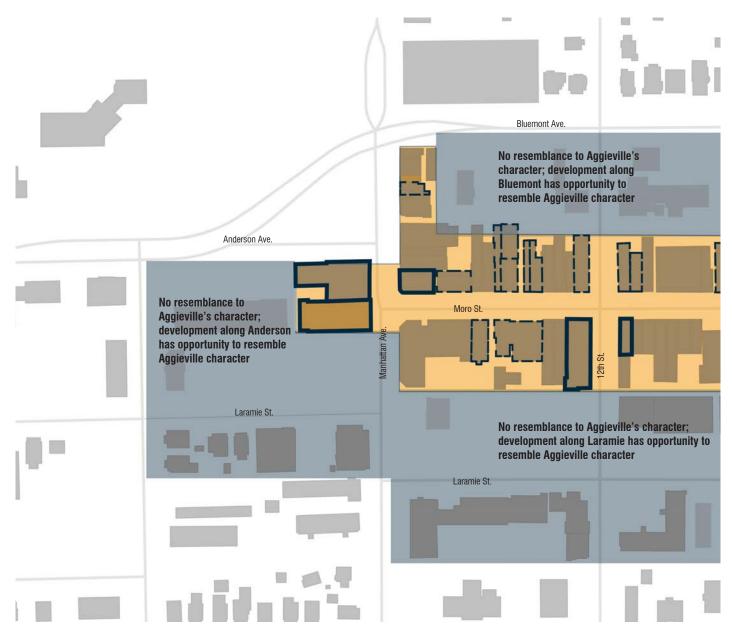


Figure 2.1: Maintaining historic character with future development Source: Hahn GIS Data, "RLCo_StreetCL," "BLDGFTPRNTS."

Inquiry: Where is the strongest representation of Aggieville's architectural character?

Key Extractions: Building footprints, Riley County street center lines,

Methodology: After studying the existing buildings and determining an architectural character, an analysis was done to study where the greatest representation of architectural character existed, and delineate areas for future development to resemble the historic architectural character of Aggieville.

Conclusions: Due to the original development occuring along Manhattan Avenue and Moro Street, the buildings along these streets had the strongest representation of Aggieville's historic architectural character. The opportunity exists to renovate buildings along Manhattan and Moro Street in order to maintain the historical character of Aggieville. An even greater opportunity exists for development along Bluemont, Anderson, and Laramie St. to resemble the historical character of Aggieville's core.

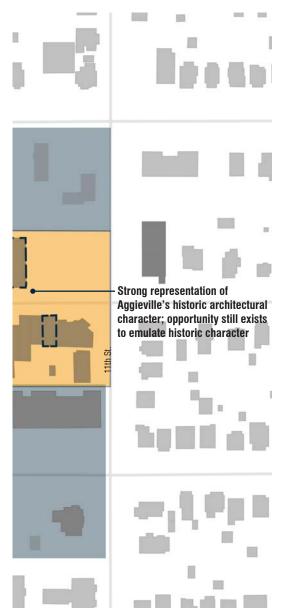
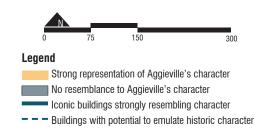




Figure 2.2: Older buildings along Moro providing examples of historic character Source: (Sickmann, 2014)



Figure 2.3: Area of business district with no resemblence to Aggieville's character Source: (Sickmann, 2014)





Architectural Character of Aggieville to Be Maintained Along Manhattan and Moro

Building heights to increase with future development along Bluemont, Anderson, and Laramie St.



Source: Hahn GIS Data, "RLCo StreetCL," "BLDGFTPRNTS."

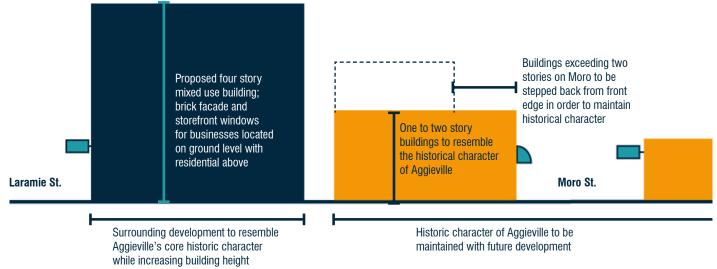


Figure 3.2: Resembling character while increasing building height Source: (Sickmann, 2014)

Inquiry: In what ways can the historic character of Aggieville impact surrounding development?

Key Extractions: Existing building heights, proposed building heights

Methodology: After discovering the area of focus for historic preservation in Aggieville, strategies were developed to increase building density while maintaining the character of the historic Aggieville Business District.

Conclusions: The buildings that currently define the character of Aggieville along Manhattan and Moro Street are one to two stories in height. In order to preserve the architectural character along these two streets, building heights will remain at one to two stories at the front edge along Moro, with potential to develop a third story that is stepped back. To resemble Aggieville's character in surrounding development, brick facades and storefront windows can be implemented along the first floor of new buildings. Building heights, however, can increase along Bluemont, Anderson, and Laramie St. This will allow for higher density development in the area surrounding Aggieville's core, while maintaining the historical character of Aggieville along Manhattan and Moro St.

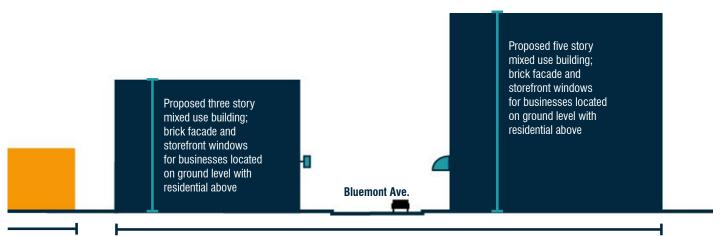
Future development resembling historic character by incorporating historic architectural qualities while increasing building height

One to two story buildings emulating the historic character of Aggieville; buildings exceeding two stories on Moro to be stepped back from front edge in order to maintain historical character

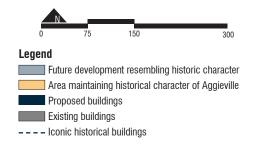


Figure 2.3: Example of newly constructing building thats multiple stories with qualities resembling historic character

Source: (Sickmann, 2014)



Surrounding development to resemble Aggieville's core historic character while increasing building height





Compared to Peer College Entertainment Districts, Aggieville is Most Compact

Building desity is comparable among districts yet street length varies

W3_LT04_300_CollegeTownComparison.PDF



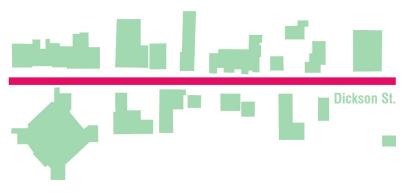


Moro Street
Manhattan, Kansas
Manhattan Ave to 11th St
900 ft. long
300 ft. from Campus
Block length - 400 ft.
High Density





O Street Lincoln, Nebraska 11th St to Centennial 1200 ft. from campus 1600 ft. long Block length - 350 ft. High Density





Fayetteville,
Arkansas
N.W. Ave to Highland Ave.
1900 ft. long
600 ft. from Campus
Block length - 330 ft.
Moderate Density

Dickson Street

Figure 01. Moro street's business district in relationship to other college districts Source: Hahn. GIS Data "Buildings."

Inquiry: In what ways does Aggieville's Moro Street compare to other streets in college town districts?

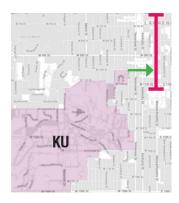
Key Extractions: Comparing the distant from campus to business district in peer college towns, the length of each street, and building figure ground. **Methodology:** Kansas State University (Manhattan) University of Nebraska (Lincoln), University of Arkansas (Fayetteville), University of Kansas (Lawerence), and lowa State University (Ames), are all peer universities that have similar entertainment districts located near campus. Building density was determined by the number of facade fronts located along each block. Length of street was determined either by district boundaries or types of building uses.

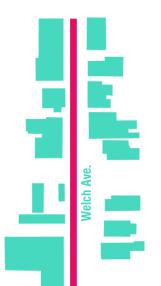
Conclusions: All business districts were similar in building density even though most of the streets varied in length. Overall, Moro Street is the shortest street while Massachusetts's St. was four times as long. All of the districts were in reasonable walking distance to the town's business district, with Welch Avenue in Ames being the closest to its campus and "0" street in Lincoln being the farthest from campus.

Massachusetts St.

Massachusetts Street Lawrence, Kansas

E. N. Park St. to 40 Hwy 3600 ft. long 1300 ft. from campus Block length - 630 ft. High Density

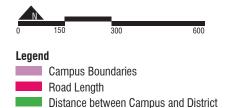




Welch Avenue Ames, Iowa

Lincoln Way to Hunt St 1100 ft. long 150 ft. from campus Block length - 400 ft. Moderate Density





Aggieville has Potential to Expand and Redevelop within its Compact District

Many open spaces allow for high density development adjacent to Moro Street

W1_LT05_300_AggievilleExpansion.PDF

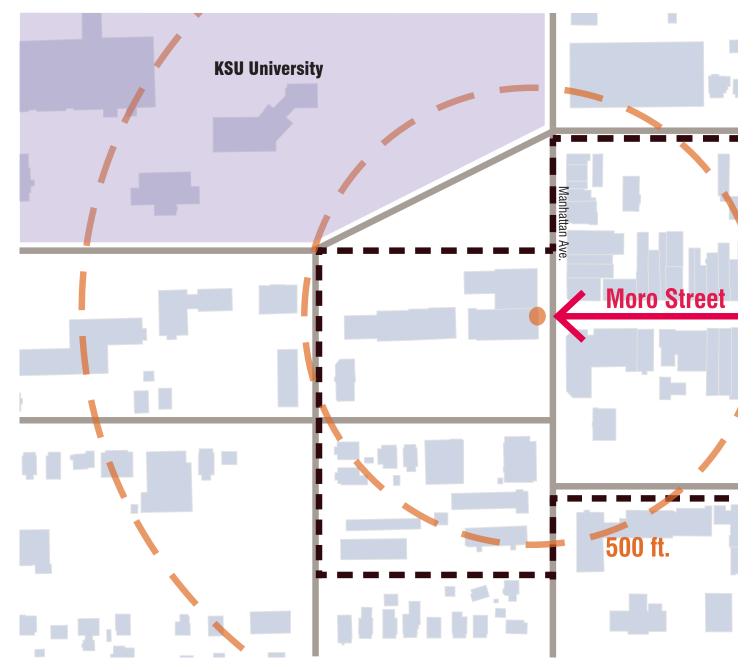


Figure 02. Opportunity to Expand within Aggieville District Source: Hahn. GIS Data "Buildings."

Inquiry: Where are the opportunities for Aggieville to expand its building density throughout the district?

Key Extractions: Desirable walking distance, development opportunities adjacent to Moro Street, and building figure ground.

Methodology: Identifying the desirable walking range and seeking out areas of new potential development showed the most opportunity within the current district boundaries.

Conclusions: Aggieville has a very desirable walking distance because it is compact, however the only street that provides the highest building density is Moro Street. By looking at the figure ground, it was determined that open spaces in adjacent blocks of Moro provide the most opportunity for redevelopment.





New Buildings Help Increase Building Density Throughout Aggieville

Additional buildings located on adjacent blocks from Moro Street increase density, but retain existing compact form

W3_LT06_NewHighDensityBuildings.PDF



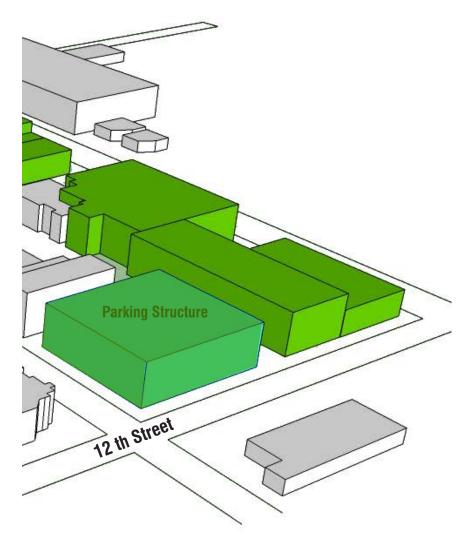
Figure 03. New High Density Buildings Throughout Aggieville Source: Hahn. GIS Data "Buildings." Heerman, Lauren. 2014. Aggieville Model. Sketchup.

Inquiry: How can open lots in Aggieville be transformed to expand the district's building density?

Key Extractions: Key additional buildings and building modifications constructed in the block's open space.

Methodology: Building from the opportunity map, this model shows potential new building masses throughout Aggieville.

Conclusions: Building on the opportunity map, the open spaces located in adjacent blocks from Moro Street present the most opportunity for redevelopment. These new buildings could be implemented in phases starting with the amenity that is most critical and then others can follow. With the new development, not only would it increase building density throughout the district, but the buildings could serve as mixed use and create an urban environment that provides an array of amenities as well as a desirable walking environment.



Phase I: Add two to three story mixed-use buildings along Bluemont with one parking structure on the corner of Moro St. and 12th St.

Phase II: Add two to three story mixed-use buildings along Laramire to expand high density buildings in Aggieville with one parking structure on the corner of Manhattan Ave. and Laramie St..





Aggieville Deficient In Pedestrian-Friendly Infrastructural Amenities

Aggieville's infrastructure amenities are similar to Poyntz Avenue District, but offer fewer crosswalks

W2_PR01_200_Amenities.PDF



Inquiry: How does Aggieville compare to the Poyntz Avenue District, it's primary competitor within the city of Manhattan, in terms of pedestrianfriendly infrastructural amenity presence?

9 Crosswalks Total

Key Extractions: Urban retail and entertainment districts - Aggieville and Poyntz Avenue; Pedestrian-scale amenity infrastructure - seating elements (benches, picnic tables, and movable seating), waste bins, and city-delineated crosswalks; Parcels, building footprints and road

Methodology: Inventoried pedestrian-friendly amenity infrastructure (seating elements, waste bins, and crosswalks) on both sites, then georeferenced data using aerial imagery. Resulting graphics were overlain on GIS data indicating parcels, building footprints, and road centerlines obtained from Riley County GIS. Street lengths were measured using the road centerline data.

Conclusions: After all prior steps were completed, the total count of each infrastructural element was divided by the corresponding street length in each district. This led to the discovery that Aggieville and the Poyntz Avenue District offer a very simliar number of seating and waste bin amenities, but Poyntz Avenue offers nearly three times the number of crosswalks.

Downtown





Aggieville Lacks Adequate Amenities

Aggieville's pedestrian-scale amenity infrastructure is nearly 60% on average below Project for Public Spaces' recommendation W2_PRO2_200_AmenityFrequency.PDF

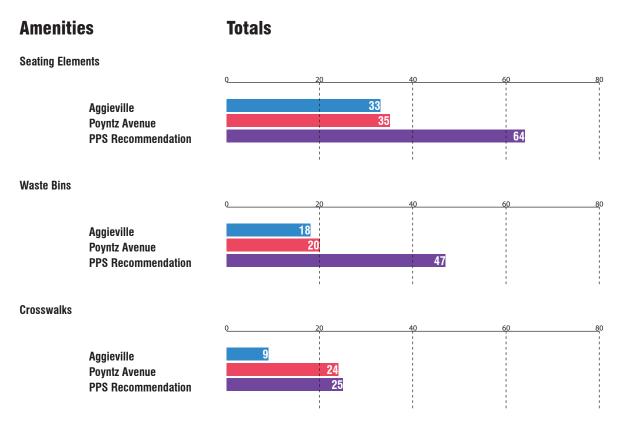


Inquiry: To what extent does Aggieville need to improve it's pedestrian-scale infrastructural amenities to become a more comfortable urban environment conducive to walkability and intimate contact among its users?

Key Extractions: Aggieville physical boundary; Pedestrian-scale amenity infrastructure - seating elements (benches, picnic tables, and movable seating), waste bins, and city-delineated crosswalks; Parcels, building footprints, and road centerlines.

Methodology: After compiling all amenity infrastructure data and synthesizing the data into map form, guidelines formed by the Project for Public Spaces (PPS) organization was used to determine the optimal amount of amenities that should be present in the Aggieville Business District. The framework recommends the positioning of benches and waste receptacles be near high-volume intersections, restaurants and food vendors, and other existing or proposed infrastructure. Existing amenity infrastructure was then juxtaposed against the new data to examine the difference between the current state of the infrastructure and the desirable state.

Conclusions: Across the three categories calculated, Aggieville was found to be under-equipped by an average of 58%. The positioning of the existing infrastructure is desirable, the quantity, however, needs to improve to make the streets more hospitable to its users.



Amenity Frequency in Relation to Total Street Length in Study Areas

(Average distance between [in feet]: number of element[s])

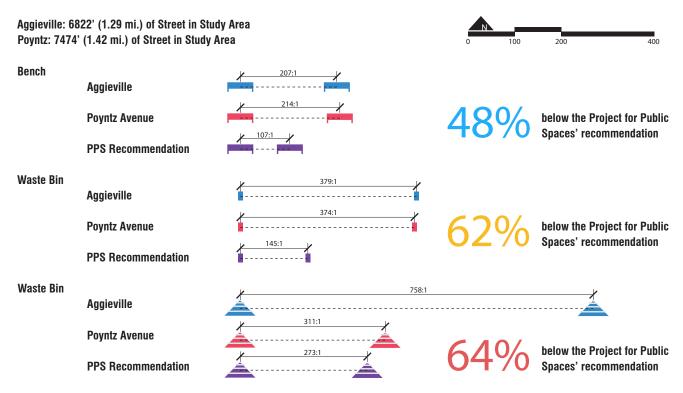


Figure 02. Amenity Frequency in Aggieville and Poyntz and Recommended by Project for Public Spaces Source: Google Earth, Project for Public Spaces



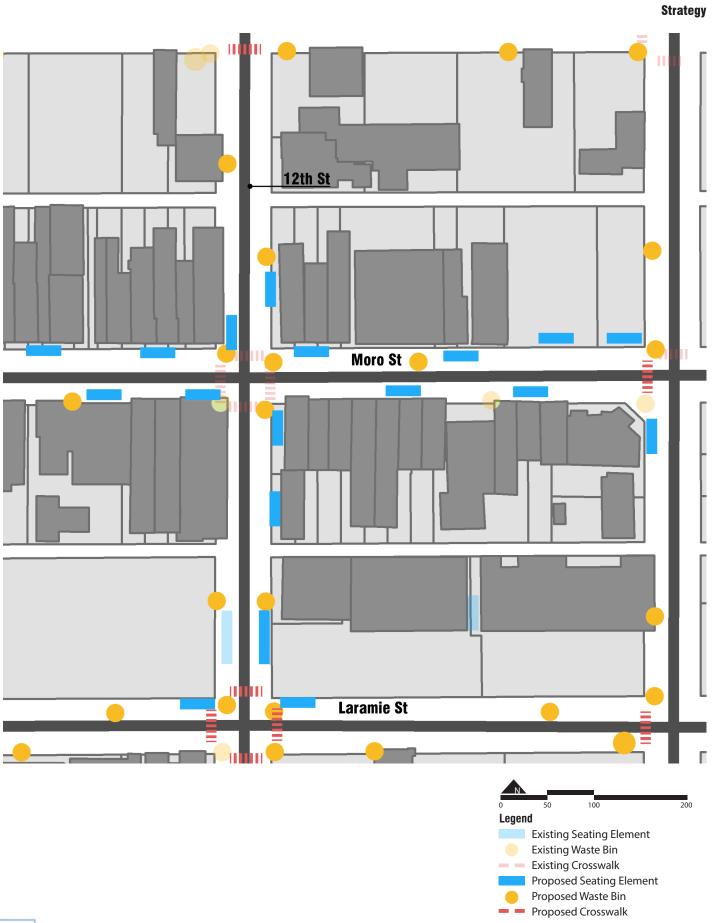
Additional Amenity Infrastructure Creates a More Comfortable Pedestrian Environment Increasing the number of pedestrian-scale amenities reduces clustering of amenities and prioritizes walkability W2_PR03_100_Proposed Amenities.PDF **Manhattan Ave** Ш

Figure 01. Aggieville District Existing and Proposed Amenity Infrastructure Source: Google Earth, ArcGIS

Inquiry: How can the pedestrian-scale infrastructural amenities of Aggieville be improved?

Key Extractions: Aggieville physical boundary; Pedestrian-scale amenity infrastructure - seating elements (benches, picnic tables, and movable seating), waste bins, and city-delineated crosswalks; Parcels, building footprints, and road centerlines.

Methodology: Using the guidelines outlined by the Project for Public Spaces (PPS) organization, locations for additional amenities were chosen based on amount of nearby pedestrian traffic, street intersections, and proximity to dining facilities and existing infrastructure. **Conclusions:** The addition of these amenities would serve a strong purpose in balancing and dispersing the available amenities offered throughout Aggieville, rather than offering certain amenities in clustered sections of the business district, while also improving the condition of the pedestrian environment and walkability throughout the site.





Aggieville doesn't meet ADA requirements

Because Aggieville was built before 1992, ADA guidelines are not required.

W4_AB07_150_ADAAccessiblity.PDF

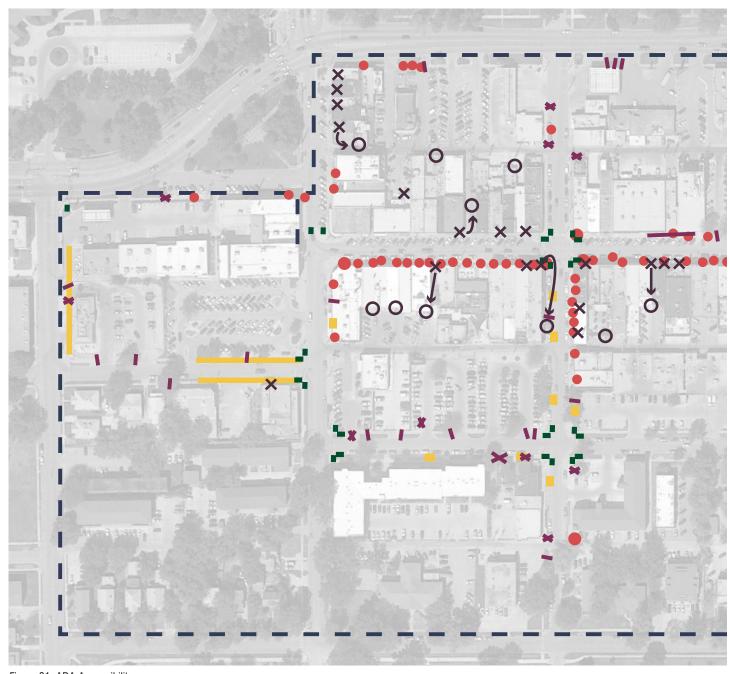


Figure 01. ADA Accessibility

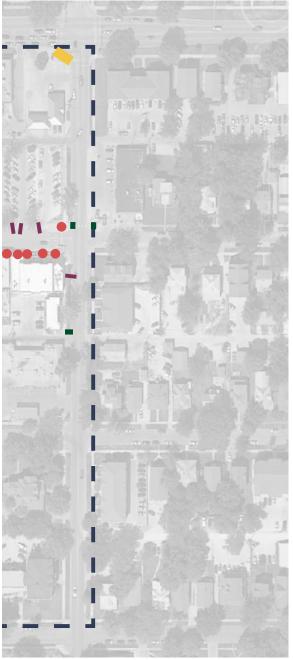
Source: Balderston, Allison. 2014. ADA Accessibility. Source map: Google Earth. Manhattan, Kansas. 39d11'08.94"N 96d34'29.20"W. Access June 20, 2014.

Inquiry: Does Aggieville meet ADA requirements?

Key Extractions: Sidewalk Obtrusions, Unaccessible Entrances, Alternative Entrances, Crossings without Tactile Paving, Missing Pavers **Methodology:** Through first-hand site observations, I analyzed existing site conditions relative to ADA requirements. Business entrances, sidewalk conditions, and crosswalk quality that didn't follow ADA requirements were recorded.

Conclusions: After studying the sidewalks within the Aggieville business district it is concluded that there are many inconsistencies with ADA requirements. There are many missing pavers along the sidewalks, obtrusions, and uneven bricks throughout Aggieville. Many of the businesses don't have a door that is ADA accessible by having elevation changes from the sidewalk that doesn't provide a ramp.

Classification



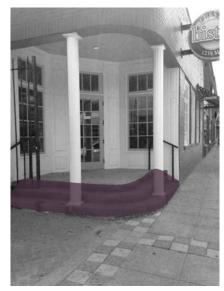


Figure 02: Unaccessible Business Entrance



Figure 03: Uneven Side Bricks

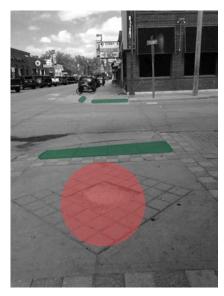


Figure 04: Missing Paver and Tactile Paving

4. Building Stock and Infrastructure | Streetscape and Amenities

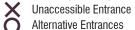


Figure 05: Sidewalk Obtrusions



Legend

Boundary of Study



Uneven Bricks

Obtrusions

Missing Pavers

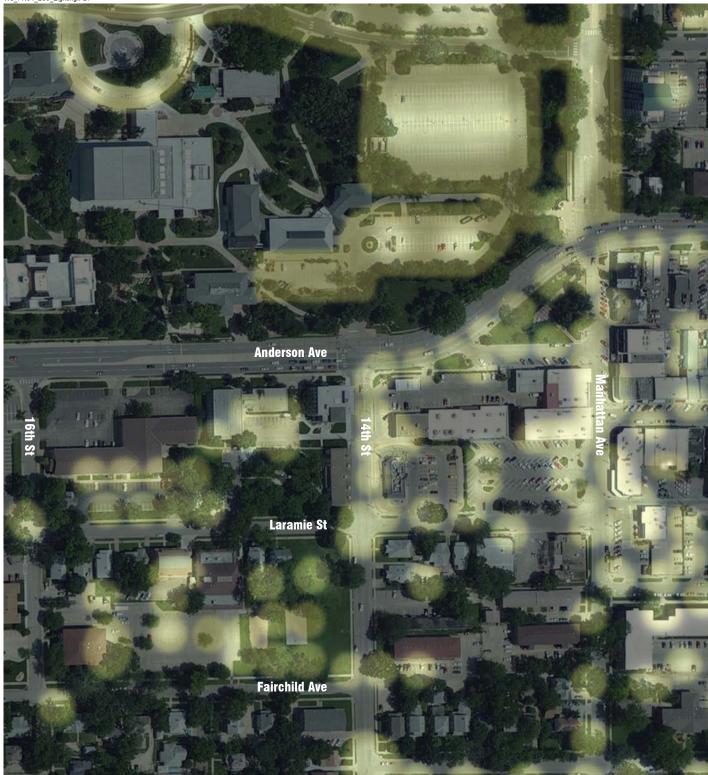
Crosswalks without Tactile Paving



Alleys and Adjacent Neighborhoods Lack Sufficient Lighting

Lighting conditions along Aggieville's streets seem adequate but quickly decreases after exiting Aggieville

W3_PR04_200_Lighting.PDF

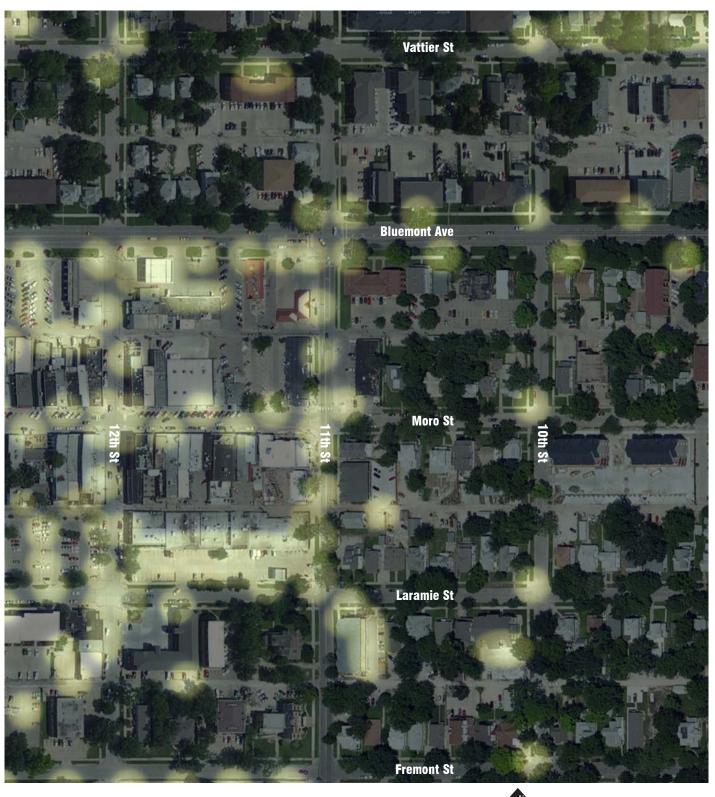


Inquiry: What are the current lighting conditions in Aggieville and adjacent neighborhoods?

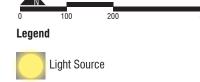
Key Extractions: lightpost positions, and light distribution

Methodology: After conducting an inventory on lightposts in Aggieville and the surrounding neighborhoods, light distribution patterns were overlain on an aerial photograph to show where light is present and absent in and around Aggieville.

Conclusions: Lighting along the streets of Aggieville is adequate and is visible from adjacent neighborhoods. However, the lighting conditions in the alleys of Aggieville and the surrounding neighborhoods are either poor or completely absent.





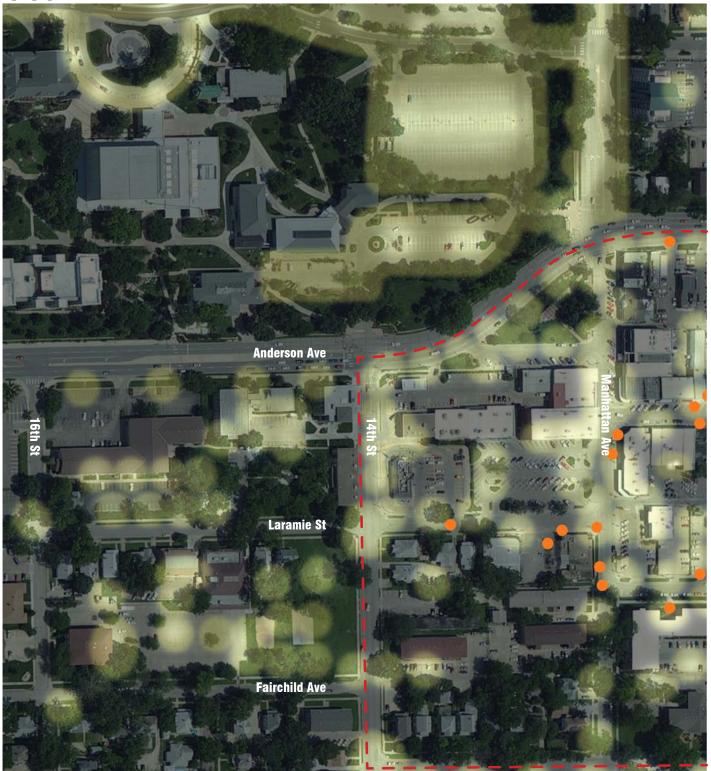




Violent Crimes in Neighborhoods Adjacent to Aggieville Generally Occur in Poorly-Lit Areas

Incidents of violent crime occur near drinking establishments in Aggieville and in dimly-lit neighborhood areas

W3_PR05_200_ViolentCrimes.PDF



Inquiry: How does the distribution of violent crimes correlate with lighting in and around Aggieville?

Key Extractions: violent crimes (assault, homicide, sexual assaults) in Manhattan from January 1, 2012 to present, light distribution **Methodology:** After assessing current light distribution patterns, data regarding incidences of violent crimes in Aggieville and the surrounding neighborhoods was gathered and juxtaposed against lighting presence over the same study area.

Conclusions: While it seems that incidents of violent crime in Aggieville tend to occur in clusters around drinking establishments (bars, taverns, nightclubs), there are incidences of crimes in the alleys of Aggieville (six of thirty total), but perhaps the most intriguing is the pattern of crimes in the poorly-lit areas of the neighborhoods adjacent to Aggieville (four out of six total).

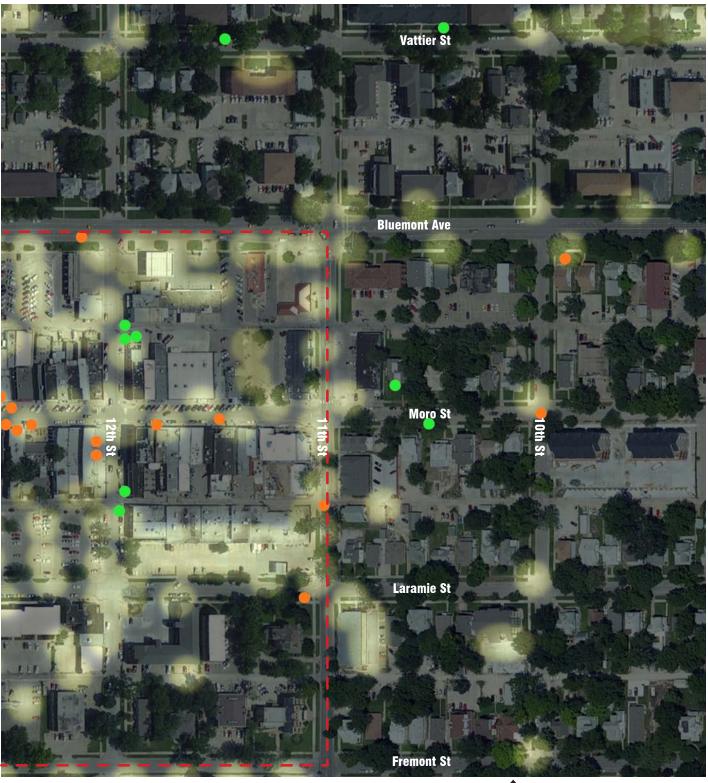


Figure 01. Violent crimes in relation to lighting in and around Aggieville Source: GIS, RAIDS Online



crimes outside Aggieville occur in dimly-lit areas

crimes in Aggieville occur in dimly-lit alleys





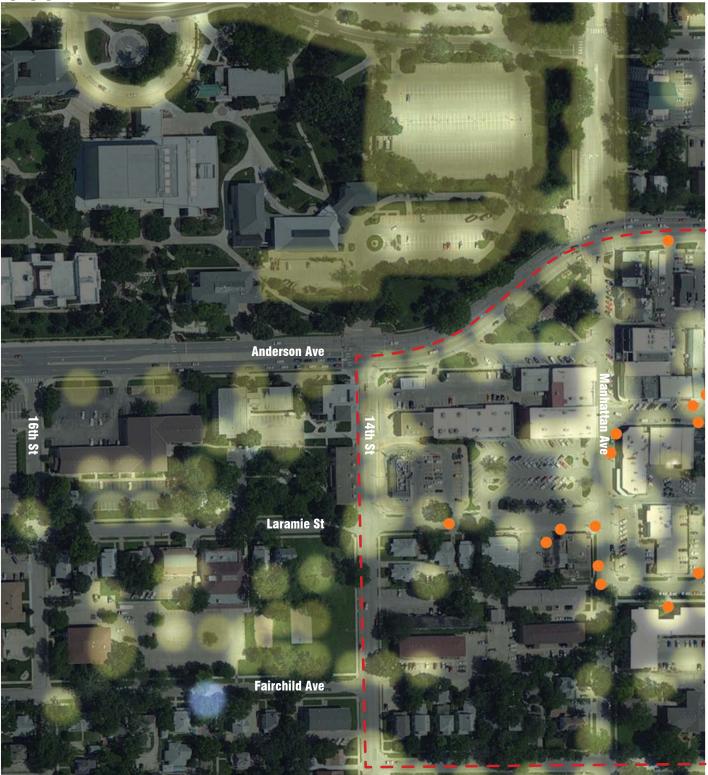
Light Source Aggieville Boundary



Additional Lighting Around Aggieville May Reduce Crime

Added lighting in Aggieville's alleys and adjacent neighborhoods can create safer pedestrian walkways

W3_PR06_200_ProposedLighting.PDF



Inquiry: What measures can be taken to reduce the risk of violent crimes in Aggieville and its adjacent neighborhoods? Key Extractions: Incidences of violent crime in Manhattan from January 1, 2012 to present, existing and proposed light distribution Methodology: After assessing existing light distribution patterns throughout Aggieville and the surrounding neighborhoods, as well as criminal activity, proposed additional lighting was positioned based on how it could positively affect pedestrian walkability and safety. Conclusions: An additional streetlight placed mid-block in the neighborhoods would create a uniform pattern and provide an extra sense of safety and security to those walking through Aggieville and the adjacent neighborhoods during the night. Additionally, these proposed lights aim to promote walkability throughout Aggieville and near the Kansas State University campus at all hours of the day.

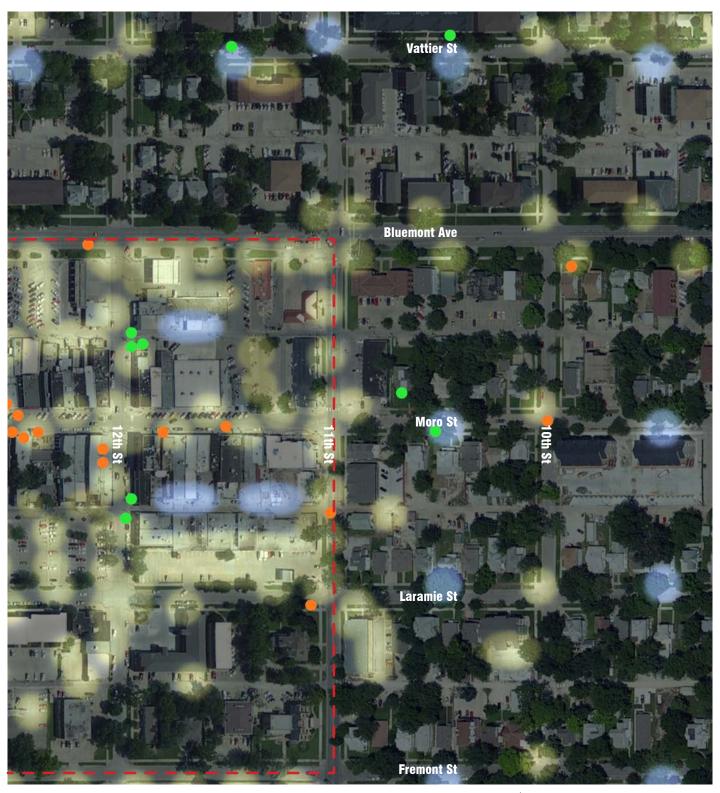
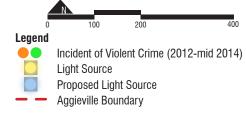


Figure 01. Existing and Proposed Lighting in and Around Aggieville Source: GIS, Raids Online





Spaces of High Enclosure Contain a High Amount of Dumpsters and Utilities

A high enclosure brings the pedestrian closer to these obtrusive elements.

W3_WM04_150_Enclosure.PDF

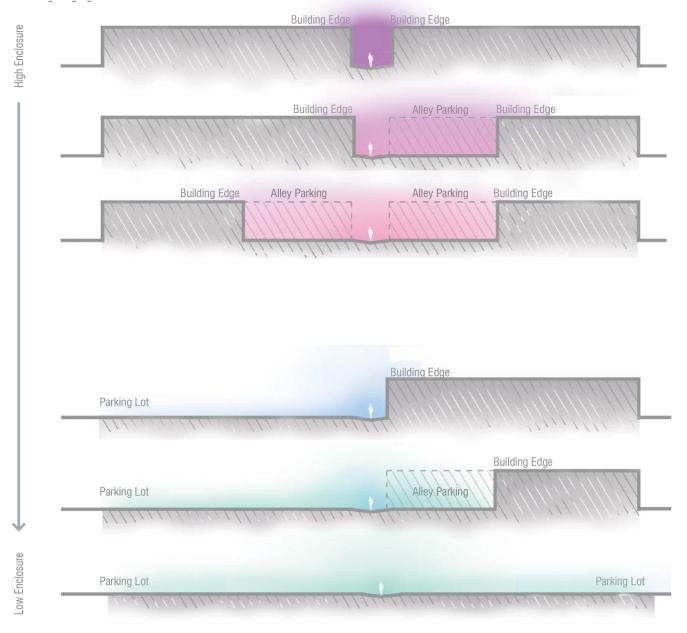


Figure 01. **Generalized** Aggieville Enclosure Color Key Source: (Moore, 2014)

Inquiry: Where are obtrusive elements in relationship to alleyways of high enclosure in central Aggieville?

Key Extractions: Pedestrian pathways and buildings are in white to give context. Enclosure is exhibited in a color gradient from magenta to teal to exhibit the degree of enclosure of the chosen field. The field was chosen to exhibit the two alleyways and their immediate context. Dumpsters, Light posts, and

Methodology: Through a site visit and analysis in Google Earth an analysis of enclosure types was decided and portrayed through elevation. The enclosure types were given a color gradient and this color was applied to the plan of the site.

Conclusions: The majority of alleyways with high enclosure also contain obtrusive elements such as dumpsters, utilities, and power poles. This relationship is important to recognize because the experience of obtrusive elements is amplified by the increased proximity, and decreased air movement inherent in spaces of high enclosure.

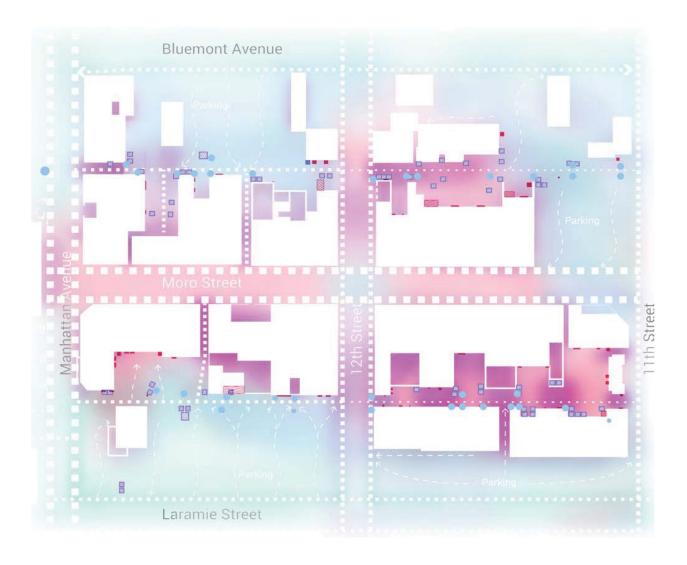
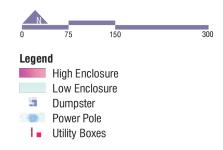


Figure 02. Aggieville Enclosure Source: (Google Earth, 2014)





Opportunities for Visual Screening and Odor Reduction in Aggieville Alleys

Increased enclosure intensifies the pedestrian's experience of dumpsters, utilities, and light posts.

W3 WM05 150 Enclosure.PDF

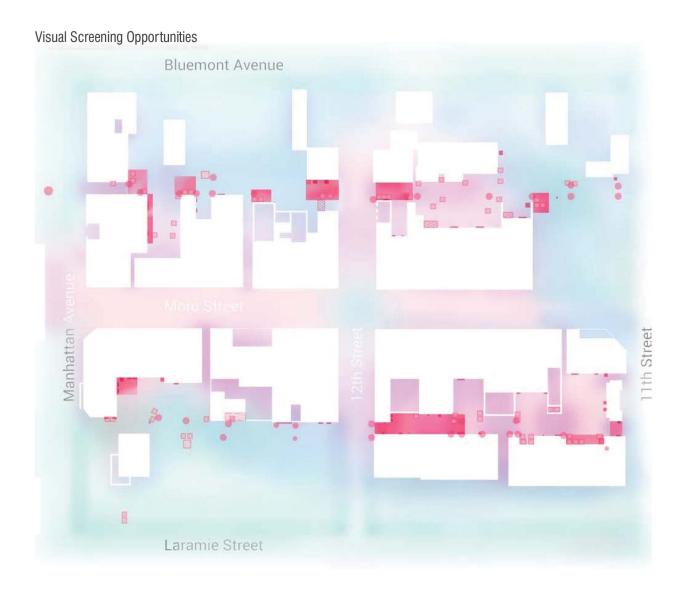


Figure 01. Alleyway Screening Opportunities Source: (Google Earth, 2014)

Inquiry: What alleyway locations are most in need of a design intervention to improve the experience of Aggieville?

Key Extractions: Pedestrian pathway and buildings are in white to give context. Enclosure is exhibited in a color gradient from magenta to teal to exhibit the degree of enclosure of the chosen field. The field was chosen to exhibit the two alleyways and their immediate context. Light Posts and Meter boxes are shown for the visual analysis and dumpsters are shown for the smell analysis.

Methodology: Through a site visit and analysis in Google Earth an analysis of enclosure types was decided and exhibited in the section diagrams on the right-hand page. The enclosure types were given a color gradient to and this color was applied to the plan of the site. Assuming that a higher proximity to dumpsters, light posts, and meter boxes results in a worse experience and perception of the alleyways the enclosure of each alleyway was compared to the density of obtrusive elements to determine critical opportunity areas.

Conclusions: Locations with high enclosure which also contain a large amount of obtrusive elements such as dumpsters and utility boxes are considered to be the most detrimental to the experience of Aggieville Alleyways. The most critical areas are highlighted as opportunities for designs.

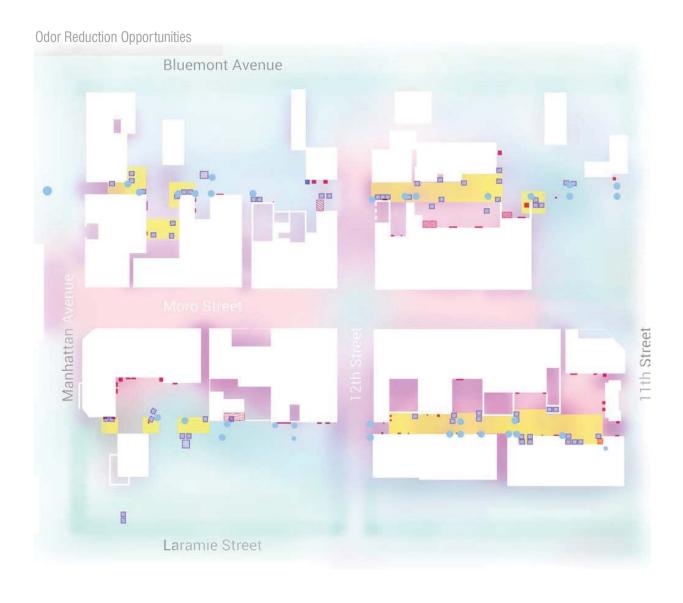
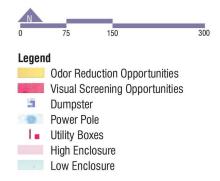


Figure 02. Alleyway Venting Opportunities Source: (Google Earth, 2014)





Improving the Sight and Smell of Aggieville Alleyways

Dumpsters and utilities are screened, while power poles are utilized for art installations and lighting.

W3_WM06_150_Enclosure.PDF

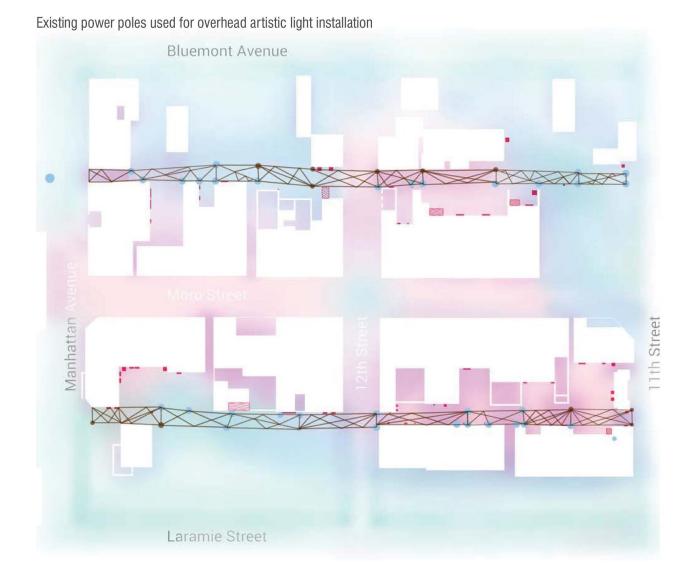


Figure 01. Alley Lighting Source: (Google Earth, 2014)

Inquiry: What can be done to improve the Alleyway environments?

Key Extractions: Pedestrian pathway and buildings are in white to give context. Enclosure is exhibited in a color gradient from magenta to teal to exhibit the degree of enclosure of the chosen field. The proposed design elements are in dark colors to stand out from the rest of the image. Methodology: Based on the conclusions from the Classification map and Opportunities researching the alleyways this proposal establishes solutions based on the existing elements and the goals of making a more suitable alleyway environment in both smell and sight.

Conclusions: Existing power poles are utilized instead of hidden or ignored by creating interesting overhead patterns of either lighting or artistic banners. The existing utilities are screened with custom fabricated perforated walls. The set back from the utilities is accounted for and utilized to further house the dumpsters which are currently strewn across the alleyways. The areas with dumpsters are vented with overhead vent hoods so the areas do not smell as bad.

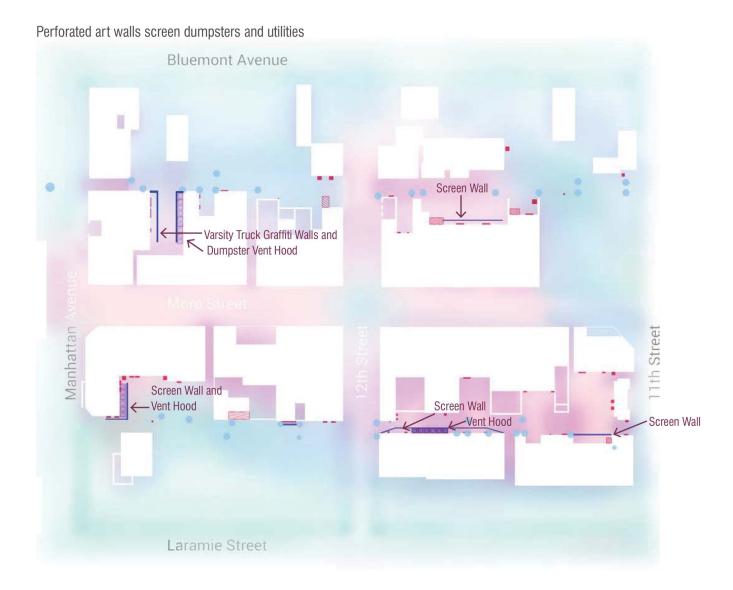
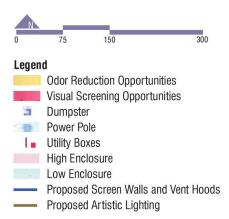


Figure 02. Alley Screen Walls Source: (Google Earth, 2014)







Inquiry: Where are dumpsters in relation to outdoor dining and pedestrian use?

Key Extractions: Buildings and streets give context. Outdoor dining and alley storefronts exhibit where pedestrians travel most. Dumpster locations are shown to determine their proximity to pedestrian pathways and outdoor dining.

Methodology: The data from on-site documentation of outdoor dining spaces and dumpsters was overlaid on a Google Earth Image of Aggieville with Adobe Illustrator. The streets and building footprints were traced over the Google Earth Imagery.

Conclusions: Currently Aggieville's refuse system functions primarily within the two alley spaces to the north and south of Moro Street. This separation from Moro Street exhibits the standard practice of separating the noise, smell, and visual obstruction associated with dumpsters from primary pedestrian pathways. However, a majority of outdoor dining spaces are in close proximity to these dumpsters, and increasingly these alley spaces are being used for pedestrian circulation, exhibited especially in the trend for public store entrances to be placed on the alley side of stores. This proximity means more people's experience of Aggieville is influenced by the sights, sounds, and smells of the refuse system.





Dumpsters Are too Close to Pedestrian Circulation

The Activities in the Western Alleyways occur next to multiple dumpsters

W2_WM02_100_Dumpsters.PDF



Figure 02. Varsity Truck Dumpsters Source: (Sickmann, 2014)



Figure 03. Bluestem/Subway Dumpsters Source: (Sickmann, 2014)

Inquiry: Which dumpster locations are most detrimental to the experience of Aggievilie ?

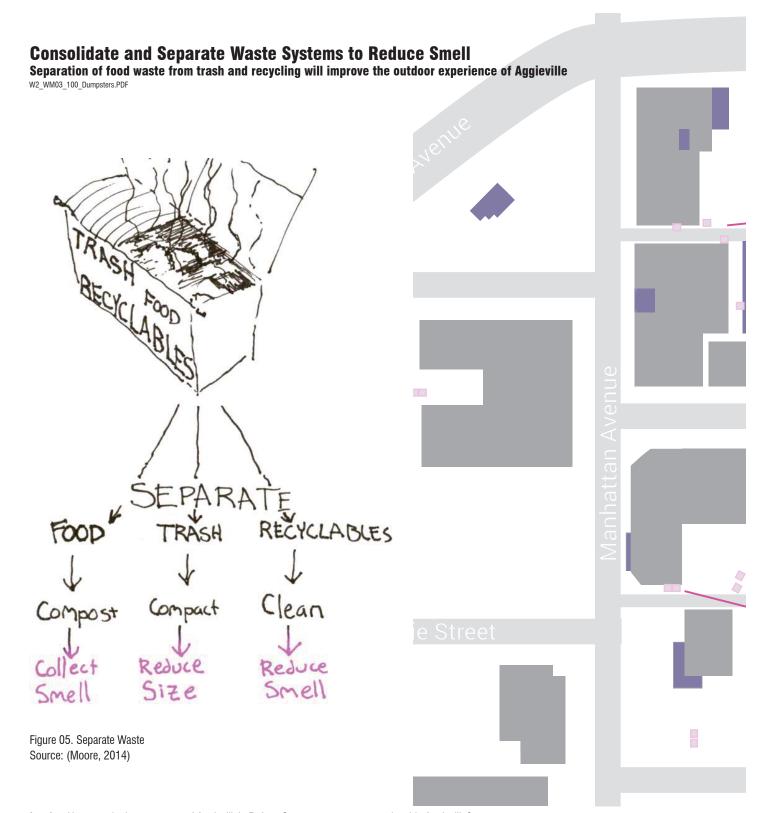
Key Extractions: Pedestrian Circulation is Shown in comparison with the proximity of smell and sight of dumpsters. The Alley entrances and Outdoor Dining spaces are also shown to give more context of which spaces are affected most by dumpsters

Methodology: Pedestrian circulation was determined by experience and analysis of the site. This was compared with the range which dumpsters can be seen and smelled. The mapping compares these two extracts to determine conflict areas.

Conclusions: The heaviest pedestrian use of alley space occurs on the West side of Aggieville. This traffic is associated with the Varsity Food Truck and the store entrances of Subway, Coldstone, and Bluestem. Therefore more people come into contact with dumpsters in these alleys than in the alleys to the East.







Inquiry: How can the improvement of Aggieville's Refuse System create a more enjoyable Aggieville?

Key Extractions: Existing dumpster locations, outdoor dining, streets, and buildings are shown to connect the proposed dumpster locations to the ideas of the previous two maps.

Methodology: Locations of proposed elements were determined by finding a central point that is accessible by each business and vehicles and separated from the pedestrian pathway and the visibility of outdoor dining spaces.

Conclusions: Separating food waste from recycling and trash will reduce the amount of waste decomposing in dumpsters and thus reduce the bad smells present in the alleyways. Consolidated food waste in composting machines will help contain the smell of food waste and allow for easy pick-up and removal from Aggieville. Collection of recycling and compaction of trash in consolidated zones will reduce the amount of dumpsters in the alley and will allow for the feasibility of beautifying the few remaining units. The Dilemma mapping shows the frequency of people passing by the western blocks, therefore these spaces should take precedent in the timing of their completion.





Lawrence's Mass Street Consolodates and Screens Dumpsters and Has Many Trees

Aggieville's dumpsters are visually exposed and scattered, and there is a lack of street trees

W3_WM07_150_Enclosure.PDF



Figure 01. Lawrence Dumpsters and Trees Source: (Google Earth, 2014)

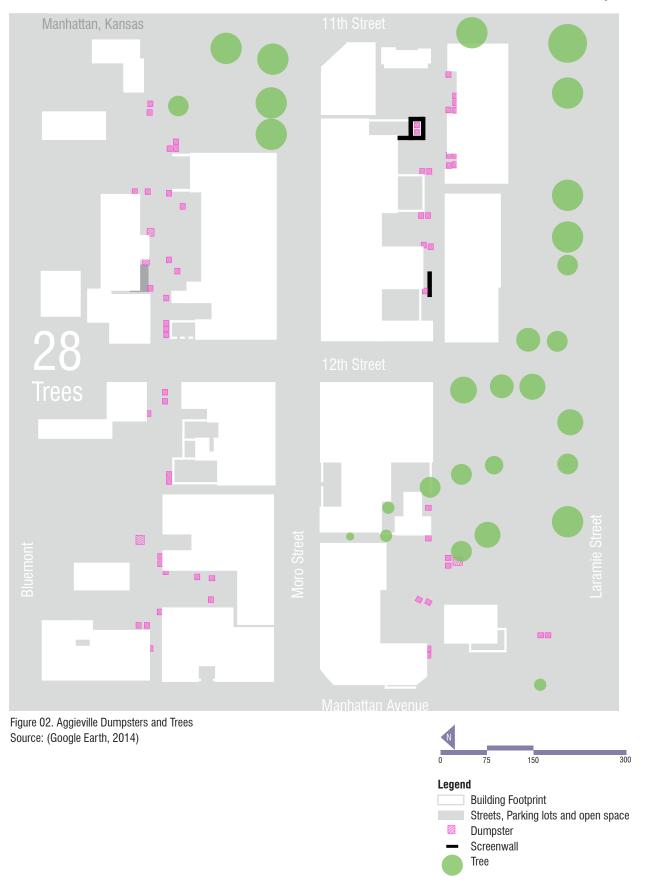
Inquiry: How is refuse managed on Mass Street in Lawrence, Kansas in comparison to Moro Street in Aggieville?

Key Extractions: Buildings and street names are shown in white on a background of light gray to give context. Trees, dumpsters and dumpster screenwalls are the key extractions to compare the management of dumpsters.

Methodology: Lawrence Dumpster locations were determined using Google Earth and Google Streets. An comparison of one block of Mass Street is shown at the same scale as two blocks of Moro Street so the qualities of the environment can be quickly compared.

Conclusions: Lawrence screens and consolidates its refuse in locations outside of the alleyways and away from pedestrian pathways from parking to the main commercial street. A noticeably higher amount of trees also exists in the streets and parking lots of Mass Street.

Comparison





Aggieville could implement refuse management systems used by Lawrence or Seattle

Consolidation of dumpster locations, or removal of dumpsters altogether would improve Aggieville alleyways

W3_WM08_150_Enclosure.PDF

Lawrence Alley Precedent Applied to Aggieville



Dumpsters Consolidated

Figure 01. Lawrence Precedent Source: (Google Earth, 2014)

Implementing Lawrence's waste management system, screening units could be constructed adjacent to building corners and edges to blend in to the existing environment.

Inquiry: What refuse management system precedents could be applied to Aggieville?

Key Extractions: Buildings and street names are shown in white on a background of light gray to give context. Trees, dumpsters and dumpster screenwalls are the key extractions to exhibit proposed dumpster management.

Methodology: Analysis of refuse systems in cities was done regionally and nationally to learn more about innovate refuse management systems. Lawrence Dumpster locations were determined using Google Earth and Google Streets. Principles of refuse management were analyzed to determine what could be transferred into the alleyways of Aggieville.

Conclusions: The complexity of building forms in the alleyways allows for many opportunities to build screenwall units into existing residual spaces and to match building form and qualities with the screenwalls. The hours of operation of Aggieville (Wilson 2014) exhibit the time frame for trash collection to occur. Trash can be placed in the alleyways in heavy duty trash bags when bars close and can be collected in the morning before most businesses open.

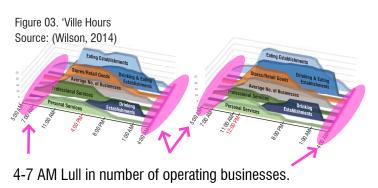
Seattle Clear Alley Precedent Applied to Aggieville



Dumpsters Eliminated

Figure 02. Seattle Precedent Source: (Seattle CAP, 2014)

Implementing Seattle's waste management system, heavy duty trash bags could be placed in designated alleyway locations after bar hours and collected over a three hour period in the morning. The hours of operation seen below exhibit the opportunity from 4-7 AM for minimum





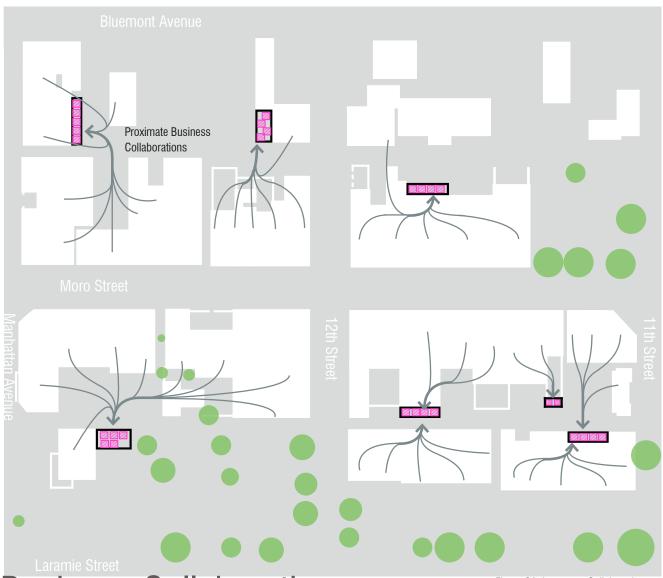


Two Strategies for Cleaner, More Pleasant Alleys

Proximate business collaborations or a comprehensive collaboration offer a realization of cleaner alleyways

W3_WM09_150_Enclosure.PDF

Lawrence Alley Precedent Applied to Aggieville



Business Collaboration

Figure 01. Lawrence Collaboration Source: (Google Earth, 2014)

Screening units are funded and maintained by block through active collaboration between business owners and waste management operators.

Inquiry: What collaborations can occur to achieve cleaner alleyways?

Key Extractions: Pedestrian pathway and buildings are in white to give context. Enclosure is exhibited in a color gradient from magenta to teal to exhibit the degree of enclosure of the chosen field. Collaboration vectors are shown to exhibit the two ideas of local collaboration compared to holistic collaboration.

Methodology: The design strategies pulled from the Comparison and Opportunity maps are further pursued by establishing collaboration zones. Information from class discussions and individual research was used to determine possible strategies for accomplishing a cleaner refuse system. **Conclusions:** Based on the Lawrence model, screening of dumpsters can be achieved by business specific collaborations to fund structures. This strategy may also include a consolidation of waste removal contractors per block to reduce traffic and confusion. Based on the Seattle model, implementation of a comprehensive system for Aggieville would be funded through the Business Improvement District (BID). A unified system either way would reduce the disruption caused by the refuse system and create an improved pedestrian environment.

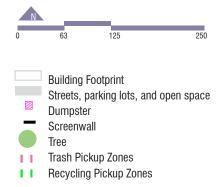
Seattle Clear Alley Precedent Applied to Aggieville



District-wide Collaboration

The BID (Business Improvement District) would fund the dumpster-free alleyway plan. The existing conglomorate of waste services would be pared downed to a streamlined system with minimal disruption and cleaner alleys.

Figure 02. Seattle Collaboration Source: (Seattle CAP, 2014)





Impermeable Surfaces Dominate Aggieville

Impermeable surfaces lead to stormwater runoff

W2_RA01_300_ImpermeableSurface.PDF



Figure: Impermeable Surfaces

Source: Riley County GIS. Site Visit: Albracht, Ryan.

Inquiry: Where are impermeable surfaces located in Aggieville? How does it compare to its surrounding context?

Key Extractions: Permeable surfaces, impermeable surfaces, and an aerial image.

Methodology: Location of permeable surfaces was done during site vists on a printed aerial map. This data was put into GIS and percentage calculations of permeable and impermeable surfaces were done.

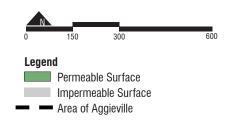
Conclusions: Aggieville has a drastically higher percentage of impermeable surfaces vs permeable surfaces. Aggieville's context including residential housing, City Park, and the KSU campus have a lower percentage of impermeable surface.



9% Permeable Surfaces in Aggieville

91%

Impermeable Surfaces in Aggieville





Most Downspouts Drain onto Impermeable Surfaces

Stormwater runoff carries contaminates into piped stormwater system

W2_RA02_200_Downspouts.PDF

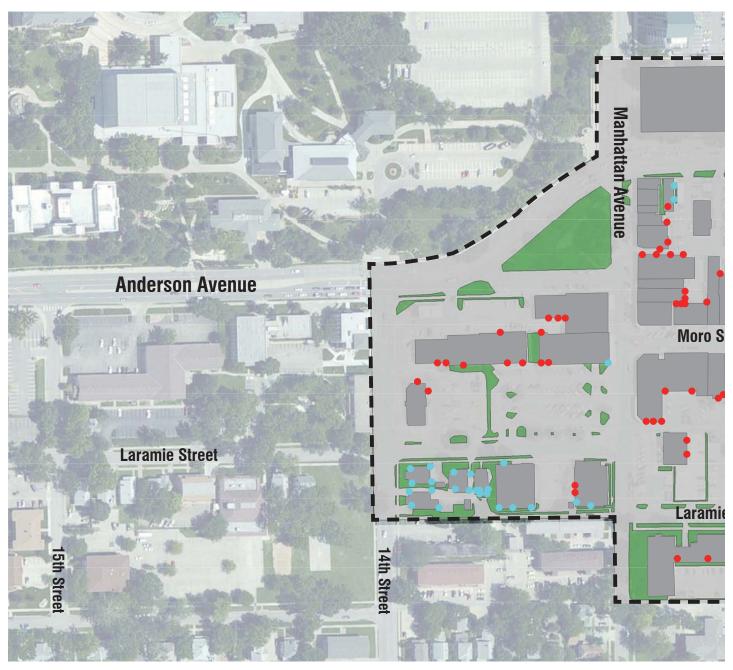


Figure: Downspouts

Source: Riley County GIS. Site Visit: Albracht, Ryan & Krehbiel, Beth.

Inquiry: Where is the source of high intensity stormwater flows?

Key Extractions: Drains, permeable surfaces, impermeable surfaces, building footprints, and an aerial image.

Methodology: Through site visits, downspouts were located in Aggieville. That data was then put into Illustrator. Next, the downspout runoff was analyzed whether it flowed onto permeable or impermeable surfaces. This data was overlayed in InDesign on previous field research of permeable and impermeable surfaces, which was created in GIS.

Conclusions: High intensity flows are primarily flowing onto impermeable surfaces. Of the sparse permeable surface in Aggieville, there are no permeable areas that collect surface runoff. This lack of good stormwater management practices causes stormwater runoff, and washes contaminants into storm sewers. This contaminated water eventually drains into the Kansas River.





Potential Collection of Stormwater

Infiltrating stormwater and or slowing down peak runoff times to reduce pollution.

W2_RA03_200_WaterCollection.PDF

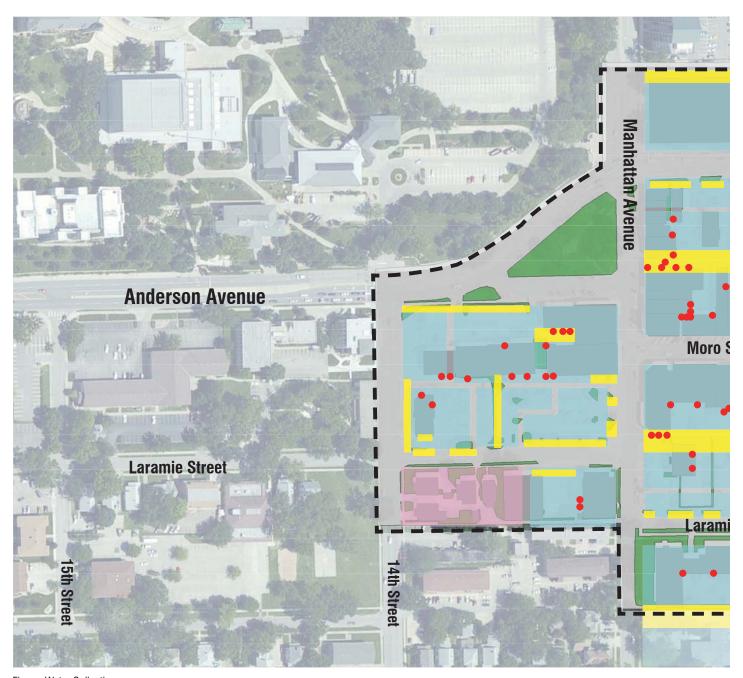


Figure: Water Collection

Source: Riley County GIS. Site Visit: Albracht, Ryan & Krehbiel, Beth.

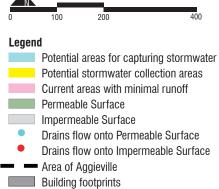
Inquiry: How can pollution be reduced in the Kansas River?

Key Extractions: Drains, permeable surfaces, impermeable surfaces, building footprints, an aerial image, current areas with minimal runoff, potential areas for capturing stormwater, and potential stormwater collection areas.

Methodology: Through site visits, downspouts were located in Aggieville and then documented in Adobe Illustrator. Next, the downspout runoff was analyzed whether it flowed onto permeable or impermeable surfaces. This data was overlayed in InDesign on previous field research of permeable and impermeable surfaces, which was created in GIS. Lastly, a site visit was done to examine slope and drainage direction. This helped to determine where potential stormwater collection areas could be located.

Conclusions: If stormwater was collected in Aggieville before entering into storm sewers, there would not be as much contaminated water entering into the Kansas River. In order to reduce pollution, the alleyways in Aggieville could serve the function of collecting stormwater. Curbs cuts should be installed adjacent to peremable surfaces to collect stormwater runoff from streets and alleyways. If alley water is collected through these strategies, the only runoff directed off site would be street water.







Majority of Aggieville is Characterized by Impermeable Roofs and Pavement

Nearly all Aggieville stormwater runoff is directed to subsurface pipes.

W2_BK01_2214_StormwaterDownspouts.pdf



Figure 01. Aggieville Downspouts Draining to Subsurface Pipes

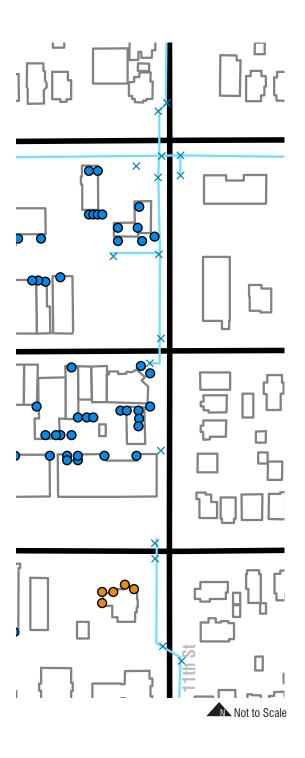
Source: Riley County GIS Data

 $\label{lower} \textbf{Inquiry:} \ \ \textbf{Where do the downspouts in Aggieville drain?}$

Key Extractions: Building Footprints, Storm Drain Lines, Storm Drains, Downspouts to Pervious and Pervious Surfaces, Roads

Methodology: In the field, documented and mapped location of downspouts; noting which ones had permeable drainage access within 5ft.

Conclusions: Nearly all downspouts in Aggieville buildings drain to impervious surfaces.



downspouts drain to impervious surfaces in urban extents of Aggieville

Legend

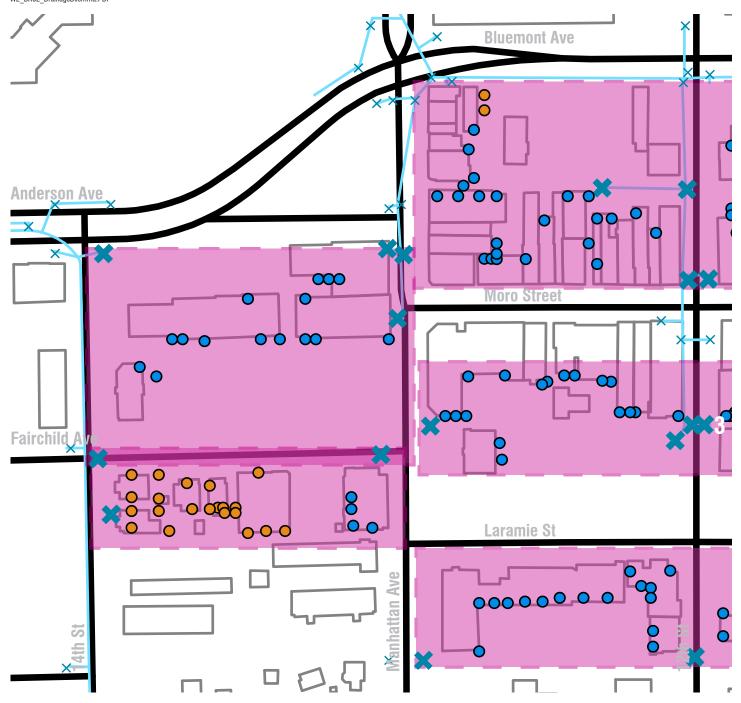
- Downspouts draining to pervious surfaces
- Downspouts draining to impervious surfaces
- Drains beyond Aggieville Watersheds Waterlines
- Street



Stormwater from Downspouts Receive Insufficient Treatment

Drainage of Aggieville storm water collects in eight watersheds

W2_BK02_DrainageDilemma.PDF

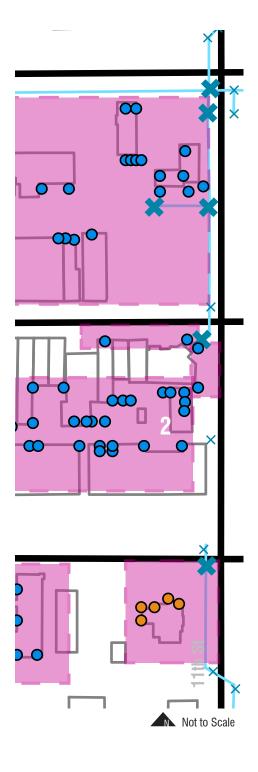


Inquiry: What dilemmas exist with current stormwater treatment and potential AC condensate from downspouts?

Key Extractions: Sewer Inlets and Lines, drains, downspout locations in Aggieville, building footprints, streets, watersheds.

Methodology: Located downspouts in correlation with storm drain infrastructure using ArcGIS data and compiling with Adobe Illustrator, Photoshop, and InDesign.

Conclusions: Of 155 downspouts, two lead directly to a permeable surface in a more urban setting. Another 26 lead to permeable surfaces but are found in residential settings on the fringe of the Aggieville District.



downspouts drain to impervious surfaces in urban extents of Aggieville

167 Total Downspouts
136 to impervious surfaces
28 to pervious surfaces
to non-residential pervious surfaces



Figure 02.Downspout Examples some downspouts dump stormwater beyond permeable surface (Krehbiel 2014)



Figure 03. Alleyway Stormwater standing water during warm, sunny, summer afternoon (Krehbiel 2014)

Legend

- Downspouts draining to pervious surfaces
- Downspouts draining to impervious surfaces
- Downspouts in Aggieville Watersheds

 Drains beyond Aggieville Watersheds

 Watersheds
 - Water Line





Ecological Corridors as Stormwater Treatment Alternative

Corridors have potential to create a unique ecological identiy in Aggieville

W2_BK03_2K_AggievilleWatershed.PDF

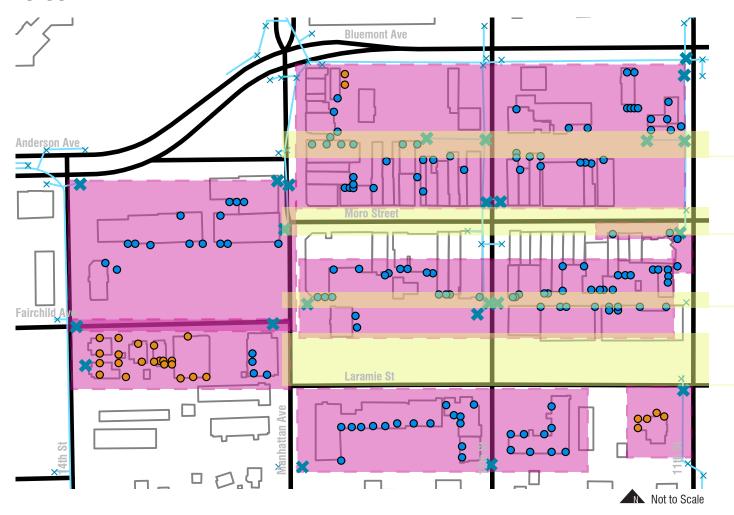


Figure 01. Ecological Opportunity Corridors (Krehbiel 2014)

Source: Hahn ArcGIS Data

Inquiry: What are ecological, creative, community-minded design moves to better treat the stormwater generated in Aggieville?

Key Extractions: Watersheds, Streets, Alleyways, Ecological Corridors, Downspouts to Permeable and Impermeable Surfaces

Methodology: Using extractions from pervious mappings, I located areas within the watersheds with potential for high pedestrian influence and opportunity to impact the greater ecological community. Through observation and data from ArcGIS, I created maps in Adobe Illustrator, Photoshop and InDesign.

Conclusions: Other mapping has indicated that 99% of paving within Aggieville is classified as impervious (Albracht, 2014). In addition to the findings on the rooftop drainage watershed maps, I envision the treatment of stormwater through permeable pavement cores in alleyways, green walls, roof top stormwater detainment, and ecological educational opportunities. In making ecological moves such as this, opportunity might be borne to create a more unique ecological identity for Aggieville while connecting to the larger context.

Opportunity Corridors provide stormwater treatement

provide stormwater treatement promote education create identity

Alleyway

Moro Street

Alleyway

Laramie Street

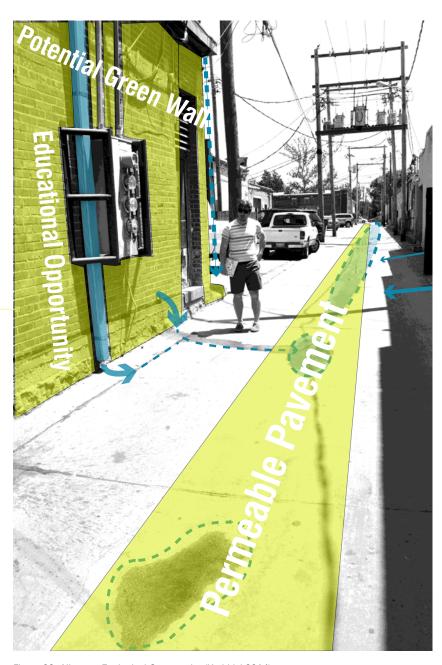


Figure 02. Alleyway Ecological Opportunity (Krehbiel 2014)

Legend

- Downspouts draining to pervious surfaces
- Downspouts draining to impervious surfaces
- Downspouts in Aggieville Watershed

 Drains beyond Aggieville Watersheds
- Watersheds
 Areas with Potential for Design
- Intervention

 Waterlines
- Street



Little Surface Stormwater Enters Aggieville From Adjacent Areas

The Downtown East/Downtown West watershed breakline bisects Aggieville so water drains away from the district

W3_RA01_10,000 | 300_Watersheds.PDF

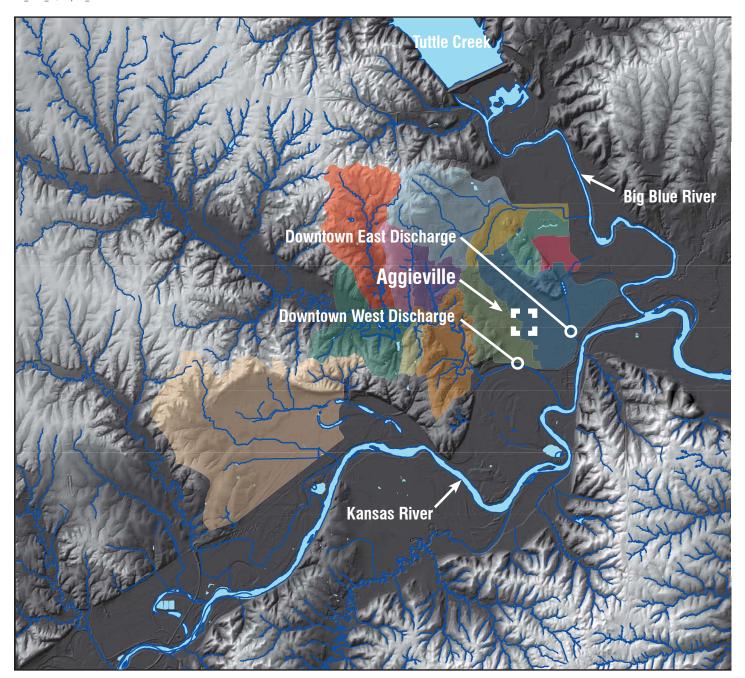


Figure 01: Manhattan Watershed

Source: Riley County GIS. 1995 Stormwater Management Master Plan- Existing System Performance

0 5,000 10,000

Inquiry: What is the drainage pattern in Aggieville and the larger Manhattan area?

Key Extractions: Hillshade, Elevation, Slope, Rivers, Creeks, Bodies of water, floodplains, Drain inlets, Storm Sewers, watershed breakline, runoff directions, Streets, and buildings.

Methodology: The GIS layers' hue, transparency, and contrast were adjusted in GIS and then exported to Adobe Indesign. The 1995 stormwater management master plan watershed was assembled in Adobe Photoshop and then traced in Adobe Illustrator. These layers were then put into Indesign and overlayed.

Conclusions: Aggieville is divided by the Downtown West | Downtown East watershed breakline. The precipitation in Aggieville runs away from the center of Aggieville and is directed into storm sewers which eventually discharged into the Kansas River. The only external runoff potentially entering Aggieville is water running south along N. Manhattan Ave.



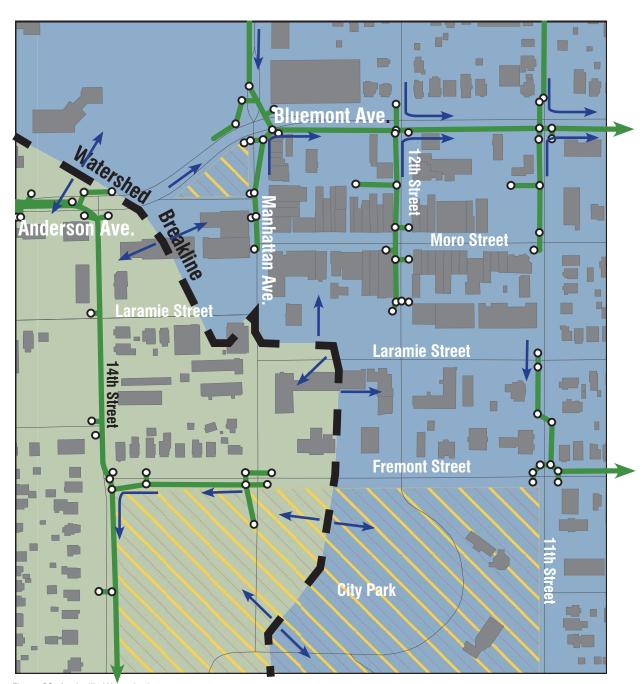


Figure 02: Aggieville Watershed

Source: Riley County GIS. Stormwater Management Master Plan- Existing System Performance





20,000

Aggieville Stormwater Drainage Relies on Two Major Pipes

Flooding can result if the Bluemont Ave. and 14th St. pipe capacities are exceeded



Source: Riley County GIS. 2014 Site Visits

Inquiry: How might Aggieville Flood?

Key Extractions: Flood Hazard Area, Campus Creek, Buildings, Storm Sewers, Drain Inlets, and Streets.

Methodology: GIS was used to give context as well as find the slope of the topography to predict where flooding would occur. Site visit was done to confirm thoughts on how flooding would occur and it was mapped in Adobe Indesign.

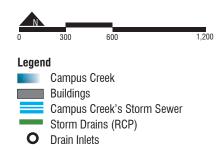
Conclusions: Flooding in Aggieville can occur from subsurface lamina flows, inadequately sized drain inlets, or inadequately sized drain pipes.





Campus Creek's Box Inlet at Manhattan Ave.

Figure 01: Spillway Source: 2014 Site Visit





Several Strategies Can Reduce the Risk of Aggieville Flooding

Reduce Clogging, Larger Infrastructure, and/or keeping Campus Creek above ground W3_RA03_1K_Redirecting.PDF

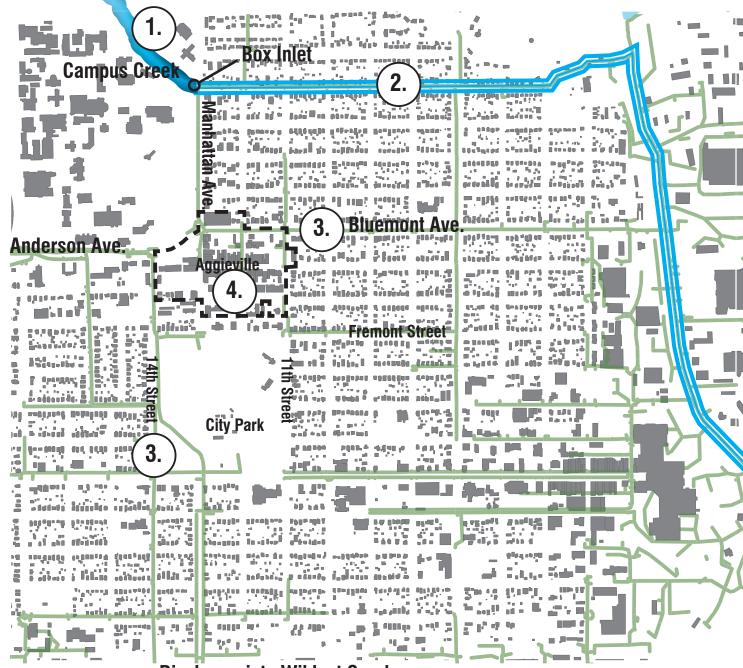


Figure 01: Redirecting Discharge into Wildcat Creek

Source: Riley County GIS. 2014 Site Visits

Inquiry: How can flooding hazards be diminished for Aggieville and its context?

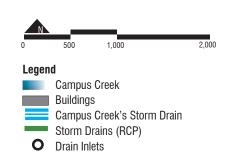
Key Extractions: Drainage ways, Campus Creek, Kansas River, storm sewers, buildings, and roads.

Methodology: GIS was used to give context as well as find the slope of the topography to predict where the best place to keep Campus Creek above ground and or underground. Proposed drainage changes were done in Adobe Indesign.

Conclusions: By collecting debris in Campus Creek before it can clog the box inlet will reduce the chance of Campus Creek flooding. If new development occurs around Aggieville, storm drains will fill more rapidly, increasing the chance of flooding. Existing drain inlets and main storm drain pipes may need to be upsized



- **Debris collector to prevent box inlet** from clogging
- Upsize storm drain pipes or bring **Campus Creek above ground**
- Upsize main drain pipes along Bluemont Ave. and 14th St.
- Ensure drain inlets in Aggieville are adequately sized.



Parking and Transportation

Parking Bus Transit Bicycle Transit

Existing Aggieville Parking Quantity is Comparable to Suburban District Parking

Although no Aggieville businesses are required to provide parking, existing lots compare to a suburban area

W3_LH04_3K_ParkingDemand.PDF

Existing in Aggieville

Most existing Aggieville parking is an expanse of paved concrete, taking surface space for potential commercial growth.

930 Parking Stalls

Required in Aggieville

Because Aggieville is in a urban district, classified as C-3, no parking is required.

Parking Stalls

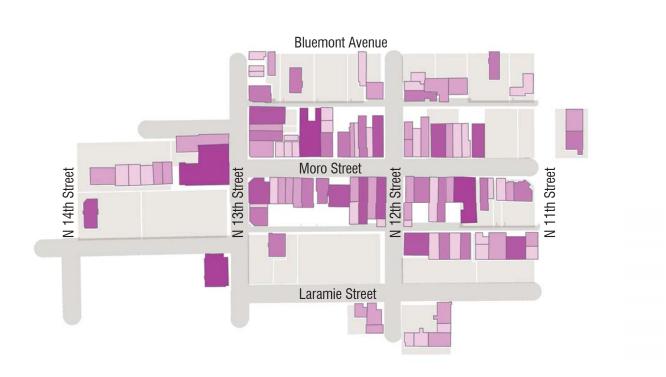


Figure 1. Parking Needs Based on Business Type and Floor Area Square Footage Source: City of Manhattan; Heermann; Lauren; Schmitt, Angie; Wilson, Erin

Inquiry: Does the current quantity of parking fit with Aggieville's location and need? Key Extractions: Parking requirements based on square footage and business type, existing parking Methodology: Total floor area for each business (90% of the building footprint) was multiplied by Manhattan's zoning parking requirements specified for each business type (City of Manhattan; Wilson, 2014). Manhattan's restaurants' and bars' parking requirements are calculated differently, so a national standard based on square footage was used in this formula (Schmitt, 2013). Required parking quantities were used to create a distribution map and were classified incrementally. Darker colors indicate higher parking requirements, and lighter colors indicate lesser parking requirements. **Conclusions:** Although Aggieville is zoned as a C-3 district (City of Manhattan) with no parking requirements, existing parking quantity is 63% of what would be requried if zoned a suburban area.



Legend

25 or More Stalls Needed in a Suburb

1 - 9 Stalls Needed in a Suburb 10 - 14 Stalls Needed in a Suburb 15 - 19 Stalls Needed in a Suburb

20 - 24 Stalls Needed in a Suburban

Existing Parking Lot

Restaurants and Bars (139,790 sf of floor area X 1 stall / 125 sf of floor area): 1,119 Parking Stalls

Banks (2,613 sf of floor area X 1 stall / 450 sf of floor area): 6 Parking Stalls

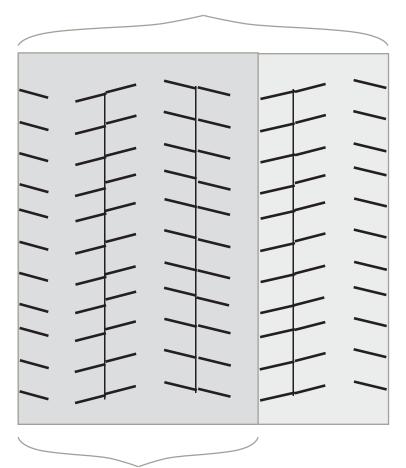
Professional Services (17,068 sf of floor area X 1 stall / 300 sf of floor area): 57 Parking Stalls

Personal Services (21,223 sf of floor area X 1 stall / 200 sf of floor area): 75 Parking Stalls

Medical Services (3,476 sf of floor area X 1 stall / 181 sf of floor area): 12 Parking Stalls

Retail (54,044 sf of floor area X 1 stall / 250 sf of floor area): 217 Parking Stalls

Required quantity if Aggieville was in a suburban area: 1483 Parking Stalls



Existing parking in Aggieville, an urban area, is 63% of what would be required if it was a suburban district.

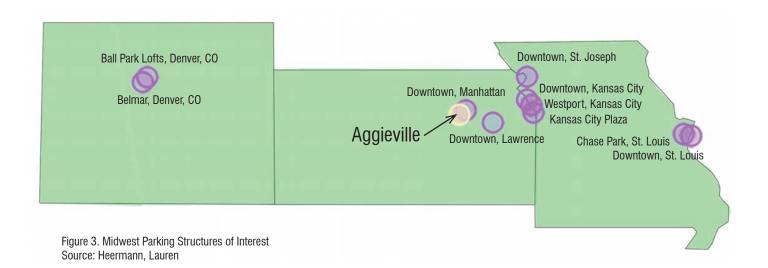
Figure 2. Suburban Versus Urban Parking Source: Heermann, Lauren

Quantity of existing Aggieville parking



Aggieville Parking Does Not Follow Urban Parking Trends

As an urban area of activity with expanses of parking lots, Aggieville does not follow urban parking structure trends wa LHO5_3K_ParkingStructureTrends.PDF



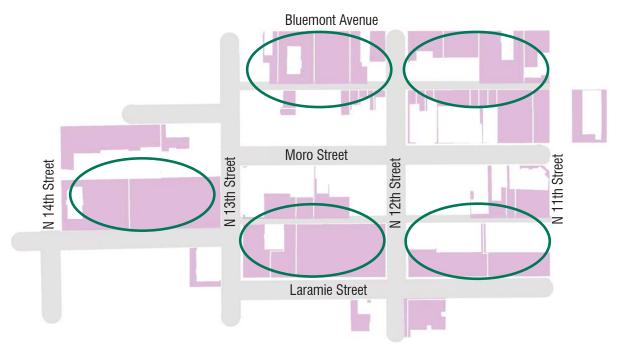


Figure 4. Aggieville's Parking Expanses with Opportunity Areas for a Parking Stucture Source: Heermann, Lauren; Wilson, Erin

Inquiry: Does Aggieville parking follow urban parking trends and what are areas of opportunity?

Key Extractions: Areas of parking structure opportunity, on-street parking streets, alleys, parking lots

Methodology: Regional urban districts reveal a trend towards parking structures. Aggieville's expanses
of surface parking present opportunity for redevelopment with integrated parking structures.

Conclusions: Aggieville's expanses of parking in concentrated areas present opportunity for
redevelopment with an integrated parking structure. An Aggieville parking structure should follow
higher quality design examples with either parking mixed above commercial or residential use or
parking mixed internally within commercial or residential use (see Figure 2.5).



Expanses of Parking Lots



Aggieville, Manhattan, KS

Parking Structure Types

Stand-Alone



Downtown, St. Joseph, MO



Westport, Kansas City, MO

Parking Above Commercial



Chase Park, St. Louis, MO



Belmar, Denver, CO



Downtown, Lawrence, KS

Parking Internal



Ball Park Lofts, Denver, CO



Downtown, Kansas City, MO



Kansas City Plaza, MO

Figure 5. The Good and the Bad of Urban Parking Trends Source: Heermann, Lauren; Google Street View



Stand-Alone Parking: Parking structure often takes up the entire block or includes no mixed-use space. Scale is not friendly for pedestrian experiences.



Parking Above Commercial: Most of the street-front first floor is commercial space, while parking is behind or above. Pedestrian passer-by experience is more enjoyable.



Parking Internal: Parking is surrounded by commercial or residential at multiple levels. Pedestrian passer-by experience is most enjoyable.

Legend



Low Quality Parking Design High Quality Parking Design Parking Structure / Lot



Urban Parking Structures Create Space for Commercial Redevelopment

Consolidated parking allows opportunity for Aggieville to grow

W3_LH06_3K_ParkingStructureAlternatives.PDF

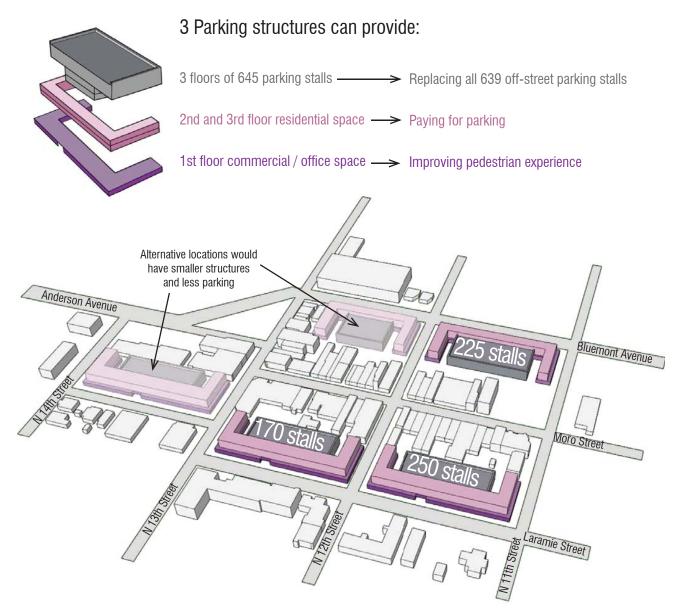


Figure 6. Parking Alternative with First Floor Commercial / Office Space and Second Floor Residential Space Source: Hahn, Howard; Heermann, Lauren; Holzum, Andrew

Inquiry: What is the best alternative for Aggieville parking that would match other urban parking trends? Key Extractions: Existing Aggieville buildings and streets, possible parking structures, possible parking stall quantities, highlight of suggested parking structures

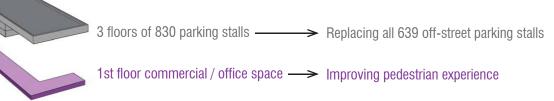
Methodology: Parking quantity in each structure was calculated using an urban planning standard for stalls per square foot in a parking structure (Hahn, Howard). Compared to current off-street parking stalls (Holzum, 2014), parking structures were suggested according to conditions attractive to a developer. Such conditions are lower property values and larger parcel sizes (Heermann, 2014).

Conclusions: Parking structures with more pedestrian friendly street-fronts are recommended because they also create space for Aggieville commercial growth. Lots that would provide space for larger building footprints should be chosen for redevelopment over smaller lots.

Legend



2 Parking structures can provide:



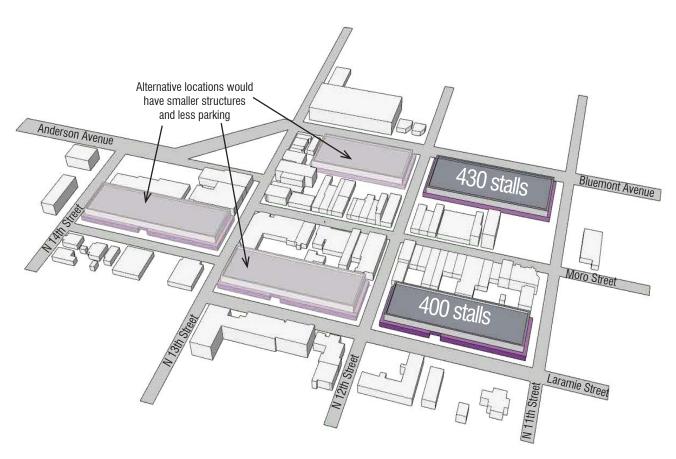


Figure 7. Parking Alternative with First Floor Commercial / Office Space Source: Hahn, Howard; Heermann, Lauren, Holzum, Andrew





62% of Parking Allocated for Public Use

A Glance at Current Parking Quantities

W2_AH01_200_Parkinglot_Quality.PDF

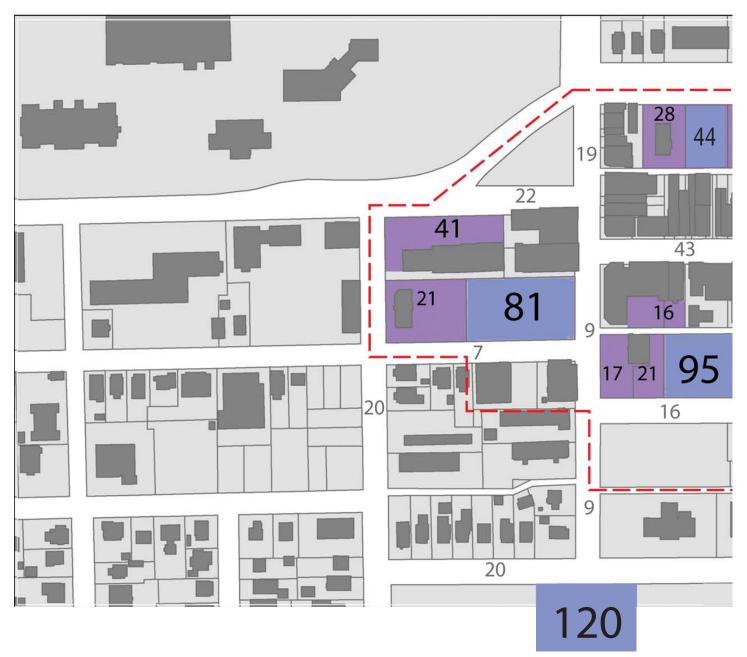


Figure 1.1 Parking lot quantity

Source: Hahn GIS Data "Building," "RLCo_Parcels_Mar2009."

Inquiry: How many public, private, and on-street parking stalls exist in Aggieville?

Key Extractions: Parking stalls; Public vs. Private lots

Methodology: The base map showing building footprints and open space from GIS is overlaid with total spots per lot (calculated by hand) and which lots are public or private. The number of spots were calculated through on-site observations.

Conclusions: Public parking accounts for 67% of parking in the Aggieville BID district. There are three main public parking lots for pedestrians that total 296 parking stalls, and 265 on street parking stalls. Public parking lots are located to the outskirts of the BID district, with the largest lot located in City Park, separated from the rest by residential units.



Dilemmas Restricting Infill in Aggieville

More parking stalls would be needed to support new development

W2_AH01_300_Dilemmas_Associated_with_Parking.PDF



Figure 2.1. Dilemmas Associated With Parking

Source: Hahn GIS Data "Building," "RLCo_Parcels_Mar2009."

Inquiry: How do parking dilemmas affect downtown Aggieville?

Key Extractions: Current parking relationships to density, dilemmas, and opportunities related to parking.

Methodology: I distinguished dilemmas with current parking conditions and potential opportunities for future parking development.

Conclusions: The largest public parking lot is located in City Park, and accommodates some Aggieville visitors. Public lots are located to the south and west of Aggieville's densest district in the northeast. Parking in the northeast is made up mostly of street parking, which is not sufficient in comparison to density.

W2_AH01_300_Opportunities_Associated_to_Parking.PDF



Source: Hahn GIS Data "Building," "RLCo Parcels Mar2009."

Inquiry: How can the development of future parking influence Aggieville?

Key Extractions: Current parking relationships to density, dilemmas, and opportunities related to parking.

Methodology: I distinguished dilemmas with current parking conditions and potential opportunities for future parking development.

Conclusions: Most opportunities for parking development include implementing more public parking along the north east boundary of Aggieville's BID district. This would take the place of on street parking on Moro St. and allow for a pedestrian street at all times. Keeping parking along the boundary of Aggieville allows the center of the district to develop and helps mitigate the disconnect between Aggieville's different social and economic boundaries.

Legend High density area inadequate parking Largest Existing Lot Disjoining Residential Units BID District Bound Dislocated Parking One Way Streets Potential for Parking Structure

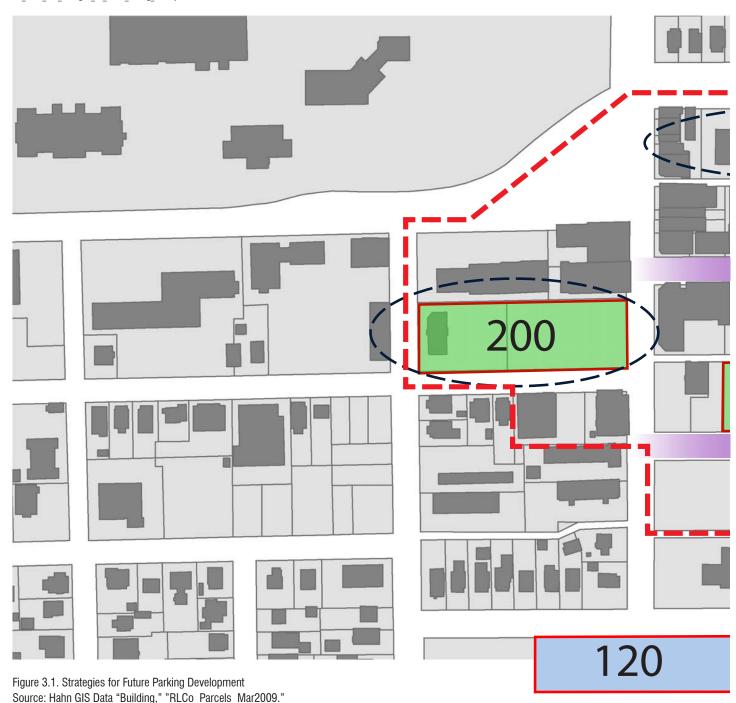
Opportunity for in-fill



Designated Parking, Increased Walkability

Eliminating Street Parking to Enhance Walkways

W2_AH01_200_Strategies_for_Future_Parking_Development.PDF



Inquiry: How can reconfiguring parking increase walkability?

Key Extractions: Designated parking structures and quantities; affected streets

Methodology: Using my dilemmas and opportunities maps, I designated where the best placement for future parking infrastructure might be and what effect that might have on current street conditions. in order to calculate aproximate new parking quantities, I took previous calculations and multiplied it by 2 (number of floors for parking) and added the values.

Conclusions: By designating parking to 3-4 parking structures, street parking is alleviated, becoming an opportunity for pedestrian only streets, streetscapes, and wider sidewalks. All proposed parking structures incorporate ground floor retail, or other amenities so as not to detract from the character of the district. One parking lot, centrally located for employees in Aggieville can reduce the amount of cars parked in alleyways. By adding parking structures (2 levels) and eliminating surface parking lots results in a net gain of 366 spaces.

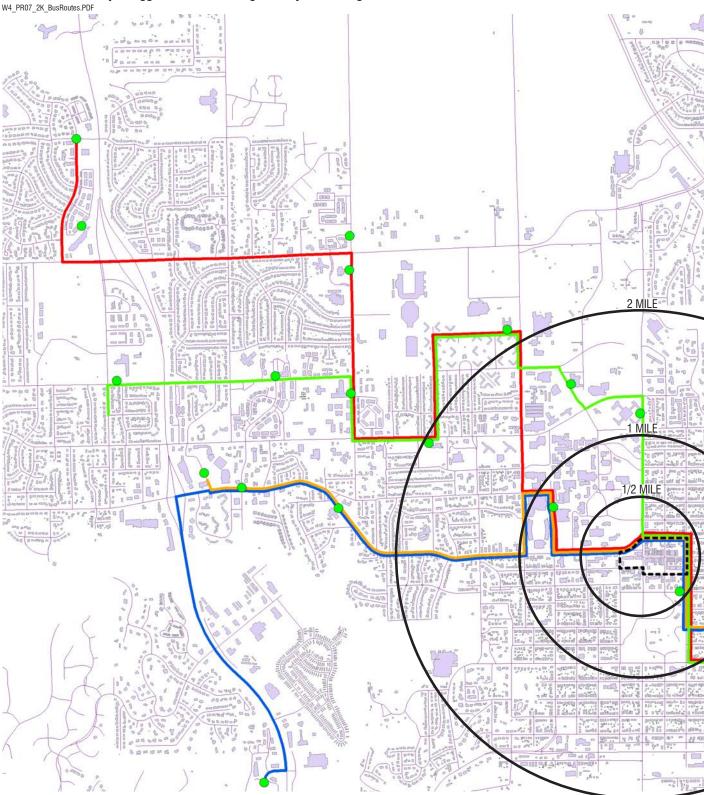
Strategy





ATA Bus Only Provides Two Stops Within One Mile of Aggieville

The nearest bus stop to Aggieville is at the edge of City Park along a street without constant service.



Inquiry: Where do current public transit routes run in Manhattan and what is their proximity to Aggieville?

Key Extractions: Aggieville, ATA Bus Routes (Red, Blue, Orange, and Green Routes), ATA Bus Stops, 1/2, 1, and 2 mile radius from Varney's **Methodology:** After finding the ATA Bus routes and stops, the data was brought into GIS to illustrate the relationship of service to Aggieville. **Conclusions:** The nearest service stop to Aggieville is approximately one-quarter of a mile from the intersection of Moro St. and Manhattan Ave. However, there is one other service stop within a one mile radius, which is located outside the K-State Student Union, and is the primary transfer station. Additionally, headway (elapsed time) between stops range from 30 to 60 minutes, which is a fairly inflexible measure for those using the transit service with great frequency.

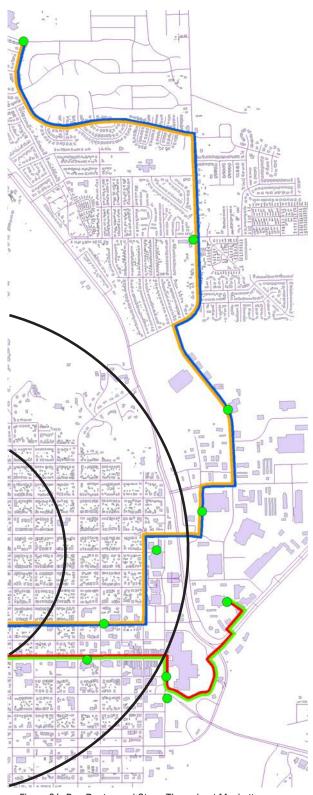


Figure 01. Bus Routes and Stops Throughout Manhattan Source: GIS, ATA Bus

BLUEMONT All Year

WB/Walters/Butterfield/start time 6:55 am WkDay WB/Walters/Butterfield/start time 7:55 am SAT EB/Walters/Butterfield/end time 6:55 pm WkDay EB/Walters/Butterfield/end time 7:55 pm SAT

WESTBOUND I	HOURLY
Walters/Butterfield	:55 am/pm
USD 383/Casement&Allen	:59 am/pm
Big Lakes	:02 am/pm
Wal-Mart@Hostetler	:05 am/pm
Ray's Apple Mkt/Leavenworth	:10 am/pm
Fremont/N.Manhattan	:13 am/pm
KSU Union	:15 am/pm
KSU Foundation	:20 am/pm
Target/CapFed	:26 am/pm
EASTBOUND I	HOURLY
T. 1/0 E. I	.00 /
Target/CapFed	:26 am/pm
KSU Foundation	:26 am/pm
KSŬ Foundation	:32 am/pm
KSŬ Foundation KSU Union	:32 am/pm :37 am/pm :39 am/pm
KSŬ Foundation KSU Union Fremont/N.Manhattan	:32 am/pm :37 am/pm :39 am/pm
KSŬ Foundation KSU Union Fremont/N.Manhattan Ray's Apple Mkt/Leavenworth Wal-Mart@Hostetler Big Lakes	:32 am/pm :37 am/pm :39 am/pm :44 am/pm
KSŬ Foundation KSU Union Fremont/N.Manhattan Ray's Apple Mkt/Leavenworth Wal-Mart@Hostetler	:32 am/pm :37 am/pm :39 am/pm :44 am/pm :47 am/pm
KSU Foundation Target/CapFed EASTBOUND	:20 am/pm :26 am/pm HOURLY

FREMONT/OSAGE **K-State In Session**

WB/Walters/Butterfield*/start time* 6:25 am WkDa **EB**/Walters/Butterfield/*end time* 7:25 pm WkDay

WESTBOUND Walters/Butterfield USD 383/Casement&Allen Big Lakes Wal-Mart@Hostetler Hy-Vee/Walgreen Ray's Apple Mkt/Leavenworth KSU Union KSU Foundation Dillons West/Ped-Xing	:32 am/pm :35 am/pm :39 am/pm
EASTBOUND Dillons West/Ped-Xing Anderson/Westport KSU Foundation KSU Union Ray's Apple Mkt/Leavenworth Hy-Vee/Walgreen Wal-Mart@Hostetler Big Lakes USD 383/Casement&Allen	:14 am/pm :18 am/pm :21 am/pm

CANDLEWOOD All Year

EB/Candlewood/*start time* 6:55 am WkDay EB/Candlewood/*start time* 7:55 am SAT EB/Candlewood/Gary/*end time* 6:55 pm WkDay

EASTBOUND Candlewood&Gary Candlewood&Kimball University Crossing Mercy Regional Hosp Founder's Hill Edwards Hall KSU Union Manhattan Public Library Mall@Houston&3rd Discovery Center Dillons Eastside	HOURLY :55 am/pm :56 am/pm :00 am/pm :02 am/pm :07 am/pm :12 am/pm :16 am/pm :20 am/pm :20 am/pm
WESTBOUND Dillons Eastside Discovery Center Mall@Houston&3rd Manhattan Public Library KSU Union Edwards Hall Founder's Hill Mercy Regional Hosp University Crossing Candlewood&Kimball Candlewood&Gary	HOURLY :25 am/pm :30 am/pm :31 am/pm :34 am/pm :38 am/pm :42 am/pm * :48 am/pm * :51 am/pm :55 am/pm :55 am/pm :55 am/pm :55 am/pm

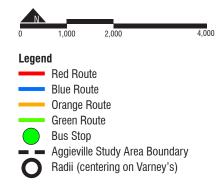
^{*} Eastbound pickup only

DICKENS K-State In Session

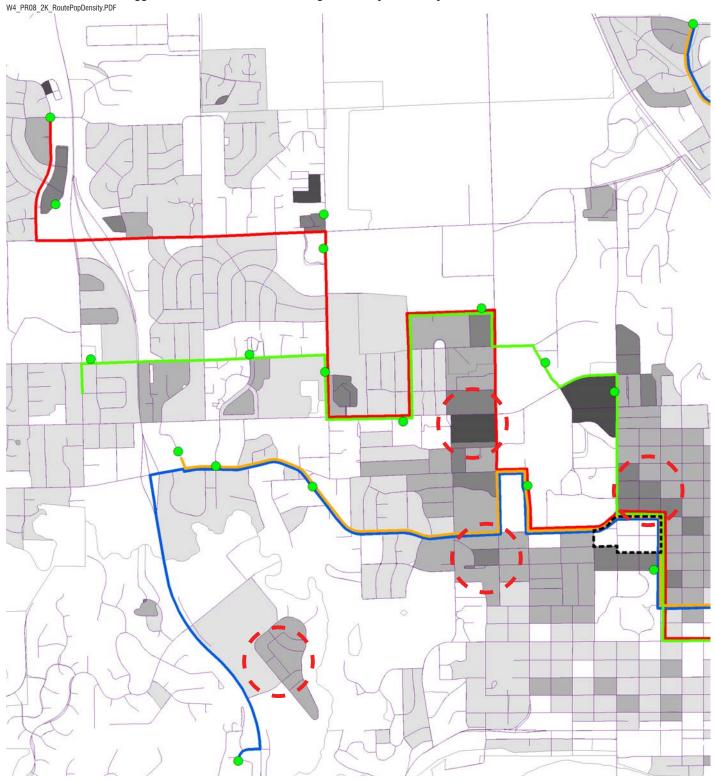
EB/MATC/*start time* 6:29 am WkDay WB/MATC/*end time* 6:29 pm WkDay

EASTBOUND MATC Dickens Commons Founder's Hill Riley County WIC Office Edwards Hall Call Hall Derby Dining Center Manhattan Public Library Mall@Houston&3rd Dillons Eastside	HOURLY :29 am/pm :32 am/pm :34 am/pm :36 am/pm :40 am/pm :43 am/pm :45 am/pm :51 am/pm :54 am/pm :59 am/pm
WESTBOUND	HOURLY
Dillons Eastside	:59 am/pm
Mall@Houston&3rd	:03 am/pm
Manhattan Public Library	:05 am/pm
Derby Dining Center	:11 am/pm
Call Hall	:14 am/pm
Edwards Hall	:16 am/pm
Riley County WIC Office	:21 am/pm
Dickens Commons	:25 am/pm
MATC	:29 am/pm

Figure 02. Routes and Stop Times Source: ATA Bus



Current ATA Bus Routes Neglect Some of the Most Densely Populated Areas of Manhattan Additional services to Aggieville as well as some of the higher density areas may broaden ATA Bus's customer base



Inquiry: What are the relationships between the existing ATA Bus routes and stops and population density throughout Manhattan?

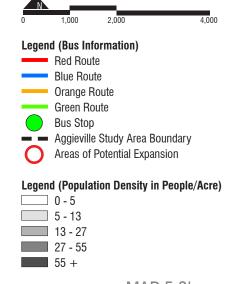
Key Extractions: ATA Bus Routes (Red, Blue, Orange, and Green Routes), ATA Bus Stops, Population Density (People per Acre)

Methodology: After inputting the ATA Bus route and stop location data in GIS, the information was overlain on a population density map for the city of Manhattan up to the Pottawatomie-Riley County line.

Conclusions: The initial conclusions drawn from this map showed that while ATA Bus provided service to the majority of the densely-populated regions of Manhattan, there are some clusters of higher density, particularly around campus and Aggieville, that could be identified as areas of potential development and expansion.



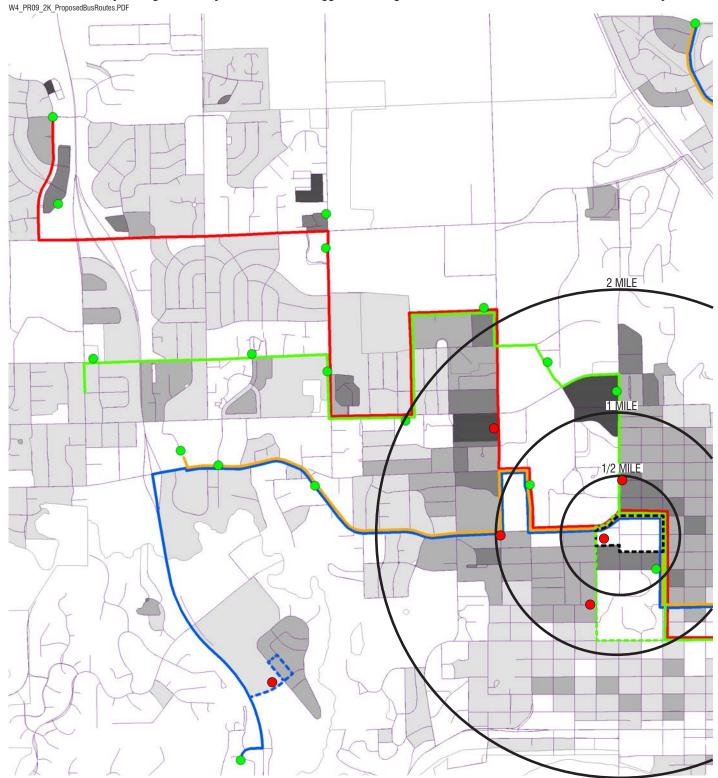
Figure 01. Bus Routes and Stops in Relation to Population Density Source: GIS, ATA Bus





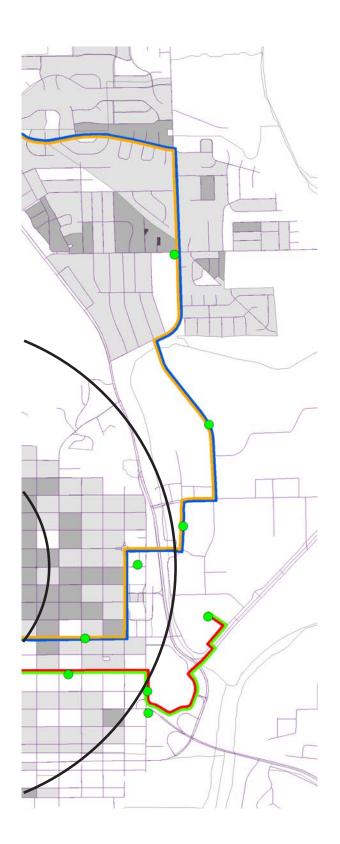
Additional Bus Routes and Stops Can Provide More Convenient Access to Aggieville

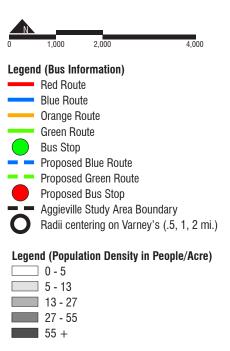
New routes and stops in higher-density areas as well as Aggieville can give Manhattan citizens access to more of the city



Inquiry: Where can additional transit infrastructure be implemented to improve access for it's patrons?

Key Extractions: Existing and Proposed ATA Bus Routes (Red, Blue, Orange, and Green Routes) and Stops, Population Density (People/Acre) **Methodology:** After examining the relationship of existing ATA Bus routes and the most densely populated areas of the city of Manhattan, six additional bus stops and four route changes were made to better service the most densely populated areas of Manhattan that lacked service. **Conclusions:** Additional ATA Bus stops and routes can provide those living in these areas of the city with access to professional and essential services otherwise absent in their immediate neighborhoods. The proposed Green Route would reduce the redundancy of the routes and offer service to a new neighborhood. The proposed stops will triple the number of current stops within one-half and one mile of Aggieville and while no existing stop has a proper bus shelter, these new stops may also bring with them the presence of new shelters.







Few Dedicated Bicycle Routes Connect to Aggieville

Linear trail circulates around the edge of Manhattan but does not adequately connect to Aggieville. $\label{eq:w2_AB01_3K_BikeTrail.PDF} \texttt{W2_AB01_3K_BikeTrail.PDF}$

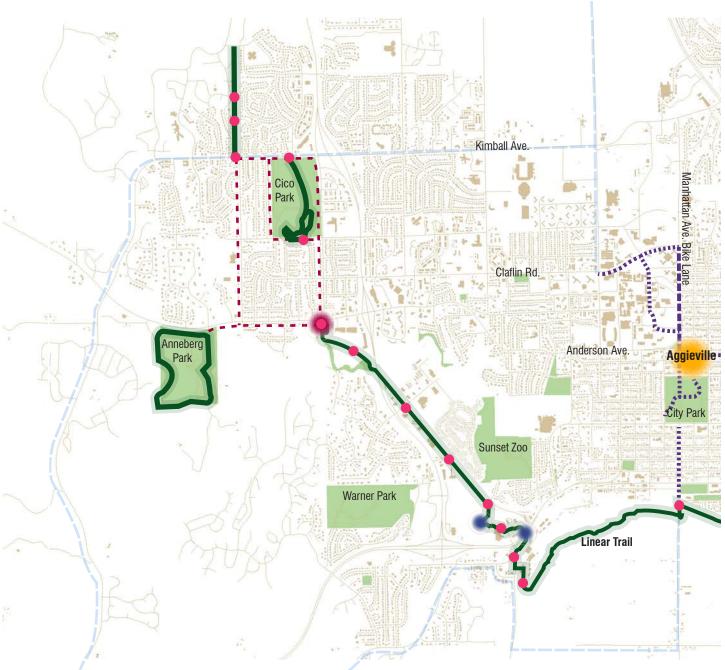


Figure 01. Few Dedicated Trail Connection to Aggieville

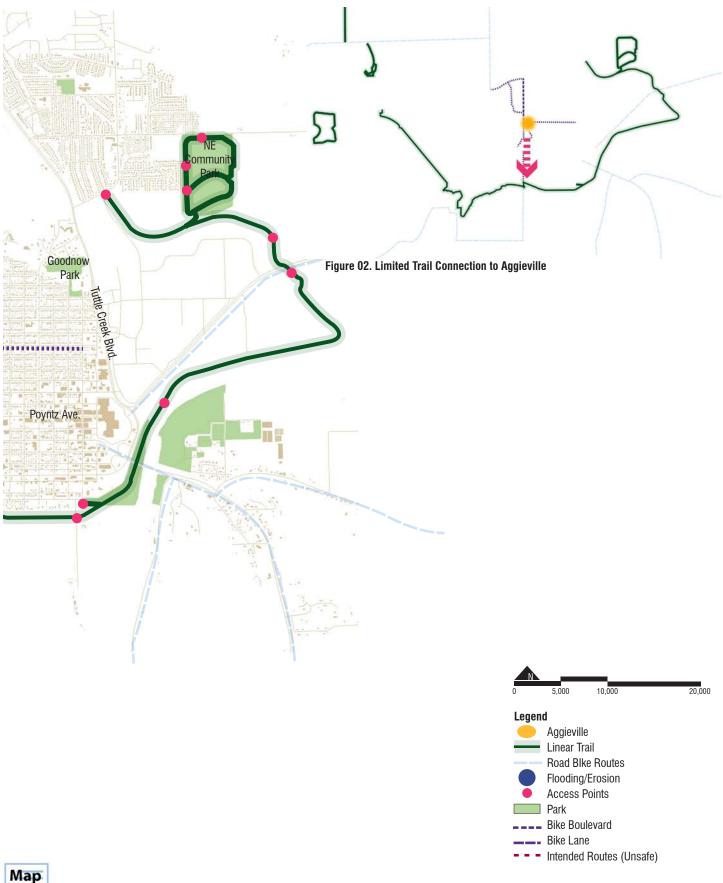
Source: Hahn. County of Riley GIS: Source data. "RICo Parks," "RICo Builidngs," RICo Streets." June 3, 2014.

Inquiry: What are current conditions of the trail network and how does it interact with Aggieville?

Key Extractions: Aggieville, Linear Trail, Access Points, Parks, Road Bicycle Routes, Flooding/Erosion, Intended Routes (Unsafe), Bike Boulevards, Bike Lanes

Methodology: ArcGIS was used to locate buildings, streets, parks, and Linear Trail. Consulted Andrew Rostek (Road Bicyclist) to distinguish location of most common routes of Street Bicyclist. Road bike along trail to note access points, flooding, erosion, and unsafe street routes along trail and streets. Brought ArcGIS map into Adobe Illustrator and located all findings on the map.

Conclusions: Bicycles are a mode of transportation that has potential to bring a community together in a healthy and vibrant way. Manhattan Kansas has a trail system that has this capability but is limited due to the Linear Trail being disjointed from the inner core of Manhattan. Only one entrance from Aggieville to the Linear Trail causes bicyclist to ride on unmarked roads. The trail also had areas that were flooded and eroded which posed dangerous riding conditions.



Aggieville is an Ideal Location for Trail Connectivity

Aggieville's loaction presents an opportunity to create a central connecting point for the trail system.

W2_AB02_4K_BikeTrail.PDF

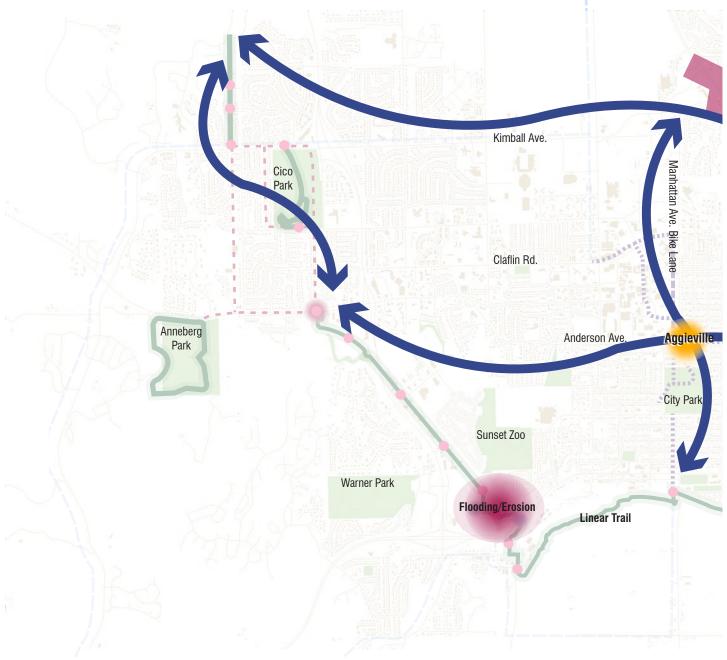


Figure 03. Opportunities and Dilemmas of the Current Trail System Source: Hahn. County of Riley GIS: Source data. "RICo_Parks," "RICo_Builidngs," RICo_Streets." June 3, 2014.

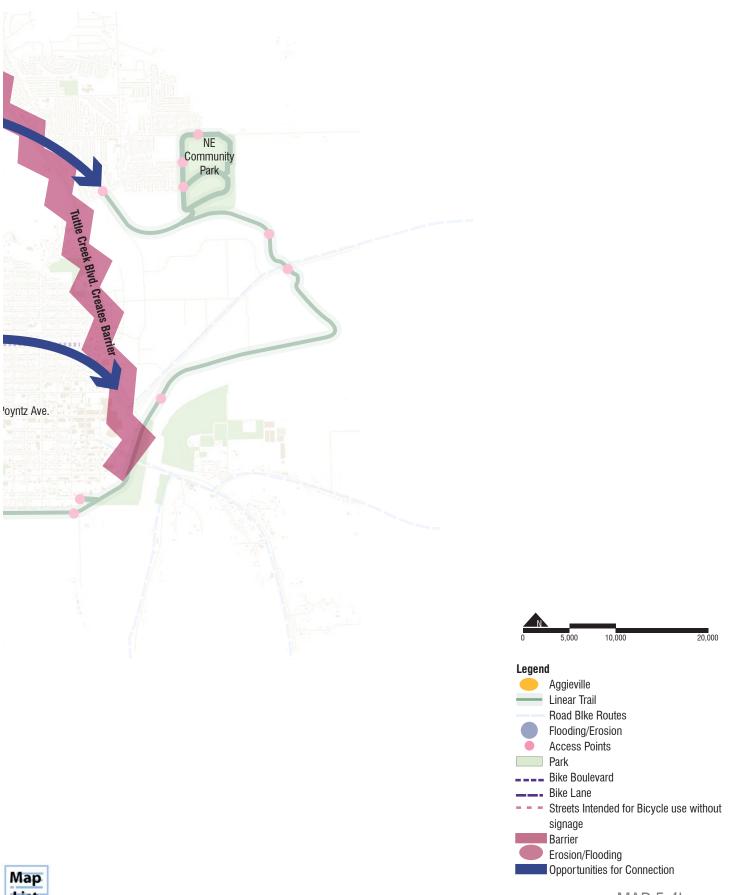
Inquiry: What are opportunites to connect Aggieville to the current trail system?

Key Extractions: Linear Trail, Access Points, Parks, Street Bicycle Routes, Flooding/Erosion, Intended Routes (Unsafe), Bike Boulevards, Bike Lanes, Barriers, Opportunities for Connections

Methodology: Evaluated map produced during bike ride and experience of bike ride itself. Noted findings on map in Adobe Illustrator and evaluated dilemmas and opportunities.

Conclusions: Opportunities and dilemmas were found along the trail. Dilemmas consisted of flooding /erosion, and limited access to the trail. In some areas, the intended route lacked signage to inform drivers to share the road. The linear trail causes bicyclists to either back track or ride on roads that aren't dedicated to sharing with bicyclists. This presented the opportunity to create linkages in the trail system that present users with loops that run through Manhattan. By mapping these opportunities for linkage, Aggieville has potential to be a intersection of the trail system.

Opportunities

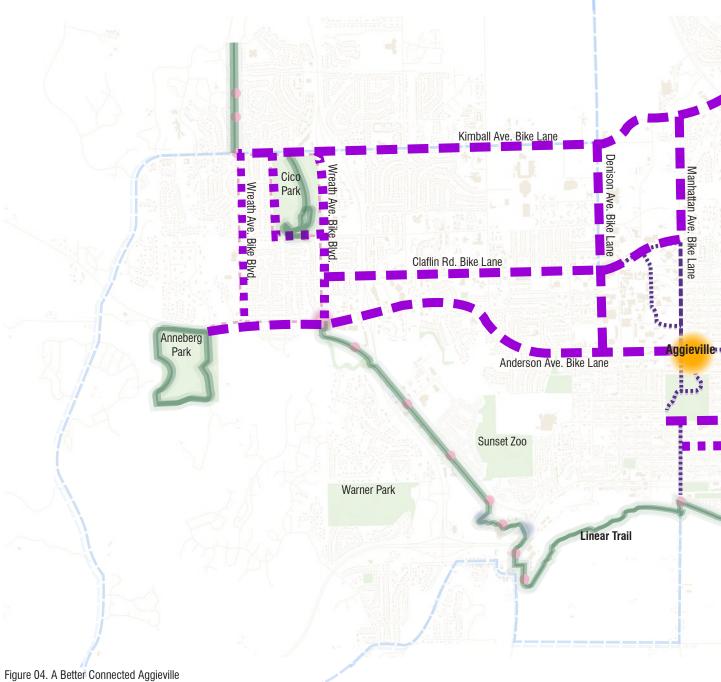




A Better Connected Aggieville

Proposed bike lanes make Aggieville a hub for bicyclist.

W2_AB03_4K_BikeTrail.PDF



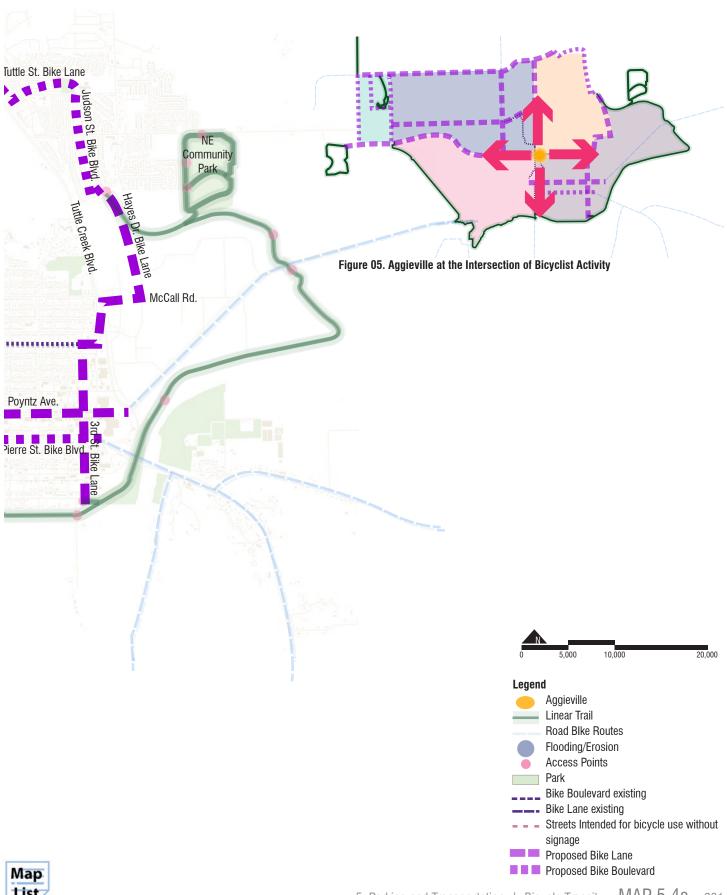
Source: Hahn. County of Riley GIS: Source data. "RICo_Parks," "RICo_Builidngs," RICo_Streets." June 3, 2014.

Inquiry: How can the current trail system be enhanced to better connect Aggieville to the rest of the community?

Key Extractions: Proposed Bike Lanes, Proposed Bike Boulevards, Linear Trail, Aggieville,

Methodology: Identifying what streets and roads would best serve as bike lanes and boulevards throughout Manhattan by biking and referencing Google Earth.

Conclusions: After distinguishing what streets and roads best serve bicyclists, it was concluded that Aggieville could be a point of connectivity amongst these trails. Aggieville is located in a spot that four loops of the proposed trail system intersect causing it to be a potential hub for bicyclists.



Land Use and Redevelopment Potential

Increasing Density
Land Use Composition
Parcel Value
Parcel Development Potential

Business Districts have Low Population Densities

The Downtown and Aggieville districts have low residential population, but Aggieville has higher surrounding population densities W2_AK01_1K_PopDenseVSWalkability.PDF

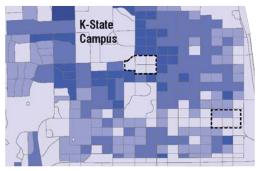
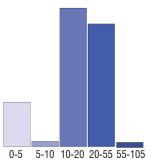
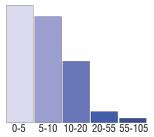


Figure 01. Population Density Distribution Source: Riley County GIS





Density within 1/4 mile of Aggieville (people/acre)



Density within 1/4 mile of Downtown (people/acre)

Figure 02. Population Density Distribution Within 1/4 Mile Source: Riley County GIS

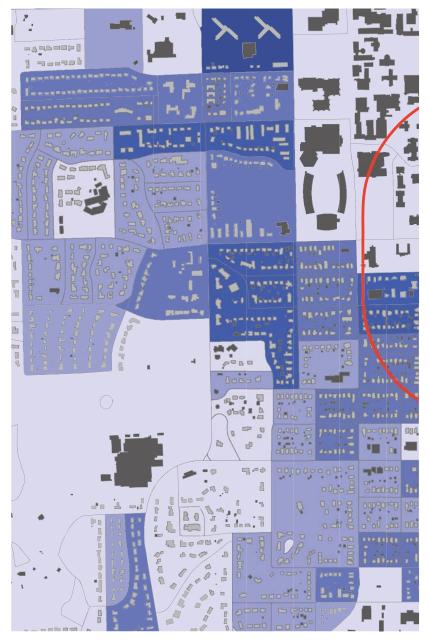


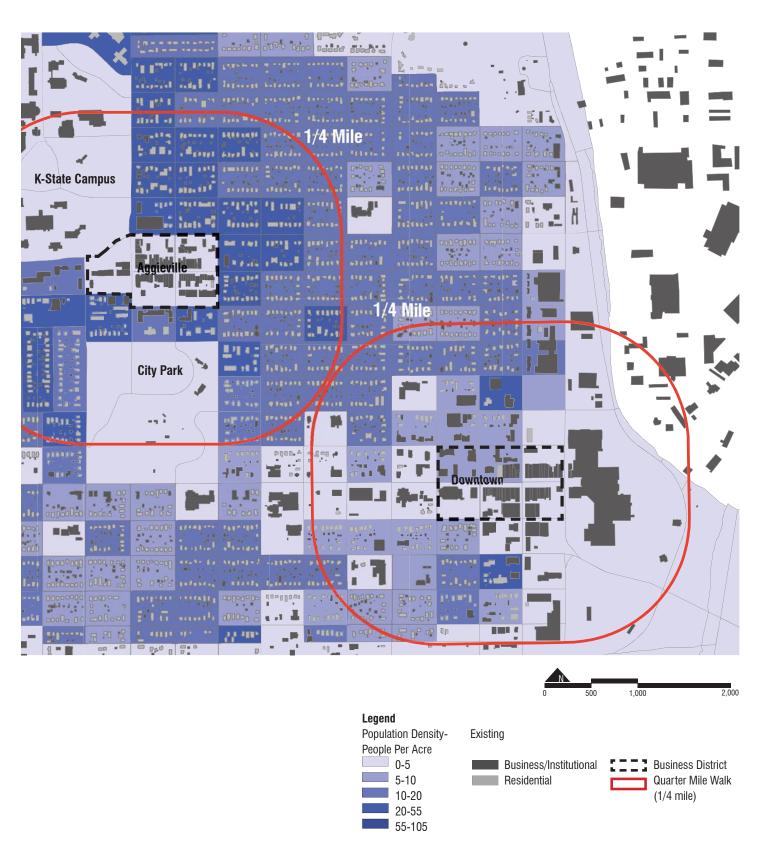
Figure 03. Population Density versus Business Locations Source: Riley County GIS

Inquiry: What are the population densities within a quarter mile of Aggieville and Downtown?

 $\textbf{Key Extractions:} \ RLCo_Census_2000, \ Buildings, \ WalkabilityRing, \ DistrictBoundaries$

Methodology: Using 2000 Census data divided by acreage, a population density distribution map was created and then classified incrementally by a range of people per acre. The darkest blue classifies the highest population density and the lightest blue classifies little to no population density. Building forms were classified residential versus business or institutional, where the residential is light grey. A quarter mile walking distance around Aggieville and Downtown were outlined, and then each parcel within that distance was counted based on its classification to create the Population Density Distribution Within 1/4 Mile bar chart above.

Conclusions: The Aggieville and Downtown Districts have mostly 0-5 people per acre living within the districts. Within a quarter mile, Aggieville has more high density population encircling its district likely due to its proximity to the K-State Campus. With the surrounding high densities, Aggieville has a good opportunity to increase its population density to allow for more people to live within its business district.





Single Story Buildings and Parking Lots Provide Opportunities for Higher Densities

Perimeter buildings with visual character difference from Moro St. and surface lots are opportunities for increased density

W2_AK02_300_DensityOpportunity.PDF

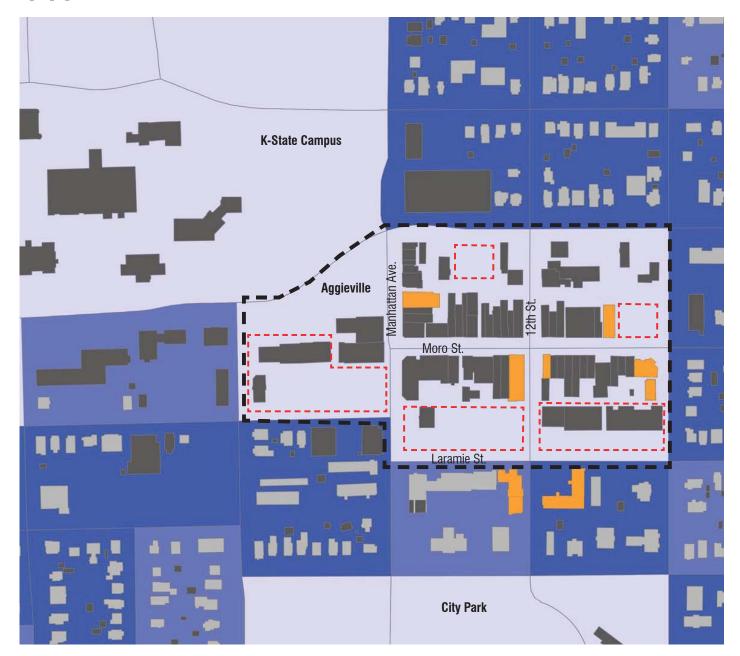
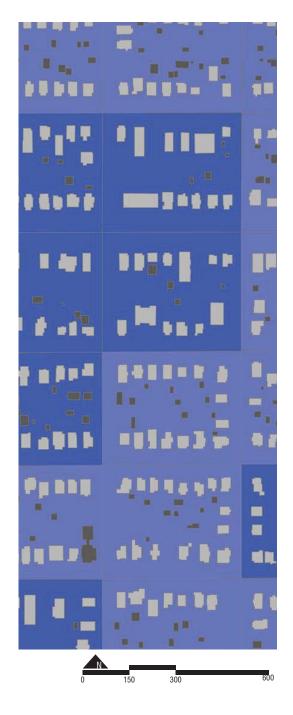


Figure 01. Opportunties for Higher Population Densities Source: Riley County GIS

Inquiry: What opportunities are there for increasing population densities within Aggieville?

Key Extractions: "RLCo_Census_2000," "Buildings," "BLDGFTPRNT." District Boundaries, Existing Residential and Opportunities for Residential. **Methodology:** Existing businesses with residential units above were identified in orange. Identification of which buildings could have more unity with Moro St. based on visual characteristics came from site visit analysis of Aggieville. Buildings and parking lots where density could be added were chosen based on the visual character analysis.

Conclusions: The visual character analysis showed that single story buildings along the perimeter of Aggieville and parking lots along the intersections provide opportunities to increase population density and create a more continuous urban fabric.



66 Buildings Total

6 with Existing Mixed-Use Residential Buildings

Multiple opportunities for repurposing of single story buildings and parking lots along perimeter of Aggieville







Figure 02. Locations for Potential Higher Population Densities Source: Prudenti, Richard





Taller Mixed-Use Buildings Would Increase Population Densities

Aggieville could use new mixed-use residential buildings to increase density and fill gaps in the urban fabric

W2_AK03_300_DensityStrategies.PDF

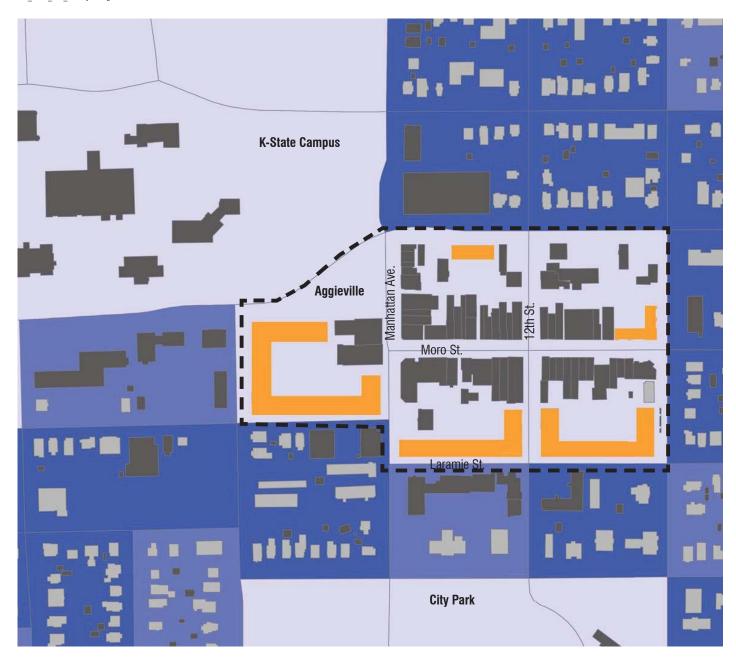


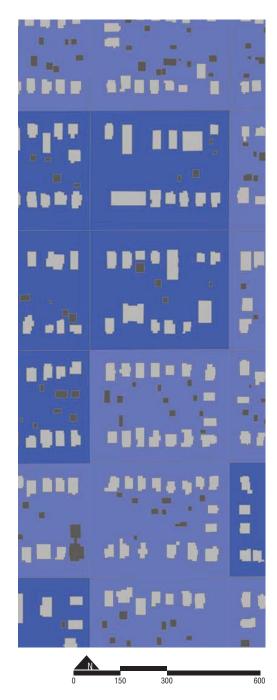
Figure 01. Strategies for Providing Residential Units to Create Higher Population Densities Source: Riley County GIS

Inquiry: How can Aggieville adjust for more residential use and density within the business district?

Key Extractions: "RLCo_Census_2000," "Buildings," "BLDGFTPRNT," DistrictBoundaries.

Methodology: To add density, generalized forms for a double corridor building that define the street edges were placed within the opportunity areas. Then calculating the square footage for each building divided by a 950 sq. ft. unit (2 bedroom) provided the total number of units per building. Those number of units times two amounts to the total number of potential residents for the 2nd and 3rd floors. The total number of people were then divided by the acreage of the parcel to find the new potential population density if these buildings were mixed-use residential maxed out at the three stories allowed for C-3 zoning.

Conclusions: If the building forms were implemented to their max C-3 zoning, then Aggieville's population density would greatly increase, potentially bringing 604 new residents. By having three story mixed-use residential, Aggieville can become a district for higher density urban living for students, townies, and other potential residents in Manhattan.



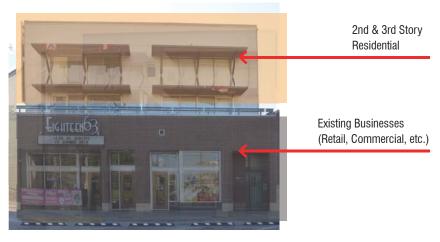


Figure 02. Emulate Mixed-Use Buildings Existing in Aggieville Source: Wilson, Erin

302 new two bedroom units 604 potential residents

Potential Maximum Increase of People Per Acre:

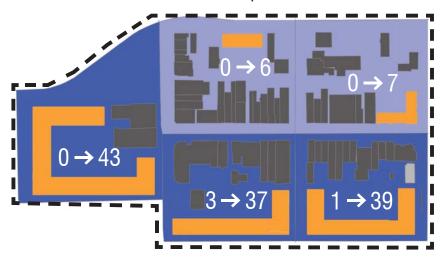


Figure 01. Potential Increased Residential Square Footage and Population Density Source: Riley County GIS





Vehicular Uses Dominate Outdoor Space in Aggieville

Total square footage for pedestrian spaces relatively small compared to on-street and surface parking areas

W4_RPD07_300_AutoPedestrianSpaces.PDF



Figure 1. Inventory of Outdoor Spaces
Source: GIS "Parcels," "Building Footprints," On-site inventory, Measurements Database

Inquiry: How much outdoor space is dedicated to buildings, pedestrian use, and vehicular use?

Key Extractions: Parcels, Buildings, Open greenspace, Alleys, Service Areas, Streets, Sidewalks, Parking lots, Residential buildings, Outdoor dining, sidewalk seating

Methodology: Inventoried outdoor uses throughout Aggieville and categorized them according to outdoor spaced dedicated to vehicles and outdoor spaces dedicated to pedestrieans. Subcategories vehicles are streets, parking and service and alleyways. Subcategories for pedestrian are: outdoor dinng, walkways, civic space and/or greenscape.

Conclusions: The majority of Aggieville is vehicular-focused as evidenced by the total square footage of streets, parking, alleys and service areas, whereas there is relatively little square-footage dedicated to public pedestrian uses including walkways and a few scattered benches. Only one area of Aggieville has a dedicated bike lane, between Bluemont Avenue and Moro Street. Only two businesses that place tables and chairs on the widest of sidewalks downtown, while 22 other businesses use open or covered outdoor dining areas, and this includes one rooftop dining/social space.



Aggieville outdoor space currently dedicated to:

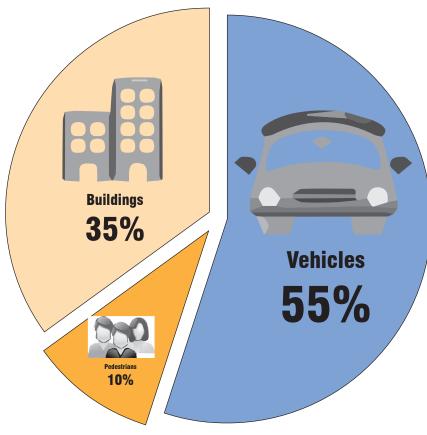


Figure 2. Major Categories Source: GIS "Parcels," "Building Footprints," On-site inventory, Measurements Database



Outdoor Open Spaces Show High Potential For Expanding Urban Setting

Street areas able to accommodate wider sidewalks; Parking areas could be transformed into civic space

W4_RPD08_300_UrbanFeatures.PDF

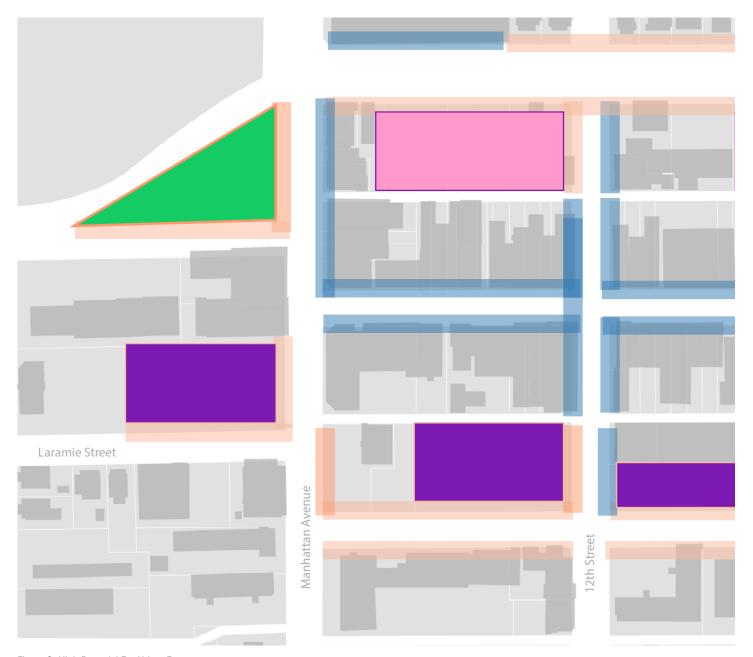


Figure 3. High Potential For Urban Features

Inquiry: Where is there greatest potential for transforming outdoor open space into civic space, expanded pedestrian sidewalks **Key Extractions:** Parcels, Building Footprints, Sidewalks, Streets

Methodology: Site measurements and inventory of existing buildings and parking areas were evaluated to gain a better understanding of how limited space could be maximized for a more pedestrian-friendly experience downtown, which includes wider sidewalks, street trees and outdoor civic space, "open space" as noted in the City of Manhattan's Campus Edge-Aggieville District Plan. Most street widths were about 40 feet, depending on the presence and type of on-street parking (angled parking, parallel parking, and whether these were on both sides of the street). The greatest potential are areas

Conclusions: Nearly all streets within or surrounding the common boundaries of Aggieville show high potential for having room to accommodate the widening of sidewalks. In the case where streets are enclosed by building mass, such as Moro Street, a lane of on-street parking would need to be removed for redevelopment to have any success. The greatest potential exists where surface parking lots exists along streets and 8-foot grassy areas exist between street and the 6-foot sidewalks adjacent to the parking lots. Six large parking areas could be redeveloped into outdoor civic space -- three each on the north and south sides of Aggieville.





Civic Space, Sidewalk Widenings, Parking Structure Proposed For Aggieville

Sidewalk widening necessitates removal of on-street parking, and in turn greater need for parking structure and civic space

W4 RDP09 300 OutdoorSpacePlan.PDF



Figure 4. Strategy To Maximize Spaces For Pedestrians Source: GIS "Parcels," "Building Footprints"

Inquiry: How can widening of sidewalks coincide with meeting other goals like a new parking garage and desire for more open space? **Key Extractions:** On-street parking, sidewalks, traffic flow, open areas

Methodology: First considered a feasible means of reclaiming space for pedestrians on Moro Street, the busiest street in Aggieville. Measurements show a 14-foot wide stretch now occupied by angled parking could allow flexibility for redevelopment of walkways. This in turn lead to reviewing data on where a parking structure might be built that could absorb the number of people who otherwise would have parked in those on-street spaces. The need for civic space, and the fact that there is no centrally locate civic spaces in Aggiellville prompted a better understanding of large open spaces in Aggievill north and south.

Conclusions: A civic space would fit well in south Aggieville along Laramie Street. This civic space could be flanked by buildings that have first-floor spaces that front wider sidewalks with outdoor seating. Wider sidewalks, greenery/street trees and sidwalk cafe seating are among goals of the city's Aggieville District Plan. Closing the street just south of Triangle Park, allowing this space to become part of the park, would create a more connected park and potential for integrated civic programming. A building structure at the northwest corner of the adjacent southern block would create an edge and signal a new traffic pattern that makes better use of a main entrance at 14th Street and Laramie, and allowing for two way traffic flow on Larmie and a reversal of traffic flow on Moro that has the advantage of directing traffic into Aggieville rather than out of Aggieville as the current traffic flow headed east does.

Strategy





Higher Assessed Property Values and Smaller Parcel Sizes Surround Moro Street

Concentration of higher property values along Moro Street define Aggieville's Core

W2_LH01_300_HigherPropertyValues.PDF



Figure 1.1: Aggieville and Zone of Higher Property Value and Smaller Pacel Sizes Source: GIS 2009 Manhattan Assessed Property Values Per Square Foot

0 150 300 600

Inquiry: What are property value trends in Aggieville?

Key Extractions: 2009 property values per square foot, parcels, and zones of higher property values **Methodology:** Assessed property values from 2009, including building and lot, were used to create a distribution map and were classified incrementally by a range of dollars per square foot. The darkest green indicates higher property values per parcel square foot. The lightest green indicates lower property values per parcel square foot. Larger parcel sizes were visually identified surrounding the zones of higher property values. A boundary was drawn around Aggieville zones of higher property values with generally smaller parcels.

Conclusions: In the Aggieville area, particularly surrounding Moro Street, most parcels are characterized by larger sizes with lower 2009 assessed building and land values. Fifty parcels compose these zones of opportunity with an average assessed value of \$52.92 per square foot.

2009 Assessed Values

\$0 - \$10 / sq ft \$11 - \$15 / sq ft \$16 - \$30 / sq ft \$31 - \$45 / sq ft \$46 - higher / sq ft Zone of higher values and smaller parcels

Zone of Higher Property Values and Smaller Parcel Sizes Falls Within Aggieville Cores

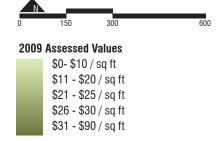


Average Assessed / Sq Ft \$52.92

50 Parcels Total



Figure 1.2: Zone of Higher Property Value and Smaller Parcel Sizes Source: GIS 2009 Property Values; Heermann, Lauren





Lower Assessed Property Values and Larger Parcels Present Redevelopment Opportunities

Zones of larger parcel sizes and lower values are attractive for developer interests

W2_LH02_300_LowerPropertyValues.PDF



Figure 1.3: Aggieville and Zones of Lower Poperty Value and Larger Parcel Sizes Source: GIS 2009 Manhattan Assessed Property Values Per Square Foot

Inquiry: What Aggieville areas are attractive to a developer, looking for low property values and large parcel sizes? **Key Extractions:** 2009 property values per square foot, parcels, and zones of lower property values and larger sizes **Methodology:** Assessed property values from 2009, including building and lot, were used to create a distribution map and were classified incrementally by a range of dollars per square foot. The darkest green indicates higher property values per parcel square foot. The lightest green indicates lower property values per parcel foot. Larger parcel sizes were visually identified surrounding the zones of higher property values. A boundary was drawn around Aggieviille zones of lower property values with generally larger parcels.

Conclusions: In some Aggieville areas surrounding the buildings on Moro Street, parcels are characterized by larger sizes with lower 2009 assessed building and land values. Because low property values and groupings of large parcels in a business district attract developers, these zones will be more suitable for redevelopment. Eighteen parcels compose these zones of opportunity with an average assessed value of \$27.83 per square foot.

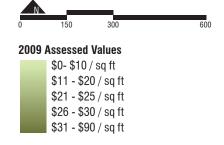


Opportunity Zones with Lower Property Value and Larger Parcel Sizes Falls within Aggieville Core





Figure 1.4: Zone of Higher Property Value and Smaller Parcel Sizes Source: GIS 2009 Property Values; Heermann, Lauren

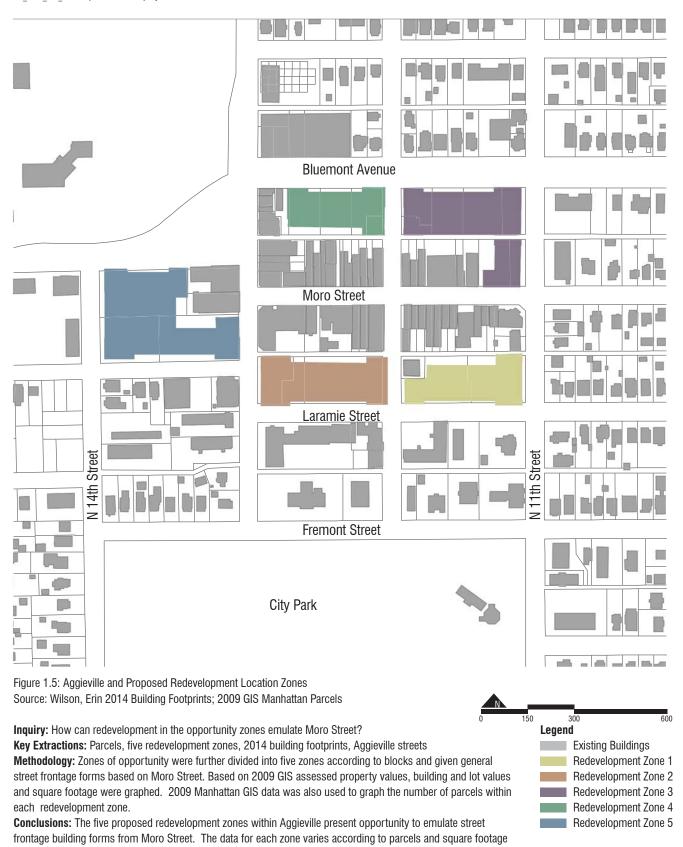




Proposed Building Placement Zones for Redevelopment

Strategic redevelopment can emulate Moro Street's frontage building form

W2_LH03_300_RedevelopmentBasedonPropertyValues.PDF



available, assessed value of land and building, and total assessed value per square foot. The yellow zone is suggested for redevelopment, based on a developer's interest in lower assessed values and less parcels for a larger

amount of space.

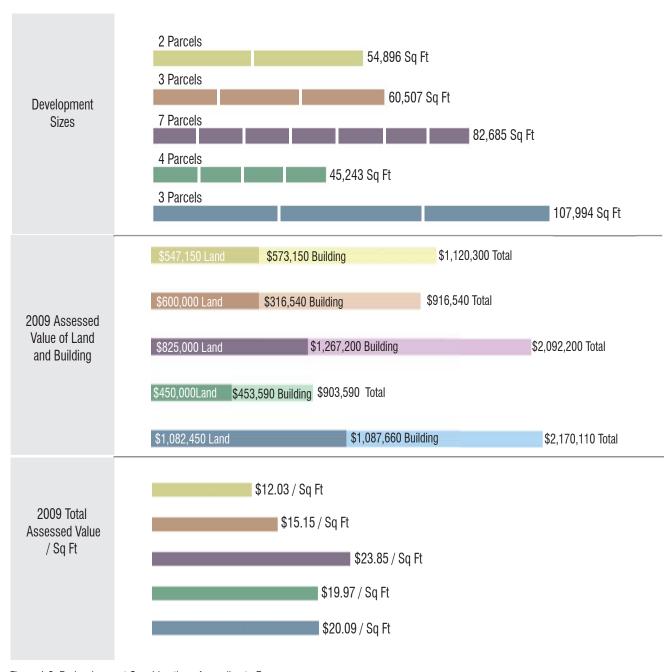
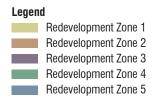


Figure 1.6: Redevelopment Considerations According to Zones Source: GIS 2009 Property Values Per Square Foot





Lower Assessed Property Values And Large Parcels Reveal Redevelopment Potential

Parking lots and adjacent parcels of common ownership are particularly attractive.

W4_AR07_300_Owenr/Value.PDF



Inquiry: What are the limitations of development in Aggieville?

Key Extractions: Parcel Data, Owners, BLDG Value, Land Value

Methodology: The first map uses the assessed building value divided by the assessed land value to give a rough estimation of cost to develop relative to parcel acquisition costs. The second map shows the distribution of parcels with common ownership.

Conclusions: There are a lot of various owners in Aggieville, but there are some clusters of parcels with common ownership. Also, although much of the land is developable, the parking lots held by the city have the highest potential for development followed by parcels along Laramie Street between 12th and 11th Streets.

Inventory

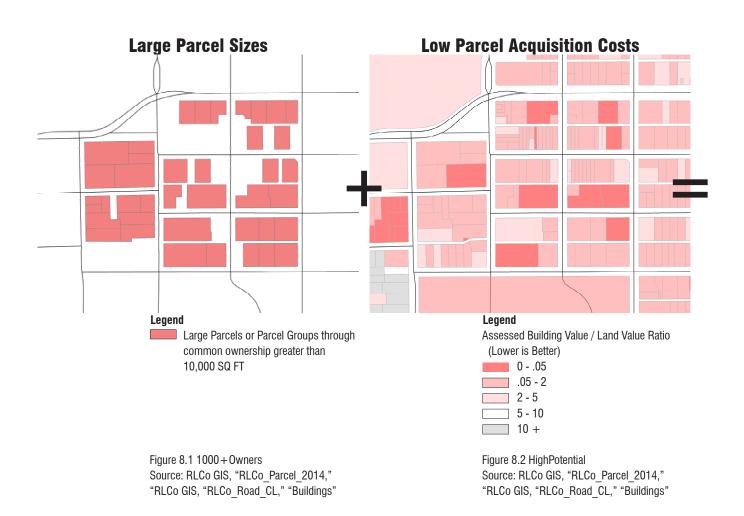




Parcels Adjacent Moro Street Are Best Suited For Redevelopment

Large parcels along Laramie and Bluemont have a higher potential for redevelopment

W4_AR07_300_DevPotential.PDF

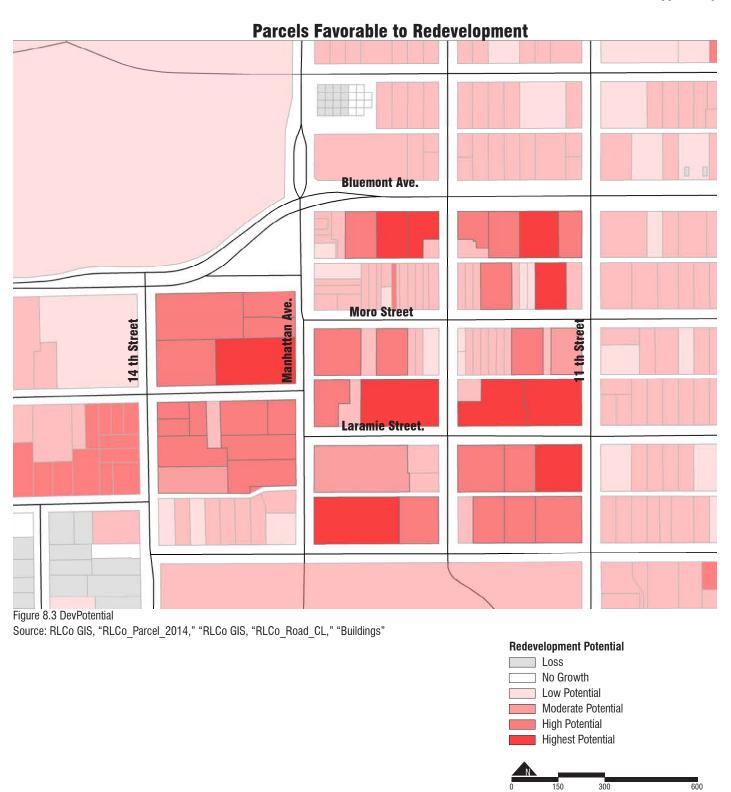


Inquiry: Which parcels have the highest potential for redevelopment in Aggieville?

Key Extractions: Parcel Data, Owners, BLDG Value, Land Value

Methodology: Overlaying data from the inventory map at 50% opacity shows a combination of parcel suitablity and ownership. The lots were simplified to single lots or groups of single owner lots that represent an continuous area greater than 10,000 SQ FT. Combining the overlays creates 6 zones of potential development.

Conclusions: There are a lot of various owners in Aggieville, but there are some clusters of parcels owned by a single owner. Also, although much of the land is developable, the parking lots held by the city have the highest potential for development followed by parcels along Laramie between 12th and 11th Streets.



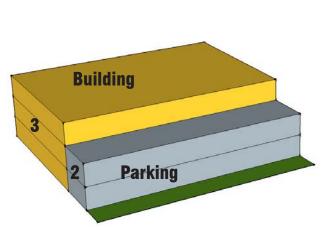


Parking and Incentives Must Be Implemented To Initiate Major Redevelopment

The cost to incorporate parking is prohibitively expensive for new development without an increase in rent prices.

W4_AR07_300_Incentives.PDF

Parking



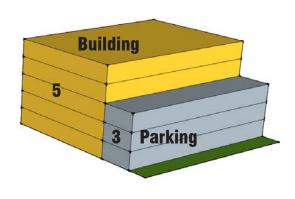


Figure 9.1 DevParking Source: Rostek 2014

FAR 3 With Parking Averages

Parcel Size: 19446 SF Building Size: 16205 SF Parking Size: 3241 SF

Potential Value: \$7,427,433.75 Current Value: \$1,393,836.67 Net Value: \$(1,609,981.76)

Assumptions:

Parking Ratio: 1 / 2 Units (750 SQ FT)

Lease Cost: \$15 SF / YR

10446 95

Potential Value: \$12,379,056.26

FAR 5 With Parking Averages

Building Size:

Parking Size:

Current Value: \$1,393,836.67 Net Value: \$(2,638,227.37)

72925 SF

14585 SF

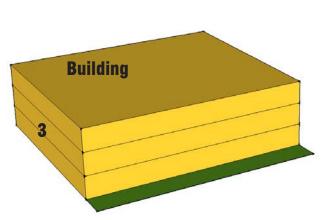
Inquiry: What is the break even point for new development.

Key Extractions: Parcel Data, BLDG Value, Land Value, Shape Area, Total Value

Methodology: Using the Land Value Potential Method for cost benefit analysis from Community Attributes, parcels with potential for development where compared at FAR values of 3 and 5 and with and without parking and 85% parcel coverage. Using typical cost and rent figures from city, realtor, and RSMeans data, values where calculated to give a dollar figure for costs of development.

Conclusions: Through the analysis, it is not possible for developers to make money through new development in Aggieville without a change in zoning to allow FAR above 5 and assistance through public parking garages or incentives through public private partnerships, tax breaks or grants. To become profitable, development in Aggieville will break even with rent of \$19.70 SF, no parking, and an FAR of 5.

No Parking



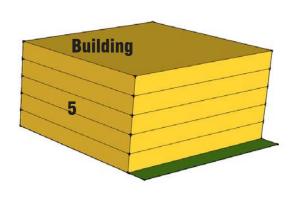


Figure 9.1 DevSansParking Source: Rostek 2014

FAR 3 Without Parking Averages

Building Size: 19446

Current Value: \$1,393,836.67 Potential Value: \$8,912,920.50 Net Value: \$(999,597.66)

Calculations with Rent @ \$20 SF

Potential Value: \$11,883,894.01 Net Value: \$1,971,375.84 **FAR 5 Without Parking Averages**

Building Size: 87510

Current Value: \$1,393,836.67 Potential Value: \$19,509,392.66 Net Value: \$(3,268,499.34)

Calculations with Rent @ \$20 SF

Potential Value: \$19,806,490.01 Net Value: \$1,683,123.16



Parcels in yellow were analyzed for development potential.

Figure 9.1 Owner Source: RLCo GIS, "RLCo_ Parcel 2014," "RLCo GIS,

- "RLCo_Road_CL," "Buildings"
- * Building Size: Potential Billable SF of a new building
- **Potential Value: Potential profit / CAP for a 5 year turnover.

Rent is derived from communication with Realtors and property listings.



Citations



Citations

Opening Pages

Prudenti, Richard. 2014. Aggieville Sidewalk (Manhattan, Kansas). Digital Photograph. p. iii.

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Hahn, Howard. 2014. Aggieville Sidewalk (Manhattan, Kansas). Digital Photograph. p. iv.

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1. Manhattan Context

Existing Demographics

Map 1.1a

"Aggieville Serves a Majority Renter Population"
Andrew Rostek: W2 AR01 3k Rebtal.pdf

Figure 1.1

Rostek, Andrew. 2014. Majority Rental vs. Owner Occupied. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "RLCo_Census_2000," "RLCo_Parcels_Mar2009," "Buildings," "StateHighways," "Citybounds." Accessed 4 June 2014. Supplemental source: Bureau, U.S. Census. 2014. "American FactFinder - Results." Accessed June 6. http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1

Map 1.1b

"Aggieville Lacks Permanent Residents"

Andrew Rostek: w2 AR02 2k Residents.pdf

Figure 2.1

Rostek, Andrew. 2014. Permanent Residency. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "RLCo_Census_2000," "RLCo_Parcels_Mar2009," "Buildings," "StateHighways," "Citybounds." Accessed 4 June 2014. Other sources:

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Map 1.1c

"Denser & More Owner Occupied Housing Could Be Developed" Andrew Rostek: w2 AR03 2k NewHousing.pdf

Figure 3.

Holloway Builders. 2013. Breathe-Flyview-655. Digital. http://ccdu.govt.nz/sites/default/files/breathe-flyview-655.jpg.

Figure 3.2

Rostek, Andrew. 2014. Medium Density Development. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "RLCo_Census_2000," "RLCo_Parcels_Mar2009," "Buildings," "StateHighways," "Citybounds." Accessed 4 June 2014. Other sources:

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Map 1.2a

"Radiating Out, Demographics Shift from Single Students to Families and Seniors"

Andrew Rostek: w3 AR04 7.5K Demographic.pdf

Figure: 4.1

Rostek, Andrew. 2014. Median Age. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "Tiger2010_RL_Census_Block," "Buildings," "StateHighways." Accessed 4 June 2014.

Figure: 4.2

Rostek, Andrew. 2014. Familes. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "Tiger2010_RL_Census_Block," "Buildings," "StateHighways." Accessed 4 June 2014.

Figure: 4.3

Rostek, Andrew. 2014. Density. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "Tiger2010_RL_Census_Block," "Buildings," "StateHighways." Accessed 4 June 2014.

Figure: 4.4

Rostek, Andrew. 2014. Zones. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "Buildings," "StateHighways." Accessed 4 June 2014.

Map 1.2b

"Population is Skewed Towards College Age Residents Around Aggieville"

Andrew Rostek: w2_AR01_2K_Divide.pdf

Figure 1.1

Rostek, Andrew. 2014. Permanent Residency. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "Buildings," "StateHighways." Accessed 4 June 2014.

Map 1.2c

"Mixed Multistory Development Could Be Implemented on Main Roads"

Andrew Rostek: w2 AR06 2k VilleAge.pdf

Figure 06.1

Andrew, Rostek. 2014. Building Mass. Digital.

Figure 06.2

Rostek, Andrew. 2014. AggievilleAge. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "Buildings," "StateHighways." Accessed 4 June 2014.

Map 1.3a

"Majority of Families Live Over 1 Mile From Aggieville and Downtown"

Amanda Kline: w4 AK07 3K Family Density.pdf

Figure 1

Kline, Amanda. 2014. Family Density Distribution. Source data: Riley County GIS. "2010_riley_roads," "MileRadius_Buffer," "FamDensity_2014_NN," "Tiger2010_RL_Census_Block." Accessed 16 June 2014.

Map 1.3b

"Aggieville Provides a Connection Between City Park Families and Activities"

Amanda Kline: w4 AK08 1K Family-OrientedOpportunities.pdf

Figure 1

Kline, Amanda. 2014. Relationships of Family-Oriented Activities, Schools, and Family Density. Source data: Riley County GIS. "2010_riley_roads," "RecFacilityPoint," "Trails," "GolfCourse," "Parks," "RLCo_RecSites," "SchoolSites," "FamDensity_2014_NN," "Tiger2010_RL_Census_Block." Accessed 16 June 2014.

Figure 2

Kline, Amanda. 2014. Opportunities for Connections of Family-Oriented Activities Within Aggieville. Source data: Riley County GIS. "2010_ri-ley_roads," "RecFacilityPoint," "Trails," "GolfCourse," "Parks," "RLCo_RecSites," "SchoolSites," "FamDensity_2014_NN," "Tiger2010_RL_Census_Block." Accessed 16 June 2014.

Map 1.3c

"Underutilized Spaces Can Become Urban Areas of Family Recreation and Activity"

Amanda Kline: w4 AK09 Aerial Family-OrientedStrategies.pdf"

Figure 1

Kline, Amanda. 2014. Proposed Family-Oriented Activities in Aggieville. Sketchup and Photoshop Rendering. Included images:

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- Kline, Amanda. 2009. Swinging (Wichita, Ks). Digital Photograph.
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Map 1.4a

"Aggieville is Centrally Located and Relatively Close to Several Major Investment Areas"

Beth Krehbiel: w4-BK07 KStateAggievilleUser.pdf

Figure 01

Krehbiel, Beth. 2014 Extracted Recent Investment Areas Uniquely Situate Aggieville. Source data: Krehbiel, Beth. 2014. Manhattan Development Investments. Source data: Riley County GIS. "Road_network." Accessed via KSU course materials. Accessed June 24, 2014. Data edited in ArcGIS, Adobe Illustrator and Adobe InDesign.

Figure 02

Krehbiel, Beth. 2014. KSU Users. Source data: Riley County GIS.

"parcels." Accessed via KSU course materials. Accessed June 24, 2014. Data edited in ArcGIS, Adobe Photoshop and Adobe InDesign.

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"K-State and City Planning Documents Highlight Contextual Relationships to Aggieville"

Beth Krehbiel: w4 BK08 Opportunity.pdf

Figure 01

Krehbiel, Beth. 2014. Aggieville's Relation to KSU Master Plans. Source data: Riley County GIS. "parcels." Accessed via KSU course materials. Accessed June 24, 2014. Data edited in ArcGIS, Adobe Photoshop and Adobe InDesign.

Figure 02

Krehbiel, Beth. 2014 Campus Master Plan. Source data: "Campus Master Plan." In Campus Master Plan Update 2012. Modified in Adobe InDesign.

Figure 03

Krehbiel, Beth. 2014 Campus Edge Plan. Source data: "Campus Edge Plan." In Campus Master Plan Update 2012. Modified in Adobe InDesign.

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"Newly Identified and Promoted Corridors Can Improve Connections to Aggieville"

Beth Krehbiel: w4 BK09 Strategy.pdf

Figure 01

Krehbiel, Beth. 2014. Bike Connections. Source data: Riley County GIS. "parcels." Accessed via KSU course materials. Accessed June 24, 2014. Data edited in ArcGIS, Adobe Photoshop and Adobe InDesign.

Figure 02

Krehbiel, Beth. 2014. Pedestrian Connections. Source data: Riley County GIS. "parcels." Accessed via KSU course materials. Accessed June 24, 2014. Data edited in ArcGIS, Adobe Photoshop and InDesign. Figure 03

Krehbiel, Beth. 2014. Shuttle Connections. Source data: Riley County GIS. "parcels." Accessed via KSU course materials. Accessed June 24, 2014. Data edited in ArcGIS, Adobe Photoshop and InDesign.

Existing Planning Documents

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"Aggieville District Plan Calls for Well-defined Urban Edge Along Bluemont Avenue"

Richard Prudenti: w3 RDP04 None Conceptualization.pdf

Figure 1

Conceptual Vision for Aggieville and the Surrounding District. Original

Image titled "Conceptual Vision prepared by RTKL." 2005. Reproduced from Community Development, City of Manhattan. August 2005. Aggieville-Campus Edge District Plan, accessed June 9, 2014 from http://www.cityofmhk.com/DocumentCenter/Home/View/791. Modified by Richard Dean Prudenti.

Figure 2

Prudenti, Richard Dean. 2014 Plan: Street Trees (Manhattan, Kansas). Digital Photograph.

Figure 3

Prudenti, Richard Dean. 2014 Plan: Increase Street Width (Manhattan, Kansas). Digital Photograph.

Figure 4

Prudenti, Richard Dean. 2014 Plan: Improve Corner Building Look (Manhattan, Kansas). Digital Photograph.

Figure 5

Conceptual Framework Plan. Original Image titled "Gateway Corridor with Enhanced Pedestrian and Vehicular Circulation – RTKL Concept. 2005. Reproduced from Community Development, City of Manhattan. August 2005. Aggieville-Campus Edge District Plan, accessed June 9, 2014 from http://www.cityofmhk.com/DocumentCenter/Home/View/791. Modified by Richard Dean Prudent

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"Some Recent Development Conflicts With Intent of Conceptual Edge Plan"

Richard Prudenti: w3_RDP05_None_DilemmaOpportunity.pdf

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Derailing Plan: Potential Conflicts. Google Earth, 39 degrees 11'15.82"N 96 degrees 34'25.34" W elev 1032 ft. eye alt 5109. accessed June 13, 2014. Modified by Richard Dean Prudenti.

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Prudenti, Richard Dean. 2014 House A (Manhattan, KS). Dig. Photo. Figure 3

Prudenti, Richard Dean. 2014 House B (Manhattan, Kansas). Digital Photograph.

Figure 4

Prudenti, Richard Dean. 2014 House C (Manhattan, Kansas). Digital Photograph.

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Prudenti, Richard Dean. 2014 House D (Manhattan, Kansas). Digital Photograph.

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Prudenti, Richard Dean. 2014 House E (Manhattan, Kansas). Digital Photograph.

Prudenti, Richard Dean. 2014 House F (Manhattan, Kansas). Digital Photograph.

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Prudenti, Richard Dean. 2014 The Arby's (Manhattan, Kansas). Digital Photograph.

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Prudenti, Richard Dean. 2014 Parking Lot A (Manhattan, Kansas). Digital Photograph.

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Prudenti, Richard Dean. 2014 Starbucks (Manhattan, Kansas). Digital Photograph.

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"Aggieville-Campus Edge Plan Can Be Forced for Urban Redesign Despite Deviations"

Richard Prudenti: w3_RDP06_None_Strategy.pdf

Figure 1

Resolution and Strategy: Potential Conflicts. Google Earth, 39 degrees 11'15.82"N 96 degrees 34'25.34" W elev 1032 ft. eye alt 5109. accessed June 13, 2014. Modified by Richard Dean Prudenti.

Figure 2

Prudenti, Richard Dean. 2014 New Direction (Manhattan, Kansas). Digital Photograph.

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Prudenti, Richard Dean. 2014 Parking Potential (Manhattan, Kansas). Digital Photograph.

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"Comprehensive Plan Projects High Density Adjacent to Aggieville" Ally Balderston: w3 AB04 10K ComprehensivePlan.PDF

Figure 01

Balderston, Allison. 2014. City of Manhattan's Plan for Future Growth.

County of Riley GIS: Source data. "RICo_Parks," "RICo_Builidngs," RICo_Streets." "RICo_KSRiver." June 3, 2014.

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"Aggieville the Ideal Location for School and Economic Developments"

Ally Balderston: w3 AB05 3K AggievilleDowntown Connect.PDF

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Balderston, Allison. 2014. Potential Connection between Aggieville and Downtown. County of Riley GIS: Source data. "RICo_Parks," "RICo_Builidngs," RICo_Streets." "RICo_KSRiver." June 3, 2014.

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"Aggieville Downtown Urban District"

Ally Balderston: w3 AB06 1K UrbanDistrict.PDF

Figure 01

Balderston, Allison. 2014. Aggieville Downtown Urban District. County of Riley GIS: Source data. "RICo_Parks," "RICo_Builidngs," RICo_Streets." "RICo_KSRiver." June 3, 2014.

Area Investments

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"Inventory of Manhattan Regional Development Reveal Three Areas of Concentrations"

Beth Krehbiel: w3_BK04_3K_FinancialInventory.PDF

Figure 01

Krehbiel, Beth. 2014. Manhattan Regional Development Cores. Source data: Riley County GIS. "Road_network." Accessed via KSU course materials. Accessed June 16, 2014. Data edited in ArcGIS, Adobe Illustrator and Adobe InDesign.

Figure 02

Krehbiel, Beth. 2014. Manhattan Development Investments. Source data: Riley County GIS. "Road_network." Accessed via KSU course materials. Accessed June 16, 2014. Data edited in ArcGIS, Adobe Illustrator and Adobe InDesign.

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"Aggieville Located as "Cross-Connection" Between KSU and Downtown Investment Cores"

Beth Krehbiel: w3_BK05_Comparative_Investment.PDF

Figure 01

Krehbiel, Beth. 2014. Aggieville. Source data: Riley County GIS. "Road_network." Accessed via KSU course materials. Accessed June 16, 2014. Data edited in ArcGIS, Adobe Illustrator and Adobe InDesign.

Krehbiel, Beth. 2014. Downtown. Source data: Riley County GIS. "Road_network." Accessed via KSU course materials. Accessed June 16, 2014. Data edited in ArcGIS, Adobe Illustrator and Adobe InDesign.

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Krehbiel, Beth. 2014. Aggieville and Downtown Context. Source data: Riley County GIS. "Road_network." Accessed via KSU course materials. Accessed June 16, 2014. Data edited in ArcGIS, Adobe Illustrator and Adobe InDesign.

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"Strategic Routes Proposed to Enhance Aggieville's Connections and Increase Usage

Beth Krehbiel: w3 BK06 Strategy Investment.PDF

Figure 01

Krehbiel, Beth. 2014. Aggieville Connects KSU Investment Core and Downtown Investment Core. Source data: Riley County GIS. "Road_network." Accessed via KSU course materials. Accessed June 16, 2014. Data edited in ArcGIS, Adobe Illustrator and Adobe InDesign.

2. Business Composition and Operations

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"Locally-founded Retail, Restaurant, and Service Businesses Rule Aggieville"

Taylor Lininger: w2_TL01_1K_LocalBusiness.PDF

Figure 01

Lininger, Taylor. 2014. More Local Business Character in Aggieville. Source Data: ESRI ArcOnline Aerial Image. Manhattan, KS. Works cited:

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- Downtown Manhattan. 2011. "Food & Drink, Shop, Business, Stay, Health/Beauty." 1 June 2014. http://downtownmanhattanks.com/.

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"Surface Parking and Nation-Chain Businesses Distract from Local Character"

Taylor Lininger: w2_TL02_500FT_SporadicParking.PDF

Figure 01

Lininger, Taylor. 2014. Sporadic Parking Distracts from Local Character of Aggieville. Source data: Riley County GIS. "BLDGFTPRNTS." June 2014. Source map: Google Earth. Manhattan, Kansas. 39d11'09.43"N 96d34'26.69"W. Accessed 3 January 2014.

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"Towards More and Better-Organized Parking in Aggieville" Taylor Lininger: w2 TL03_500FT_OrganizedParking.PDF

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Lininger, Taylor. 2014. More Organized Parking in Aggieville. Source data: Riley Count GIS. "BLDGFTPRNTS." June 2014. Source map: Google Earth. Manhattan, Kansas. 39d11'09.43"N 96d34'26.69"W. Accessed 3 January 2014.

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"Aggieville's Business Landscape"

Erin Wilson: w2 EW01 200 VilleBusinesses.PDF

Figure 1

Wilson, Erin. 2014. Aggieville's Business Landscape. Source data: Riley County GIS. "RLCo_PAarcels_Mar2009," "Buildings". Accessed via KSU course materials. Accessed 1 June 2014. Source data: Infogroup, Inc. (2014). Map Search, Manhattan, KS bounded by Bluemont Avenue, 14th Street, 10th Street, and Fremont Street. Retrieved June 1, 2014, from Reference USA database. Data edited in ArcGIS, Adobe Photoshop, and Adobe InDesign.

Figure 2

Wilson, Erin. 2014. Aggieville Business Infographics. Source data: Infogroup, Inc. (2014). Map Search, Manhattan, KS bounded by Bluemont Avenue, 14th Street, 10th Street, and Fremont Street. Retrieved June 1, 2014, from ReferenceU SA database. Created with Adobe Illustrator and Adobe InDesign.

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"Opportunities to Change Aggieville's Business Landscape" Erin Wilson: w2 EW02_200_VilleBusOpportunities

Figure 1

Wilson, Erin. 2014. Opportunities to Change Aggieville's Business Landscape. Source data: Riley County GIS. "RLCo_PAarcels_Mar2009," "Buildings". Accessed via KSU course materials. Accessed 1 June 2014. Source data: Infogroup, Inc. (2014). Map Search, Manhattan, KS bounded by Bluemont Avenue, 14th Street, 10th Street, and Fremont Street. Retrieved June 1, 2014, from Reference USA database. Data edited in ArcGIS, Adobe Photoshop, and Adobe InDesign.

Map 2.2c

"Mimicking Moro"

Erin Wilson: w2 EW03 200 VilleBusStrategy.PDF

Figure 1

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Map 2.3a

"Manhattan is an Automobile Dependent Town"

Libby Tudor: w4 LT07 Walkability.PDF

Figure 01

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Figure 02

Tudor, Libby. 2014. Walkability of Aggieville District. Source Data: Walkscore. "Manhattan's Walkscore," 2014. http://www.walkscore. com/methodology.shtml. Accessed 16 June 2014.

Figure 03

Tudor, Libby. 2014. Location of Grocery Stores/Drug Stores. Source Data: Hahn. GIS Data "Buildings." Accessed: 6 June 2014. Walkscore. "Manhattan's Walkscore," 2014. http://www.walkscore.com/methodology.shtml. Accessed: 16 June 2014.

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Tudor, Libby. 2014. Location of Retail. Source Data: Hahn. GIS Data "Buildings." Accessed: 6 June 2014. Walkscore. "Manhattan's Walkscore," 2014. http://www.walkscore.com/methodology.shtml. Accessed: 16 June 2014.

Figure 05

Tudor, Libby. 2014. Location of Restaurants/Bars. Source Data: Hahn. GIS Data "Buildings." Accessed: 6 June 2014. Walkscore. "Manhattan's Walkscore," 2014. http://www.walkscore.com/methodology. shtml. Accessed: 16 June 2014.

Figure 06

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Figure 07

Tudor, Libby. 2014. Location of Parks. Source Data: Hahn. GIS Data "Buildings." Accessed: 6 June 2014. Walkscore. "Manhattan's Walkscore," 2014. http://www.walkscore.com/methodology.shtml. Accessed: 16 June 2014.

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Tudor, Libby. 2014. Location of Schools. Source Data: Hahn. GIS

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Map 2.3b

"Aggieville Lacking in Retail Business"

Libby Tudor: w4 LT08 300 LackingRetail.PDF

Tudor, Libby. 2014 Percentage of Retail Businesses in Aggieville. Source Data: Hahn. GIS Data "Buildings." Wilson Aggieville Business Database, Accessed: 6 June 2014.

Figure 02

Tudor, Libby. 2014 Percentage of Retail Businesses in Downtown. Source Data: Hahn. GIS Data "Buildings." Accessed: 6 June 2014. Manhattan Kansas Area Chamber of Commerce. "Chamber of Commerce: Business Directory." http://www.manhattan.org/index. aspx?NID=345. Accessed: 18 June 2014.

Map2.3c

"Adding More Retail Businesses in Aggieville Can Create a Better **Mixed-Use District**"

Libby Tudor: w4 LT09 RetailInTheVIlle.PDF

Figure 01

Tudor, Libby. 2014. Understanding National Chain and Local Businesses. Source Data: Delware Valley Regional Planning Commission. "Revitalizing Suburban Downtown Retail Districts: Strategies and Best Practices." http://www.dvrpc.org/reports/13070.pdf. "Dick's Sporting Goods: Manhattan Marketplace." (Manhattan, KS). Digital Photo. https://www.facebook.com/pages/Dicks-Sporting-Goods/228344007206084. "Fortuity Shopping and Retail." (Manhattan, KS). Digital Photo. https://www.facebook.com/pages/Fortuity/188327921195429. Accessed: 18 June 2014.

Figure 02

Tudor, Libby. 2014. Proposed Spaces for New Mixed-Use Development to be Implemented. Source Data: Hahn. GIS Data "Buildings." Accessed: 6 June 2014.

Figure 03

Tudor, Libby. 2014. Proposed Building Idea with Retail and Parking. Source Data: Prudenti, Richard. 2014. Varney's Parking Lot (Manhattan, KS). Digital Photo

Pearl Street Comparison

Map 2.4a

"Pearl Street Mall Has 31% More Retail Than Aggieville" Erin Wilson: w4 EW07 300 PearlandVille.PDF

Wilson, Erin. 2014. Pearl Street Mall Business Demographics. City of Boulder GIS Data. "Buildings," "Parcels." Retrieved from https://bouldercolorado.gov/open-data/tag/gis. Accessed 16 June 2014. Source data: Downtown Boulder. Accessed http://www.boulderdowntown.com/shopping. 18 June 2014. Data edited in ArcGIS, Adobe Illustrator, and Adobe InDesign.

Figure 2

Wilson, Erin. 2014. Aggieville's Business Demographics. Source data: Riley County GIS. "RLCo_PAarcels_Mar2009," "Buildings". Accessed via KSU course materials. Accessed 1 June 2014. Source data: Infogroup, Inc. (2014). Map Search, Manhattan, KS bounded by Bluemont Avenue, 14th Street, 10th Street, and Fremont Street. Retrieved June 1, 2014, from ReferenceUSA database. Data edited in ArcGIS, Adobe Photoshop, and Adobe InDesign.

Figure 3

Wilson, Erin. 2014. Pearl Street Mall Businesses. Source data: Downtown Boulder. Accessed http://www.boulderdowntown.com/shopping. 19 June 2014. Data edited in Adobe Illustrator and InDesign. Wilson, Erin. 2014. "Infographics." Digital media ed. with Illustrator.

Figure 4

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Map 2.4b

"Opportunities for Aggieville to Adopt Pearl Street Mall Model" Erin Wilson: w4 EW08 0 PearlModel.PDF

Figure 1

Wilson, Erin. 2014. Pearl Street Mall Street View. Source image: Google Earth Boulder, Colorado. 40d01'04.58"N 105d16'47.53"W. Accessed 19 June 2014.

Figure 2

Wilson, Erin. 2014. Changing Moro Street. Source image: Prudenti, Richard Dean. Moro Street. Image edited with Adobe Illustrator and Adobe InDesign.

Figure 3

Wilson, Erin. 2014. 2nd Level Aggieville Cinema Suggestion. Source Image: Google Sketchup Model. Image edited with Adobe Photoshop.

Map 2.4c

"A Balanced Aggieville"

Erin Wilson: w4 EW09 150 PearlandVille.PDF

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Business Hours of Operation

Map 2.5a

"Most Aggieville Businesses Operate Between 11:00 AM - 1:00 AM" Erin Wilson: w3 EW04 600 VilleHours.PDF

Figure 1

Wilson, Erin. 2014. Monday Hours in Aggieville. Source data: Wilson Aggieville Business Database. Data edited in Microsoft Excel, Adobe Illustrator, and Adobe InDesign.

Figure 2

Wilson, Erin. 2014. Average Weekday Hours in Aggieville. Source data: Wilson Aggieville Business Database. Data edited in Microsoft Excel, Adobe Illustrator, and Adobe InDesign.

Figure 3

Wilson, Erin. 2014. Saturday Hours in Aggieville. Source data: Wilson Aggieville Business Database. Data edited in Microsoft Excel, Adobe Illustrator, and Adobe InDesign.

Figure 4

Wilson, Erin. 2014. Sunday Hours in Aggieville. Source data: Wilson Aggieville Business Database. Data edited in Microsoft Excel, Adobe Illustrator, and Adobe InDesign.

Figure 5

Wilson, Erin. 2014. Aggieville at 7:00 AM. Source data: Wilson Aggieville Business Database. Wilson GIS Data. "AggievilleBusinesses." Riley County GIS Data. "Buildings." Accessed via KSU course materials. Accessed 12 June 2014. Data edited in ArcGIS, Adobe Illustrator, and Adobe InDesign.

Figure 6

Wilson, Erin. 2014. Aggieville at 11:00 AM. Source data: Wilson Aggieville Business Database. Wilson GIS Data. "AggievilleBusinesses." Riley County GIS Data. "Buildings." Accessed via KSU course materials. Accessed 12 June 2014. Data edited in ArcGIS, Adobe Illustrator, and Adobe InDesign.

Figure 7

Wilson, Erin. 2014. Aggieville at 8:00 PM. Source data: Wilson Aggieville Business Database. Wilson GIS Data. "AggievilleBusinesses." Riley County GIS Data. "Buildings." Accessed via KSU course materials. Accessed 12 June 2014. Data edited in ArcGIS, Adobe Illustrator, and Adobe InDesign.

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Map 2.5b

"Eastern Half of Moro Street Left Hungry for Morning Business" Erin Wilson: w3 EW02 100 VilleHoursOpportunities.PDF

Figure 1

Wilson, Erin. 2014. Location of Current Morning Businesses with Areas of Concentration and Opportunity. Source data:

- Wilson Aggieville Business Database. Wilson GIS Data.
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Map 2.5c

"A New Morning on Moro Street"

Erin Wilson: w3 EW06 100 VilleMorningStrategy.PDF

Figure 1

Wilson, Erin. 2014. A New Morning on Moro Street. Source data:

- Wilson Aggieville Business Database. Wilson GIS Data.
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- Wilson, Erin. 2014. Aggieville Business Infographics. Digital media edited with Adobe Illustrator.

3. Perceptions and Identity

Visual Cues, Entrances, Edges, and Landmarks

Map 3.1a

"Focal Points Integral to Aggieville's Unique Identity" Richard Prudenti: w2 RDP01 200 VisualCues.PDF

Figure 1

Aggieville Identity. Riley County GIS, "RLCo_Parcels_Mar2009," Accessed June 5, 2014. LAR 646 course data set derived from Riley County.

Figure 2

Prudenti, Richard Dean. 2014 Bluemont Avenue and 11th Street, northeast Aggieville (Manhattan, Kansas). Digital Photographs.

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Prudenti, Richard Dean. 2014Bluemont Avenue and 11th Street, north Aggieville (Manhattan, Kansas). Digital Photographs.

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Prudenti, Richard Dean. 2014 Bluemont Avenue and 11th Street, north-central Aggieville (Manhattan, Kansas). Digital Photographs.

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Prudenti, Richard Dean. 2014 Laramie and 14th Street (Manhattan, Kansas). Digital Photographs.

Figure 6

Prudenti, Richard Dean. 2014 Laramie and Manhattan Avenue (Manhattan, Kansas). Digital Photographs.

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Prudenti, Richard Dean. 2014 (Manhattan, Kansas). Digital Photographs.

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Prudenti, Richard Dean. 2014 Laramie and 11th Street (Manhattan, Kansas). Digital Photographs.

Figure 9

Prudenti, Richard Dean. 2014 Fremont and Manhattan Avenue (Manhattan, Kansas). Digital Photographs.

Figure 10

Prudenti, Richard Dean. 2014 Fremont and 11th Street (Manhattan, Kansas). Digital Photographs.

Map 3.1b

"Open Areas Offer Opportunities for Defining Visual Border" Richard Prudenti: w2 RDP02 200 Opportunity.PDF

Figure 1

Aggieville Identity. Riley County GIS, "RLCo_Parcels_Mar2009," Accessed June 5, 2014. LAR 646 course data set derived from Riley County.

Figure 2

Prudenti, Richard Dean. 2014. Building Edge Near Moro and 12th Streets (Manhattan, Kansas) Digital Photographs.

Figure 3

Prudenti, Richard Dean. 2014. Strong Street Enclosure at Moro Street and Manhattan Avenue (Manhattan, Kansas). Digital Photographs.

Figure 4

Prudenti, Richard Dean. 2014. Sole Billboard On South Side of Varney's Book Store (Manhattan, Kansas). Digital Photographs.

Concrete Pavers Introduced, Using Material Change To Define Business District (Manhattan, Kansas) Prudenti, Richard Dean. 2014. Digital Photographs.

Figure 6

Prudenti, Richard Dean. 2014. New and Old Pilasters At One Of Northwest Entrances To Aggieville (Manhattan, Kansas). Digital Photographs.

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Prudenti, Richard Dean. 2014. Year-Round Event Banner At Moro Street and 12th Street (Manhattan, Kansas) Digital Photographs.

Figure 8. Prudenti, Richard Dean. 2014. Varney's Marquee As Principle Landmark In Aggieville Business District (Manhattan, Kansas). Digital Photographs.

Figure 9

Prudenti, Richard Dean. 2014. Portal to Aggieville (Manhattan, Kansas). Digital Photographs.

Figure 10

Prudenti, Richard Dean. 2014. Pedestrian Entrance at Moro and 11th Streets (Manhattan, Kansas). Digital Photographs.

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"Stronger Visual Cues Would Clarify Aggieville's Border" Richard Prudenti: w2 RDP03 200 NewCues.PDF

Figure 1

Aggieville Identity. Riley County GIS, "RLCo_Parcels_Mar2009," Accessed June 5, 2014. LAR 646 course data set derived from Riley County.

Figure 2

Prudenti, Richard Dean. 2014. Campus/Community Arch, Beach Museum of Art (Manhattan, Kansas). Digital Photograph.

Figure 3

Prudenti, Richard Dean. 2014. City Park, Central Manhattan. Digital Photograph.

Figure 4

Prudenti, Richard Dean. 2014. Redevelopment District, Southwest Manhattan (Manhattan, Kansas). Digital Photograph.

Figure 5

Prudenti, Richard Dean. 2014. Manhattan Christian College, West of Aggieville (Manhattan, Kansas). Digital Photograph.

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Prudenti, Richard Dean. 2014. Kansas State University, looking from Bluemont Avenue (Manhattan, Kansas). Digital Photograph.

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Prudenti, Richard Dean. 2014. Kansas State University, Beach Museum of Art, from Anderson Avenue (Manhattan, Kansas). Digital Photograph.

Figure 8

Prudenti, Richard Dean. 2014. Kansas State University, near Alumni Center, off Anderson Avenue (Manhattan, Kansas). Digital Photograph.

Figure 9

Prudenti, Richard Dean. 2014. Hilton Garden Inn, Southwest Manhattan (Manhattan, Kansas). Digital Photograph.

Figure 10

Prudenti, Richard Dean. 2014. Statue, traffic circle along Bluemont Avenue, seven blocks east of Aggieville (Manhattan, Kansas). Digital Photograph.

Visibility, Awareness, and Perceptions

Map 3.2a

"Businesses on Manhattan Avenue and Moro Street Have Stronger Online Presence"

Jared Sickmann: w3 JS01 200 Advertisement.PDF

Figure 1.1

Sickmann, Jared. 2014. Types of Advertisement. Bar graph created in Adobe Illustrator.

Figure 1.2

Ruskamp, Parker. 2014. Signage for Aggieville Business District. Digital Photograph.

Figure 1.3

Sickmann, Jared. 2014. Storefront Signage. Digital Photograph altered in Adobe Photoshop.

Figure 1.4

Sickmann, Jared. 2014. Signage for Aggieville Businesses. Hahn GIS Data, "RLCo StreetCL," "BLDGFTPRNTS." Accessed June 10, 2013.

Sickmann, Jared. 2014. Signage for Aggieville Businesses.
 Diagram in Adobe Illustrator.

Map3.2b

"Identity of Aggieville is Overlooked as Individuals Pass on Bluemont and Anderson Avenues"

Jared Sickmann: w3 JS02 200 PresenceofAggieville.PDF

Figure 2.1

Sickmann, Jared. 2014. Presence of Aggieville on Bluemont and Anderson. Hahn GIS Data, "RLCo StreetCL," "BLDGFTPRNTS."

• Sickmann, Jared. 2014. Signage for Aggieville Businesses. Diagram in Adobe Illustrator.

Figure 2.2

Sickmann, Jared. 2014. Visual Access along Anderson Ave. Diagram created in Adobe Illustrator.

Figure 2.3

Sickmann, Jared. 2014. Representation of Aggieville District - Anderson. Digital Photograph.

Figure 2.4

Sickmann, Jared. 2014. Visual Access along Bluemont Ave. Diagram created in Adobe Illustrator...

Figure 2.5

Sickmann, Jared. 2014. Representation of Aggieville District – Bluemont. Digital Photograph.

Map3.2c

"Improving Identity of Aggieville by Creating a Defined Urban Edge" Jared Sickmann: w3 JS03 200 Increasing Density. PDF

Figure 3.1

Sickmann, Jared. 2014. Increasing Building Density. Hahn GIS Data, "RLCo StreetCL," "BLDGFTPRNTS." Accessed June 10, 2013.

• Sickmann, Jared. 2014. Increasing Building Density. Diagram in Adobe Illustrator.

Figure 3.2

Sickmann, Jared. 2014. Continuous Building Edge Along Bluemont and Anderson. Source Map: Google Earth. Manhattan, KS. 39d 11'09.55"N 96d 34'30.41"W. Accessed June 13, 2014.

 Sickmann, Jared. 2014. Continuous Building Edge Along Bluemont and Anderson. Sketchup 8; Adobe Photoshop.

Figure 3.3

Sickmann, Jared. 2014. Visual Access along Bluemont Ave. Diagram created in Adobe Illustrator..

Map3.3a

"Higher Traffic Volumes Pass by Aggieville Than Downtown" Amanda Kline: w3_AK04_1K_TrafficVolume.PDF

Figure 01

Kline, Amanda, 2014, Traffic Volume Patterns in Manhattan, Source data: Kansas Department of Transportation. 2013. "KDOT Traffic Count City Maps." http://www.ksdot.org/burtransplan/maps/MapCountCities. asp. Accessed 9 June 2014.

Figure 02

Kline, Amanda. 2014. Traffic Volumes Around Aggieville and Downtown. Source data: Riley County. "2010_ riley roads," "BLDGFT-PRNTS." Accessed 2 June 2014. Source data: Kansas Department of Transportation. 2013. "KDOT Traffic Count City Maps." http://www. ksdot.org/burtransplan/maps/MapCountCities.asp. Accessed 9 June 2014.

Map 3.3b

"High Traffic Volumes Create Opportunity for Stronger Aggieville **Identity Along Bluemont Ave."**

Amanda Kline: w3 AK05 300 TrafficOpportunities.PDF

Figure 01

Sickmann, Jared. 2014. Existing Expansive Parking Lots and Chain Stores Along Bluemont Ave (Aggieville, Manhattan, KS). Digital Photo-

Figure 02

Kline, Amanda. 2014. Start of Change and Higher Density Buildings Across Bluemont Ave. (Aggieville, Manhattan, KS). Digital Photograph.

Kline, Amanda. 2014. Visibility and Identity Opportunities for Aggieville. Source data: Riley County. "2010 riley roads," "BLDGFTPRNTS." Accessed 2 June 2014. Source data: Kansas Department of Transportation. 2013. "KDOT Traffic Count City Maps." http://www.ksdot.org/ burtransplan/maps/MapCountCities.asp. Accessed 9 June 2014.

Map 3.3c

"Extension of Dense Building Forms Create Stronger Edges and **Identity Across Bluemont**"

Amanda Kline: w3 AK05 300 TrafficStrategies.PDF

Figure 01

Sickmann, Jared. 2014. Moro St. Buildings with Continuous Urban Edge to Emulate Along Bluemont Ave. (Aggieville, Manhattan, KS). Digital Photograph.

Figure 02

Kline, Amanda. 2014. Higher Building Densities Create a Stronger Urban Edge and Identity for Aggieville. Source data:

- Riley County. "2010 riley roads," "BLDGFTPRNTS." Accessed 2 June 2014.
- Kansas Department of Transportation. 2013. "KDOT Traffic Count City Maps." http://www.ksdot.org/burtransplan/maps/ MapCountCities.asp. Accessed 9 June 2014.

Map 3.4a

"Aggieville has Numerous & Varied Building Forms"

Andrew Holzum: W4_AH01_57_Moro building form comparison.PDF

Holzum, Andrew. 2014. Moro buildings west of 12th street. Source Data: Holzum. 2014. Building façade Moro. Modeled in Sketchup. Edited in Photoshop. Edited June 19, 2014.

Figure 2

Holzum, Andrew. 2014.Moro building form comparison. Source Data: Moore. Images "Moro Street". Edited in Adobe Illustrator. Edited June 19, 2014.

Figure 3

Holzum, Andrew. 2014. Maryland Ave. comparison. Source Data: Google maps. Accessed 2014. Edited in Sketchup and Adobe Photoshop. Edited June 19, 2014.

Map3.4b

"Aggieville Buildings Need Stronger Connection Along Bluemont"
Andrew Holzum: W4 AH02 200 Opportunities for building form.PDF

Figure 4

Holzum, Andrew. 2014. Opportunities for building forms. Source Data: Wilson GIS Data. "BLDGFTPRNTS". Riley County GIS "Parcels." Holzum GIS Data. "Clipped_Buildingfootprint". Edited in Adobe Illustrator June 18, 2014.

Map 3.4c

"Unifying Aggieville Character with Functional Building Form" W4_AH03_200_Development of building form within areas lacking building character.PDF

Figure 5

Holzum, Andrew. 2014. Opportunities for building forms. Source Data: Wilson GIS Data. "BLDGFTPRNTS". Riley County GIS "Parcels." Holzum GIS Data. "Clipped_Buildingfootprint". Edited in Adobe Illustrator June 18, 2014.

Figure 6

Holzum, Andrew. 2014. Potential for new building design. Source: Holzum. 2014. Modeled in Sketchup. Building façade Moro. Modeled in Sketvchup. Edited in Photoshop June 19, 2014.

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"Students' Perception of Aggieville District is Centralized Around Moro Street"

Jared Sickmann: W2_JS01_200_PerceivedDistrict.PDF

Figure 1.1

Sickmann, Jared. 2014. Perceived Aggieville District. Hahn GIS Data, "RLCo StreetCL," "BLDGFTPRNTS." Accessed June 3, 2013.

Figure 1.2

Sickmann, Jared. 2014. Varney's. Digital Photograph.

Figure 1.3

Prudenti, Richard. 2014. Radina's Coffee Shop. Digital Photograph.

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Wilson, Erin. 2014. Varsity Food Truck. Digital Photograph

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"Opportunity to Grow Aggieville Identity"

Jared Sickmann: W2 JS02 200 AggievilleFragmented.PDF

Figure 2.1

Sickmann, Jared. 2014. Fragmented Aggieville. Hahn GIS Data, "RLCo StreetCL," "BLDGFTPRNTS." Accessed June 3, 2013.

Figure 2.2

Sickmann, Jared. 2014. Identity of Perceived Aggieville District. Digital Photograph.

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Sickmann, Jared. 2014. Identity Along Bluemont Avenue. Digital Photograph.

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Sickmann, Jared. 2014. Identity Along Laramie Street. Digital Photograph.

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Jared Sickmann: W2 JS03 200 ImprovingIdentity.PDF

Figure 3.1

Sickmann, Jared. 2014. Fragmented Aggieville. Hahn GIS Data, "RLCo StreetCL," "BLDGFTPRNTS." Accessed June 3, 2013.

Figure 3.2

Sickmann, Jared. 2014. Parking Lot Lacks Identity. Digital Photograph.

Figure 3.3

Sickmann, Jared. 2014. Mixed-use Development and Plaza Creates Identity. Photoshop Rendering. Included images:

- "English: A Street Mural in the Town of Orange, NJ." Richards, Eric. 2013. Courtesy of Wikimedia Commons. Accessed March 4, 2014.
- Own Work. Wikimedia Commons, http://commons.wikimedia.org/ wiki/File:Street Mural.jpg.
- Sickmann, Jared. 2014. Maple Trees (Manhattan, KS). Digital Photograph.
- Sickmann, Jared. 2014. Park Bench. Digital Photograph.
- Sickmann, Jared. 2014. Tall Shrub. Digital Photograph.

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"Moro Street Has the Strongest 'Sense of Place' within Aggieville" Libby Tudor: W2 LT01 200 ContinuousFacade Enclosure.PDF

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Tudor, Libby. 2014. Relationship Between Continuous Facades and Areas of Enclosure. Source Data: Hahn. GIS Data "Buildings." Accessed: June 6, 2014.

Map 3.6b

"Most Unenclosed Areas in Aggieville are Allocated to Parking Lots" Libby Tudor: W2 LT01 200 SurfaceParkingLotArea.PDF

Figure 02

Tudor, Libby. 2014. High Coverage of Surface Lots Deminishes Continuous Building Edge. Source Data: Hahn. GIS Data "Buildings." Accessed: June 6, 2014.

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Libby Tudor: W2 LT01 200 DefineBuildingEdge.PDF

Figure 03

Tudor, Libby. 2014. Removal of Surface Parking Lots to Develope Buildings. Source Data: Hahn. GIS Data "Buildings." Accessed: June 6, 2014.

Figure 04

Tudor, Libby. 2014. Proposed Buildings within Aggieville. Source Data: Hahn. GIS Data "Buildings." Accessed: June 6, 2014.

Map 3.7a

"Varney's, Varsity Truck, and Character of Moro Street are Photographed Often"

Taylor Lininger: W4 TL07 00 Instagram.PDF

Figure 01

Lininger, Taylor. 2014. Landmarks and Locations Popular on Instagram. Source data: Worldc.am. 2013-14. http://worldc.am/id/4bf1f44c3fa220a183f01820. Source map: Lauren Heermann. 2014. A-Ville SketchUp Base.

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"Aggieville Landmarks Not Widely Visible from Bluemont Avenue"
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Lininger, Taylor. 2014. Existing Landmarks in Aggieville. Source map: Lauren Heermann. 2014. A-Ville Sketchup Base.

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Lininger, Taylor. 2014. Varney's Landmark from the Manhattan/Anderson/Bluemont Avenue Intersection. Source map: Lauren Heermann. 2014. A-Ville Sketchup Base.

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Lininger, Taylor. 2014. Varsity Truck Landmark from Bluemont Avenue is Hidden by Buildings. Source map: Lauren Heermann. 2014. A-Ville Sketchup Base.

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"Additional Landmarks Indicate Location of Aggieville"

Taylor Lininger: W6_TL09_00_Indicators.PDF

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Lininger, Taylor. 2014. New Landmarks Along Bluemont and Anderson Avenues. Source map: Lauren Heermann. 2014. A-Ville Sketchup Base.

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Lininger, Taylor. 2014. Landmark at Eastern Corner of Aggieville. Source map: Lauren Heermann. 2014. A-Ville Sketchup Base.

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Lininger, Taylor. 2014. Utilizing Triangle Park as a Landmark Location. Source map: Lauren Heermann. 2014. A-Ville Sketchup Base.

Events and Social Activities

Map 3.8a

"Aggieville Events Activate Life on Moro Street" Lauren Heermann: W4 LH07 3K EventActivity.PDF

Figure 1

Heermann, Lauren. 2014. Aggieville Events Throughout the Year. Illustrator and InDesign image. Sources:

- Pagels, Michael. November 2014. "Homecoming Parade and Pep Rally!" Accessed June 17, 2014. http://www.littleapplepost. com/2013/10/21/homecoming-parade-and-pep-rally/
- Pinterest. 2014. "Aggieville Events." Accessed June 17, 2014. http://www.pinterest.com/aggieville/events/

Figure 2

Heermann, Lauren. 2014. Aggieville Events and Possible Street Activity. Illustrator and InDesign image. Sources:

- Pagels, Michael. November 2014. "Homecoming Parade and Pep Rally!" Accessed June 17, 2014. http://www.littleapplepost. com/2013/10/21/homecoming-parade-and-pep-rally/
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Heermann, Lauren. 2014. Aggieville Events Overall Along Moro Street Activity. Illustrator and InDesign image. Sources:

- Pagels, Michael. November 2014. "Homecoming Parade and Pep Rally!" Accessed June 17, 2014. http://www.littleapplepost. com/2013/10/21/homecoming-parade-and-pep-rally/
- Pinterest. 2014. "Aggieville Events." Accessed June 17, 2014. http://www.pinterest.com/aggieville/events/

Map 3.8b

"Lively Streets Could Expand Along North and South Streets Adiacent to Moro"

Lauren Heermann: W4 LH08_3K_PedestrianActivityExpansion.PDF

Figure 1

Heermann, Lauren. 2014. Pedestrian Life Expansion along Streets Adjacent to Moro. Photoshop and InDesign image. Included images:

- Heermann, Lauren. 2014. Manhattan Avenue. Digital photograph.
- · Heermann, Lauren. 2014. Moro Street North. Digital photograph.
- · Heermann, Lauren. 2014. More Street South. Digital photograph.

Figure 2

Heermann, Lauren. 2014. Pedestrian Life Expansion South to City Park and North to Bluemont Avenue. Source map: Google Earth. Manhattan, Kansas. 96□11'00.58" N 96□34'31.24" W. Accessed 18 June 2014.

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"Interactive Street Fronts Adjacent to Moro Street Can Accentuate Social Experiences"

Lauren Heerman: W4 LH09 3K PedestrianInteraction.PDF

Figure 1

Heermann, Lauren. 2014. Aggieville and Zone of Lower Property Value and Larger Parcel Sizes. Source data:

- ManhattanRegStudyAreaGeodBase GIS. "Aggieville Prop Values."
- Wilson, Erin, 2014. 2014 Building Footprints. Source data: 2009 AggievilleGeodBase GIS "BLDGFTPRNTS."

Figure 2

Heermann, Lauren. 2014. Pedestrian Social Experiences Feeding Off of Moro Street to Bluemont Avenue. Photoshop and InDesign image. Source map: Google Street View. Manhattan, Kansas. 39°11'09.90" N 96°34'28.97"W. Accessed 19 June 2014.

Figure 3

Heermann, Lauren. 2014. Pedestrian Social Experiences Feeding Off of Moro Activity to Manhattan Avenue. Illustrator and InDesign image. Source map: Google Street View. Manhattan, Kansas. 39°11'06.99" N 96°34'34.96" W. Accessed 19 June 2014.

Map 3.9a

"Night-Life and Events are the Talk of Aggieville"

Taylor Lininger: W3 TL04 300 TwitterTalk.PDF

Figure 01

Lininger, Taylor. 2014. Aggieville is known for night-life. Source data: Twitter. 2013-14. https://twitter.com/search?f=realtime&q=Aggieville%20near%3A%22Manhattan%2C%20 KS%22%20within%3A15mi%20since%3A2013-06-09%20 until%3A2014-06-09&src=typd.

Figure 02

Lininger, Taylor. 2014. Students are tweeting the most. Source data: Twitter. 2013-14. https://twitter.com/search?f=realtime&q=Aggieville%20near%3A%22Manhattan%2C%20 KS%22%20within%3A15mi%20since%3A2013-06-09%20 until%3A2014-06-09&src=typd.

Figure 03

Lininger, Taylor. 2014. Varsity Donuts, Kite's, and Aggie Station are nodes of virtual activity. Source data: Twitter. 2013-14. https://twitter.com/search?f=realtime&q=Aggieville%20 near%3A%22Manhattan%2C%20KS%22%20within%3A15mi%20 since%3A2013-06-09%20until%3A2014-06-09&src=typd. Source data: Riley County GIS. "BLDGFTPRNTS." June 2014.

Map 3.9b

"Aggieville Phenomenon Affect Twitter Topics"

Taylor Lininger: W2 TL05 00 SocialPhenomenon.PDF

Figure 01

Lininger, Taylor. 2014. There are many things to talk about in the summer. Source data: Twitter. 2013-14. https://twitter.com/search?f=realtime&q=Aggieville%20near%3A%22Manhattan%2C%20 KS%22%20within%3A15mi%20since%3A2013-06-09%20 until%3A2014-06-09&src=typd.

Figure 02

Lininger, Taylor. 2014. Few tweets sent during breakfast hours. Source data: Twitter. 2013-14. https://twitter.com/search?f=realtime&q=Aggieville%20near%3A%22Manhattan%2C%20KS%22%20within%3A15mi%20since%3A2013-06-09%20until%3A2014-06-09&src=typd.

Figure 03

Lininger, Taylor. 2014. Townies come out when the students are away. Source data: Twitter. 2013-14. https://twitter.com/search?f=realtime&q=Aggieville%20near%3A%22Manhattan%2C%20KS%22%20within%3A15mi%20since%3A2013-06-09%20until%3A2014-06-09&src=typd.

Map 3.9c

"An Encompassing Aggieville Brand on Moro Street"

Taylor Lininger: W3 TL06 00 AggievilleBrand.PDF

Lininger, Taylor. 2014. Only businesses along Moro Street are part of the current Aggieville brand. Source data: Twitter. 2013-14. https://twitter.com/search?f=realtime&q=Aggieville%20 near%3A%22Manhattan%2C%20KS%22%20within%3A15mi%20 since%3A2013-06-09%20until%3A2014-06-09&src=typd. Source map: Lauren Heermann. 2014. A-Ville SketchUp Base.

4. Building Stock and Infrastructure

Historical Look

Map 4.1a

"Evolution of Aggieville"

Jared Sickmann: W4 JS01 Timeline AggievillesHistory.PDF

Figure 1.1

Sickmann, Jared. 2014. Historic foundation of Aggieville. Diagram created in Adobe InDesign. Sources:

- Walter, Dan. 2001. Aggieville 1889 1989: 100 Years of the Aggieville Tradition. Manhattan, KS: Able Printing Co.
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Figure 1.2

"11th Street Looking West." 1887. KSU Archives. Reproduced from Dan Walter. 2001. In Aggieville 1889 – 1989: 100 Years of the Aggieville Tradition. Manhattan, KS: Able Printing Co.

Figure 1.3

"First Brick Buildign." 1909. Riley County Historical Museum. Reproduced from Dan Walter. 2001. In Aggieville 1889 – 1989: 100 Years of the Aggieville Tradition. Manhattan, KS: Able Printing Co.

Figure 1.4

"Trolley Line." Year unknown. Riley County Historical Museum. Reproduced from Dan Walter. 2001. In Aggieville 1889 – 1989: 100 Years of the Aggieville Tradition. Manhattan, KS: Able Printing Co.

Figure 1.5

"11th Street Looking West." 1989. Oliver Kaubisch. Reproduced from Dan Walter. 2001. In Aggieville 1889 – 1989: 100 Years of the Aggieville Tradition. Manhattan, KS: Able Printing Co.

Figure 1.6

"Campus Book Store." 1950s. Riley County Historical Museum. Reproduced from Dan Walter. 2001. In Aggieville 1889 – 1989: 100 Years of the Aggieville Tradition. Manhattan, KS: Able Printing Co.

Figure 1.7

"J.L. Johns building." Year unknown. Jim Johns Family. Reproduced from Dan Walter. 2001. In Aggieville 1889 – 1989: 100 Years of the Aggieville Tradition. Manhattan, KS: Able Printing Co.

Architectural Character and Materials

Map 4.2a

"Aggieville Character Defined Through Building Characteristics" Andrew Holzum: W3 AH01 300 Building Height rating.PDF

Figure 01

Holzum, Andrew. 2014. Building Height rating. Source Data: Wilson GIS Data. "AggievilleBusinessBaseData" "Parcels." Edited in ArcGIS June 10, 2014.

Figure 02

Holzum, Andrew. 2014. Building Façade rating. Source Data: Wilson GIS Data. "AggievilleBusinessBaseData" "Parcels." Edited in ArcGIS June 10, 2014.

Model. Edited in Adobe Photoshop and Adobe Illustrator. Edited June 6, 2014.

Map 4.3a

"Defining Aggieville's Historic Architectural Character"

Jared Sickmann: W4 JS01 200 Aggieville's Character. PDF

Figure 1.1

Sickmann, Jared. 2014. Building facades along Moro Street looking north. Digital photographs adjusted in Adobe Photoshop.

Sickmann, Jared. 2014. Building facades between 11th and 12th looking south. Digital photographs adjusted in Adobe Photoshop.

Figure 1.3

Wilson, Erin. 2014. Building façade on Manhattan looking east. Digital photographs altered in Adobe Photoshop.

Figure 1.4

Heerman, Lauren. 2014. Building façade on Manhattan looking west. Digital photographs altered in Adobe Photoshop.

Sickmann, Jared. 2014. Buildings resembling architectural character. Hahn GIS Data, "RLCo StreetCL," "BLDGFTPRNTS." Accessed June 10, 2013. Diagram in Adobe Illustrator.

Map 4.3b

"Maintaining Historic Character With Future Development" Jared Sickmann: W4 JS02 200 PresenceofCharacter.PDF

Figure 2.1

Sickmann, Jared. 2014. Maintaining historic character with future development. Hahn GIS Data, "RLCo_StreetCL," "BLDGFTPRNTS." Diagram in Adobe Illustrator.

Figure 2.2

Sickmann, Jared. 2014. Older buildings along Moro providing examples of historic character. Digital photograph adjusted in Adobe InDesign.

Figure 2.3

Sickmann, Jared. 2014. Area of business district with no resemblance to Aggieville's character. Digital Photograph.

Map 4.3c

"Architectural Character of Aggieville to Be Maintained Along Manhattan and Moro"

Jared Sickmann: W4_JS02_200_ResemblingCharacter.PDF

Figure 3.1

Sickmann, Jared. 2014. Maintaining historical character while increasing building height. Hahn GIS Data, "RLCo_StreetCL," "BLDGFTPRN-TS." Accessed June 10, 2013. Diagram in Adobe Illustrator.

Figure 3.2

Sickmann, Jared. 2014. Resembling character while increasing building height. Diagram created in Adobe Illustrator.

Figure 3.3

Sickmann, Jared. 2014. Example of newly constructed building. Digital Photograph.

Peer District Comparison

Map 4.4a

"Compared to Peer College Entertainment Districts, Aggieville is Most Compact:

Libby Tudor: W3 LT04 300 CollegeTownComparison.PDF

Figure 01

Tudor, Libby. 2014. Moro street's business district in relationship to other college districts. Source Data: Hahn. GIS Data "Buildings." Accessed: June 6, 2014.

Map 4.4b

"Aggieville has Potential to Expand and Redevelop within its Compact District"

Libby Tudor: W2_LT05_300_AggievilleExpansionV2.PDF

Figure 02

Tudor, Libby. 2014. Opportunity to Expand within Aggieville District. Source Data: Hahn. GIS Data "Buildings." Accessed: June 6, 2014.

Map 4.4c

"New Buildings Help Increase Building Density Throughout Aggieville"

Libby Tudor: W3 LT06 NewHighDensityBuildingsV2.PDF

Figure 03

Tudor, Libby. 2014. New High Density Buildings Throughout Aggieville. Source Data: Hahn. GIS Data "Buildings." Accessed: June 6, 2014.

Streetscape and Amenities

Map 4.5a

"Aggieville Deficient in Pedestrian-Friendly Instructural Amenities"
Parker Ruskamp: W2 PR01 200 Amenities.PDF

Figure 01

Ruskamp, Parker. 2014. Aggieville District Pedestrian-Scale Amenity Infrastructure. Source data:

- Google Earth. Manhattan, Kansas. 39°11'06.34"N 96°34'41.81"W. Accessed 29 May 2014.
- Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "RLCo_StreetCL", "RLCo_Parcels_ Mar2009", "BuildingFootprint". Accessed 4 June 2014.

Figure 02

Ruskamp, Parker. 2014. Poyntz Avenue District Pedestrian-Scale Amenity Infrastructure. Source data:

- Google Earth. Manhattan, Kansas. 39°10'41.88"N 96°33'54.28"W. Accessed 2 June 2014.
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Map 4.5b

"Aggieville Lacks Adequate Amenities"

Parker Ruskamp: W2 PR02 200 Amenities.PDF

Figure 01

Ruskamp, Parker. 2014. Aggieville District Pedestrian-Scale Amenity Infrastructure. Source data:

- Google Earth. Manhattan, Kansas. 39°11'06.34"N 96°34'41.81"W. Accessed 29 May 2014.
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Ruskamp, Parker. 2014. Amenity Frequency in Aggieville and Poyntz and Recommended by Project for Public Spaces. Source data:

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Map 4.5c

"Additional Amenity Infrastructure Creates a More Comfortable **Pedestrian Environment**"

Parker Ruskamp: W2 PR03 100 ProposedAmenities.PDF)

Figure 01

Ruskamp, Parker. 2014. Aggieville District Existing and Proposed Amenity Infrastructure. Source data:

- Google Earth. Manhattan, Kansas. 39°11'06.34"N 96°34'41.81"W. Accessed 29 May 2014.
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Map 4.6a

"Aggieville Doesn't Meet ADA Requirements"

Ally Balderston: W4 AB07 150 ADAAccessiblity.PDF

Balderston, Allison. 2014. ADA Accessibility. Source map: Google Earth. Manhattan, Kansas. 39d11'08.94"N 96d34'29.20"W. Access June 20, 2014.

Figure 02

Balderston, Allison. 2014. Inaccessible Business Entrance. Computer Graphic using Photoshop.

Figure 03

Balderston, Allison. 2014. Uneven Side Bricks. Computer Graphic using Photoshop.

Figure 04

Balderston, Allison. 2014. Missing Paver and Tactile Paving. Computer Graphic using Photoshop.

Figure 05

Balderston, Allison. 2014. Sidewalk Obtrusions. Computer Graphic using Photoshop.

Lighting and Security

Map 4.7a

"Alleys and Adjacent Neighborhoods Lack Sufficient Lighting" Parker Ruskamp: W3 PR04 200 Lighting.PDF

Figure 01

Ruskamp, Parker. 2014. Aggieville at Night. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "World Imagery". Accessed 9 June 2014.

Map 4.7b

"Violent Crimes in Neighborhoods Adjacent to Aggieville Generally Occur in Poorly-Lit Areas"

Parker Ruskamp: W3 PR05 200 ViolentCrimes.PDF

Figure 01

Ruskamp, Parker. 2014. Violent Crimes in Relation to Lighting in and Around Aggieville. Source data:

- Bair Analytics. 2014. "RAIDS Online." Accessed 11 June 2014. http://raidsonline.com/.
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Map 4.7c

"Additional Lighting Around Aggieville May Reduce Crime"

Parker Ruskamp: W3 PR06 200 ProposedLighting.PDF

Figure 01

Ruskamp, Parker. 2014. Existing and Proposed Lighting in and Around Aggieville. Source data:

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Alleys and Service Areas

Map 4.8a

"Spaces of High Enclosure Contain a High Amount of Dumpsters and Utilities"

Wesley Moore: W3 WM04 150 Enclosure.PDF

Figure 01

Moore, Wesley. 2014. "Aggieville Enclosure Key."

Figure 02

Moore, Wesley. 2014. "Aggieville Enclosure." Source Data: Google Earth.

Map 4.8b

"Opportunities for Visual Screening and Odor Reduction in Aggieville Alleys"

Wesley Moore: W3_WM05_150_Enclosure.PDF

Figure 01

Moore, Wesley. 2014. "Aggieville Screening Opportunities." Source Data: Google Earth.

Figure 02

Moore, Wesley. 2014. "Aggieville Venting Opportunities." Source Data: Google Earth.

Map 4.8c

"Improving the Sight and Smell of Aggieville Alleys"

Wesley Moore: W3 W<06 150 Enclosure.PDF

Figure 01

Moore, Wesley. 2014. "Alley Lighting." Source Data: Google Earth.

Figure 02

Moore, Wesley. 2014. "Alley Screen Walls." Source Data: Google Earth.

Map 4.9a

"Dumpsters Make Aggieville Alleyways and Outdoor Dining Spaces Smell Bad"

Wesley Moore: W2 WM01 100 Dumpsters.PDF

Figure 01

Moore, Wesley. 2014. "Aggieville Dumpsters." Source Data: Google Earth and first-hand observation.

Map 4.9b

"Dumpsters Are too Close to Pedestrian Circulation"

Wesley Moore: W2 WM02 100 Dumpsters.PDF

Figure 02

Sickmann, Jared. 2014. "Varsity Truck Dumpsters." Digital photograph.

Figure 03

Sickmann, Jared. 2014. "Bluestem/Subway Dumpsters." Digital photograph.

Figure 04

Moore, Wesley. 2014. "Smell Range." Source Data: Google Earth and first-hand observation.

Map 4.9c

"Consolidate and Separate Waste Systems to Reduce Smell"

Wesley Moore: W2 WM03 100 Dumpsters.PDF

Figure 05

Moore, Wesley. 2014. "Separate Waste."

Figure 06

Moore, Wesley. 2014. "Waste Consolidation." Source Data: Google Earth and first-hand observation.

Map 4.10a

"Lawrence's Mass. Street Consolidates and Screens Dumpsters and Has Many Trees"

Wesley Moore: W3(4) WM07 150 Enclosure.PDF

Figure 01

Moore, Wesley. 2014. "Lawrence Dumpsters and Trees." Source Data: Google Earth. accessed 20 June 2014.

Figure 02

Moore, Wesley. 2014. "Aggieville Enclosure." Source Data:

- Google Earth. Accessed 20 June 2014.
- Image 1-4: Google Streets. 2014. "Lawrence Kansas." Accessed 18 June 2014.

Map 4.10b

"Aggieville Could Implement Refuse Management Systems Used by Lawrence or Seattle"

Wesley Moore: W3(4)_WM08_150_Enclosure.PDF

Figure 01

Moore, Wesley. 2014. "Lawrence Precedent." Source Data: Google Earth. accessed 20 June 2014.

Figure 02

Moore, Wesley. 2014. "Seattle Precedent." Source Data:

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Map 4.10c

"Two Strategies for Cleaner, More Pleasant Alleys"

Wesley Moore: W3(4)_WM09_150_Enclosure.PDF

Figure 01

Moore, Wesley. 2014. "Lawrence Collaboration." Source Data: Google Earth.

Moore, Wesley. 2014. "Seattle Collaboration." Source Data: Google Earth.

Stormwater Run-off

Map 4.11a

"Impermeable Surfaces Dominate Aggieville"

Ryan Albracht: W2 RA01 300 ImpermeableSurface.PDF

Albracht, Ryan. 2013. Impermeable Surfaces. Source data:

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Map 4.11b

"Most Downspouts Drain onto Impermeable Surfaces"

Ryan Albracht: W2 RA02 200 Downspouts.PDF

Figure

Albracht, Ryan. 2013. Downspouts. Source data:

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Map 4.11c

"Potential Collection of Stormwater"

Ryan Albracht: W2 RA03 200 WaterCollection.PDF

Figure

Albracht, Ryan. 2013. Water Collection. Source data:

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Map 4.12a

"Majority of Aggieville is Characterized by Impermeable Roofs and

Beth Krehbiel: W2 BK01 2214 StormwaterDownspouts.PDF

Figure 01

Krehbiel, Beth. 2014. Aggieville Downspouts Draining to Subsurface Pipes. Source data: Riley County GIS. "BLDGFTPRINTS," "Road network," "strm," "strmlines." Accessed via KSU course materials. Accessed July 14, 2014. Data edited in ArcGIS, Adobe Illustrator and Adobe InDesign.

Map 4.12b

"Stormwater from Downspouts Receive Insufficient Treatment: Beth Krehbiel: W2 BK02 DrainageDilemma.PDF

Figure 01

Krehbiel, Beth. 2014. Aggieville Watersheds. Source data: Riley County GIS. "BLDGFTPRINTS," "Road network," "strm," "strmlines." Accessed via KSU course materials. Accessed July 14, 2014. Data edited ArcGIS, Adobe Illustrator and Adobe InDesign.

Figure 02

Krehbiel, Beth. 2014. Downspout Examples. Source data: "Downspouts." 2014. Photography by Beth Krehbiel. Modified in Adobe Photoshop, Adobe Illustrator and Adobe InDesign.

Figure 03

Krehbiel, Beth. 2014. Alleyway Stormwater. Source data: "Alleyway." 2014. Photography by Beth Krehbiel. Modified in Adobe Photoshop, Adobe Illustrator and Adobe InDesign.

Map 4.12c

"Ecological Corridors as Stormwater Treatment Alternative" Beth Krehbiel: W2 BK03 2K AggievilleWatershed.PDF

Krehbiel, Beth. 2014. Ecological Opportunity Corridors. Source data: Riley County GIS. "BLDGFTPRINTS," "Road network," "strm," "strmlines." Accessed via KSU course materials. Accessed July 14, 2014. Data edited in ArcGIS, Adobe Illustrator and Adobe InDesign.

Figure 02

Krehbiel, Beth. 2014. Alleyway Ecological Opportunity. Source data: "Alleyway." 2014. Photography by Beth Krehbiel. Modified in Adobe Photoshop, Adobe Illustrator and Adobe InDesign.

Map 4.13a

"Little Surface Stormwater Enters Aggieville From Adjacent Areas" Ryan Albracht: W3 RA01 10,000 | 300 Watersheds.PDF

Figure 01

Albracht, Ryan. 2014. Manhattan Watershed. Source data:

- Riley County GIS. "MRSA 10m HS, MRSA 10m EL, WaterbodyRileyCounty, BLDGFTPRNTS, hydrology, RLCo Creeks" Accessed via KSU course materials. Accessed May 16, 2014.
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Figure 02

Albracht, Ryan. 2014. Aggieville Watershed. Source data: Riley County GIS. "BLDGFTPRNTS, Road network, strm, strmlines, Floodplain" Accessed via KSU course materials. Accessed May 16, 2014. Modified in Adobe Illustrator and Adobe InDesign.

Map 4.13b

"Aggieville Stormwater Drainage Relies on Two Major Pipes" Ryan Albracht: W3 RA02 600 FloodHazard.PDF

Figure 01

Albracht, Ryan. 2014. Flood Hazard. Source data: Riley County GIS. "BLDGFTPRNTS, network, strm, strmlines" Accessed via KSU course materials. Accessed May 16, 2014. Modified in Adobe InDesign.

Figure 02

Albracht, Ryan. 2014. Spillway. Photography

Map 4.13c

"Several Strategies Can Reduce the Risk of Aggieville Flooding Ryan Albracht: W3 RA03 1K Redirecting.PDF

Figure 01

Albracht, Ryan. 2014. Redirecting. Source data: Riley County GIS. "BLDGFTPRNTS, network, strm, strmlines, WaterbodyRileyCounty" Accessed via KSU course materials. Accessed May 16, 2014. Modified in Adobe InDesign.

5. Parking and Transportation

Parking

Map 5.1a

"Existing Aggieville Parking Quantity is Comparable to Suburban District Parking"

Lauren Heermann: W3_LH04_3K_ParkingDemand.PDF

Figure 1

Heermann, Lauren. Parking Needs Based on Business Type and Floor Area Square Footage. 11 June, 2014. Sources;

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Figure 2

Heermann, Lauren. Suburban Versus Urban Parking. 11 June, 2014. InDesign Image.

Map 5.1b

"Aggieville Parking Does Not Follow Urban Parking Trends"
Lauren Heermann: W3 LH05 3K ParkingStructureTrends.PDF

Figure 3

Heermann, Lauren. Regional Parking Structures of Interest. 11 June, 2014. Photoshop and InDesign Image.

Figure 4

Heermann, Lauren. Aggieville's Parking Expanses with Opportunity Areas for a Parking Structure. 11 June, 2014. Photoshop and InDesign Image. Source: Wilson, Erin, 2014. 2014 Building Footprints. Source data: 2009 AggievilleGeodBase GIS "BLDGFTPRNTS."

Figure 5

Heermann, Lauren. The Good and the Bad of Urban Parking Trends. 11 June, 2014. Photoshop and InDesign Image. Sources:

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Map 5.1c

"Urban Parking Structures Create Space for Commercial Development"

Lauren Heerman: W3_LH06_3K_ParkingStructueAlternatives.PDF

Figure 6

Heermann, Lauren. Suburban Versus Urban Parking. 11 June, 2014. InDesign Image. Sources:

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Figure 7

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Map 5.2a

"62% of Parking Allocated for Public Use"

Andrew Holzum: W2 AH01 200 Parkinglot Quality.PDF

Figure 1.1

Holzum, Andrew. 2014. Parking lot Quantity. Source Data: Hahn GIS data "Building," "RLCo_Parcel_Mar2009." Accessed June 6, 2014.

Map 5.2b

"Dilemmas Restricting Infill in Aggieville"

Andrew Holzum: W2_AH01_300_Dilemmas_Associated_with_Parking.PDF

Figure 2.1

Holzum, Andrew. 2014. Dilemmas Associated with Parking. Source Data: Hahn GIS data "Building," "RLCo_Parcel_Mar2009." Accessed June 6, 2014

Figure 2.2

Holzum, Andrew. 2014. Opportunities Associated to Parking. Source Data: Hahn GIS data "Building," "RLCo_Parcel_Mar2009." Accessed June 6, 2014

Map 5.2c

"Designated Parking, Increased Walkability"

Andrew Holzum: W2_AH01_200_Strategies_for_Future_Parking_Development.PDF

Figure 3.1

Holzum, Andrew. 2014. Strategies For Future Parking Development. Source Data: Hahn GIS data "Building," "RLCo_Parcel_Mar2009." Accessed June 6, 2014

Bus Transit

Map 5.3a

"ATA Bus Only Provides Two Stops Within One Mile of Aggieville" Parker Ruskamp: W4 PR07 2K BusRoute.PDF

Figure 01

Ruskamp, Parker. 2014. Bus Routes and Stops Throughout Manhattan.

- Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "RLCo_StreetCL", "BuildingFootprint", "Bus Routes", "Bus Stops"
- Riley County Official Website. 2014. "ATA Bus 2014 Fixed Route Brochure 11x17". Accessed 18 June 2014, http://www.rileycountyks.gov/documents/150/11.2013ReviseATAbus.11x17. School-In 201312201228292270.pdf

Figure 02

Ruskamp, Parker. 2014. Routes and Stop Times. Source data: Riley County Official Website. 2014. "ATA Bus – 2014 Fixed Route Brochure 11x17". Accessed 18 June 2014, http://www.rileycountyks.gov/documents/150/11.2013ReviseATAbus.11x17.School-In 201312201228292270.pdf

Map 5.3b

"Current ATA Bus Routes Neglect Some of the Most Densely Populated Areas of Manhattan"

Parker Parker Ruskamp: W4 PR08 2K RoutePopDensity.PDF

Figure 01

Ruskamp, Parker. 2014. Bus Routes and Stops in Relation to

Population Destiny. Source data:

- Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "RLCo_StreetCL", "BuildingFootprint", "Bus Routes", "Bus Stops", "ReprojectedCensus 2010."
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Map 5.3c

"Additional Bus Routes and Stops Can Provide More Convenient Access to Aggieville"

Parker Ruskamp: W4 PR09 2K ProposedBusRoutes.PDF

Figure 01

Ruskamp, Parker. 2014. Bus Routes and Stops in Relation to Population Destiny. Source data:

- Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "RLCo_StreetCL", "BuildingFootprint", "Bus_Routes", "Bus_Stops", "ReprojectedCensus_2010."
- Riley County Official Website. 2014. "ATA Bus 2014 Fixed Route Brochure 11x17". Accessed 18 June 2014, http://www.rileycountyks.gov/documents/150/11.2013ReviseATAbus.11x17. School-In 201312201228292270.pdf

Bicycle Transit

Map 5.4a

"Few Dedicated Bicycle Routes Connect to Aggieville"

Ally Balderston: W2_AB01_3K_BikeTrail.PDF

Figure 01

Balderston, Allison. 2014. Few Dedicated Trail Connection to Aggieville. County of Riley GIS: Source data. "RICo_Parks," "RICo_Builidngs," RICo_Streets." June 3, 2014.

Figure 02

Balderston, Allison. 2014. Limited Trail Connection to Aggieville. Diagram using Adobelllustator.

Map 5.4b

"Aggieville is an Ideal Location for Trail Connectivity"

Ally Balderston: W2 AB02 4K BikeTrail.PDF

Figure 03

Balderston, Allison. 2014. Opportunities and Dilemmas of the Current Trail System. County of Riley GIS: Source data. "RICo_Parks," "RICo_Builidngs," RICo_Streets." June 3, 2014.

Map 5.4c

"A Better Connected Aggieville"

Ally Balderston: W2 AB03 4K BikeTrail.PDF

Figure 04

Balderston, Allison. 2014. A Better Connected Aggieville. County of Riley GIS: Source data. "RICo_Parks," "RICo_Builidngs," RICo_Streets." June 3, 2014.

Figure 05

Balderston, Allison. 2014. Aggieville at the Intersection of Bicyclist Activity. Diagram using Adobe Illustator.

6. Land Use & Redevelopment Potential

Increasing Density

Map 6.1a

"Business Districts have Low Population Densities"

Amanda Kline: W2 AK01 1K PopDenseVSWalkability.PDF

Figure 01

Kline, Amanda. 2014. Population Density Distribution. Source data: Riley County. "RLCo_Census_2000," "Walkability Rings," "District-Boundaries." Accessed 2 June 2014.

Figure 02

Kline, Amanda. 2014. Population Density Distribution Within ¼ Mile. Diagram Bar Chart.

Figure 03

Kline, Amanda. 2014. Population Density Distribution. Source data: Riley County. "RLCo_Census_2000," "Buildings," "DistrictBoundaries," "BLDGFTPRNT." Accessed 2 June 2014.

Map 6.1b

"Single Story Buildings and Parking Lots Provide Opportunities for Higher Densities"

Amanda Kline: W2 AK02 300 DensityOpportunity.PDF

Figure 01

Kline, Amanda. 2014. Opportunities for Higher Population Densities. Source data: Riley County. "RLCo_Census_2000," "Buildings," "BLDGFTPRNT." Accessed 2 June 2014.

Figure 02

Prudenti, Richard. 2014. Locations for Potential Higher Population Densities (Aggieville, Manhattan, KS). Digital Photograph.

Map 6.1c

"Taller Mixed-Use Buildings Would Increase Population Densities"
Amanda Kline: W2 AKO3 300 DensityStrategies.PDF

Figure 01

Kline, Amanda. 2014. Strategies for Providing Residential Unites to Create Higher Population Densities. Source data: Riley County. "RLCo_Census 2000," "Buildings," "BLDGFTPRNT." Accessed 2 June 2014.

Figure 02

Wilson, Erin. 2014. Emulate Mixed-Use Buildings Existing in Aggieville (Aggieville, Manhattan, KS). Digital Photograph.

Figure 03

Kline, Amanda. 2014. Potential Increased Residential Square Footage and Population Density. Source data: Riley County. "RLCo_Census_2000," "Buildings," "BLDGFTPRNT." Accessed 2 June 2014.

Land Use Composition

Map 6.2a

"Vehicular Uses Dominate Outdoor Space in Aggieville" Richard Prudenti: W4 RDP07 300 AutoPedestrianSpaces.PDF

Figures 1, 3-4

Prudenti, Richard. Source: Aggieville Identity. Riley County GIS, "RLCo_Parcels_Mar2009," Accessed June 5, 2014. LAR 646 course data set derived from Riley County. Field data collected through first-hand on-site measurements.

Figure 2

Prudenti, Richard. Field data collected through first-hand on-site measurements. "People Group Vector Clip Art." June 25, 2012. Vector image. Courtesy of Clipshrine.com, public domain. Accessed July 13, 2014. Reproduced from Clipshrine.com, http://www.clipshrine.com/people-group-4252-medium.html. "Green Vector Icon." Date unknown. Vector image. Courtesy of All-free-download.com, public domain. Accessed July 13, 2014. http://all-free-download.com/free-vector/vector-icon/green_icons_268713.html. Images modified by Richard Dean Prudenti.

Map 6.2b

"Outdoor Open Spaces Show High Potential for Expanding Urban Setting"

Richard Prudenti: W4 RDP08 300 UrbanFeatures

Figure 3

Prudenti, Richard. Source: Aggieville Identity. Riley County GIS, "RLCo_Parcels_Mar2009," Accessed June 5, 2014. LAR 646 course data set derived from Riley County. Field data collected through first-hand on-site measurements.

Map 6.2c

"Civic Space, Sidewalk Widenings, Parking Structures Proposed for Aggieville"

Richard Prudenti: W4 RDP09 300 OutdoorSpacePlan.PDF

Figure 5

Prudenti, Richard. Source: Aggieville Identity. Riley County GIS, "RLCo_Parcels_Mar2009," Accessed June 5, 2014. LAR 646 course data set derived from Riley County. Field data collected through first-hand on-site measurements.

Parcel Value

Map 6.3a

"Higher Assessed Property Values and Smaller Parcel Sizes Surround Moro Street"

Lauren Heermann: W2_LH01_1K_HigherPropertyValues.PDF

Figure 1.1

Heermann, Lauren. 2014. Aggieville and Zone of Higher Property Value and Smaller Parcel Sizes. Source data: ManhattanRegStudyAreaGeod-Base GIS. "Aggieville Prop Values."

Figure 1.2

Heermann, Lauren. Zone of Higher Property Value and Smaller Parcel Sizes. 6 June, 2014. Infographic using and modifying the following images:

- Heermann, Lauren. 2014. Aggieville and Zone of Higher Property Value and Smaller Parcel Sizes. Source data: ManhattanRegStudyAreaGeodBase GIS. "Higher_Prop_Values_ Large Parcel Size."
- Heermann, Lauren. 2014. "Moro Street." Digital photograph.

Map 6.3b

"Lower Assessed Property Values and Larger Parcels Present Redevelopment Opportunities"

Lauren Heermann: W2 LH02 1K LowerPropertyValues.PDF

Figure 1.3

Heermann, Lauren. 2014. Aggieville and Zone of Lower Property Value and Larger Parcel Sizes. Source data: ManhattanRegStudyAreaGeod-Base GIS. "Aggieville Prop Values."

Figure 1.4

Heermann, Lauren. Zone of Lower Property Value and Larger Parcel Sizes. 6 June, 2014. Infographic using and modifying the following images:

- Heermann, Lauren. 2014. Aggieville Zones of Higher Property Value and Smaller Parcel Sizes. Source data: ManhattanRegStudyAreaGeodBase GIS. "Lower_Prop_Values_ Large Parcel Size."
- Heermann, Lauren. 2014. "Laramie Parking Lot." Digital photo.

Map 6.3c

"Proposed Building Placement Zones for Redevelopment"

Lauren Heermann: W2_LH03_1K_RedevelopmentBasedonPropertyValues.PDF

Figure 1.5

Heermann, Lauren. Zone Aggieville and Proposed Building Location Zones. 6 June, 2014. Digital image modifying the following images:

- Wilson, Erin, 2014. 2014 Building Footprints. Source data: 2009 AggievilleGeodBase GIS "BLDGFTPRNTS."
- Heermann, Lauren. 2014. Aggieville and Zone of Lower Property Value and Larger Parcel Sizes. Source data: ManhattanRegStudyAreaGeodBase GIS. "Parcels."

Figure 1.6

Heermann, Lauren. Redevelopment Considerations According to Zones. 6 June, 2014. Infographic using and modifying the following images:

 Heermann, Lauren. 2014. Aggieville and Zone of Lower Property Value and Larger Parcel Sizes. Source data: ManhattanRegStudyAreaGeodBase GIS. "Lower_Prop_Values_ Large Parcel Size."

Parcel Development Potential

Map 6.4a

"Lower Assessed Property Values and Large Parcels Reveal Redevelopment Potential"

Andrew Rostek: W4 AR07 300 Owner/Value.PDF

Figure 07.1

Rostek, Andrew. 2014. BLDG/LAND. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "RLCo_Parcel_2014," "Buildings," "Road_CL." Accessed 18 June 2014.

Figure 07.2

Rostek, Andrew. 2014. Owner. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "RLCo_Parcel_2014," "Buildings," "Road_CL." Accessed 18 June 2014.

Map 6.4b

"Parcels Adjacent to Moro Street are Best Suited for Redevelopment"

Andrew Rostek: W4_AR07_300_DevPotential.PDF

Figure 08.1

Rostek, Andrew. 2014. 10000+ Owners. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "RLCo_Parcel_2014," "Buildings," "Road_CL." Accessed 18 June 2014.

Figure 08.2

Rostek, Andrew. 2014. High Potential. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "RLCo_Parcel_2014," "Buildings," "Road_CL." Accessed 18 June 2014.

Figure 08.3

Rostek, Andrew. 2014. DevPotential. Source data: Riley County GIS, Kansas State University LAR646 Data Set dated 2 June 2014. File name(s): "RLCo_Parcel_2014," "Buildings," "Road_CL." Accessed 18 June 2014.

Map 6.4c

"Parking and Incentives Must be Implemented to Initiate Major Redevelopment"

Andrew Rostek: W4 AR07 300 Incentives.PDF

Figure: 09.1

Andrew Rostek. 2014. DevParking. Digital.

Figure: 09.2

Andrew Rostek. 2014. DevSansParking. Digital.

Sources:

- "Cost Per Square Foot For New Commercial Construction The Commercial Real Estate Specialists." 2014. Accessed June 18. http://www.thecommercialrealestatespecialists.com/cpsf.html.
- Chris Mefford, Mike Babb, Dawn Couch, and Tyler Schrag. 2009. Identifying Redevelopable Lands: Application of a Land Value Potential Approach in Urban Centers. Community Attributes Inc. http://cms.cityoftacoma.org/planning/Dome-Brewery%20Subarea/ Application%20of%20LVP%20Approach%20in%20Urban%20 Centers.pdf.
- · Andrew Rostek. 2014. Development Potential Spread Sheet.

Assumptions for Excel Spread Sheet:

Assertions made through discussions with local realtors and "Cost Per Square Foot"

Rent: \$15.00 – 20.00

Building Cost: \$150.00 Parking Cost: \$70.00

Modified from "Identifying Redevelopable Lands"

Demo Cost: 10% Improvement Value

Soft Cost: 20% Total Building Cost

Other values maintained

Modifiable Factors
Parking : Building Ratio

FAR

Citations

Prudenti, Richard. 2014. Varneys at Night (Manhattan, Kansas). Digital Photograph. p. 260.