IMAGINE POLK CITY
- A Bridge to the Future -

POLK CITY, IOWA
PROJECT #: 114.1068

DRAFT
October 13, 2015

Highlighted text is in the early stages of development.

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PART 1 – INTRODUCTION AND BACKGROUND

Chapter 1 – Purpose of a Comprehensive Plan

WHAT IS A COMPREHENSIVE PLAN?

A Guide For Decision Makers

A comprehensive plan is a long-range policy guide to decisions about the physical development of a community. A plan does not provide a detailed design for development of specific sites; instead, it sets out broad policy directions for growth, development and redevelopment. A comprehensive plan is a backbone of the community providing consistent direction over time with valuable information and predictability for residents and developers.

This plan analyzes and incorporates a wide variety of components including the natural environment, population, land use, transportation, parks and trails, infrastructure, public facilities and services, and growth management. As a result, this comprehensive plan provides a vision of Polk City's future, helping to guide the growth of the community.

Since the plan is a guidance document, its recommendations must be implemented through the policies, programs, and ordinances dealing with both current and long term concerns and issues. The plan includes an implementation strategy that will help city officials and staff to implement the goals of the community.

Legal Basis for Land Use Regulations

Under Section 414 of the Code of Iowa, land use regulations such as zoning ordinances and subdivision regulations must be established and enforced in accordance with an approved comprehensive plan. These regulations are designed to promote the health, safety, morals or general welfare of the community and determine how land is developed within a city and in its extra-territorial jurisdiction. This comprehensive plan provides a framework for land use regulations, recognizing that the people of a community live cooperatively and therefore have certain responsibilities to one another.

A Community's Vision for the Future

A successful comprehensive plan represents the community's vision for the future and is therefore heavily dependent upon public participation. Residents, businesses and city staff work together to identify the assets, opportunities, issues and challenges that are facing the community and collaborate on developing a vision of the community in the future. Then they prioritize those items and develop a plan of action to achieve that vision.

EVALUATION AND AMENDMENTS

The time frame of this comprehensive plan for the future vision identified in this plan is an approximately twenty-year period. Each year, the Planning and Zoning Board, Parks and Recreation Board, and city staff should review the implementation plan and provide a report of accomplishments and recommend amendments, if necessary. Amendments are likely as

external forces and conditions change; however, they should not be taken lightly or approved in contradiction to the overall goals that were identified during the public planning process. Any major changes to the comprehensive plan should be carefully prepared and evaluated, with ample opportunity for public input, as was the case with this plan. Needed amendments could be made in accordance with the procedures set forth in the Zoning Ordinance.

IOWA'S SMART PLANNING PRINCIPLES

The Iowa Smart Planning Principles were signed into law on April 20, 2010 as State Code Chapter 18B: Land Use – Smart Planning. The chapter states, "State agencies, local governments, and other public entities **shall consider** and **may apply** the following principles during deliberation of all appropriate planning, zoning, development, and resource management decisions…" Each of these principles has been considered through the development of this Comprehensive Plan.

The Smart Planning Principles include:

1. *Collaboration.* Governmental, community, and individual stakeholders, including those outside the jurisdiction of the entity, are encouraged to be involved and provide comment during deliberation of planning, zoning, development, and resource management decisions and during implementation of such decisions. The state agency, local government, or other public entity is encouraged to develop and implement a strategy to facilitate such participation.

2. *Efficiency, transparency, and consistency.* Planning, zoning, development, and resource management should be undertaken to provide efficient, transparent, and consistent outcomes. Individuals, communities, regions, and governmental entities should share in the responsibility to promote the equitable distribution of development benefits and costs.

3. *Clean, renewable, and efficient energy.* Planning, zoning, development, and resource management should be undertaken to promote clean and renewable energy use and Increased energy efficiency.

4. *Occupational diversity.* Planning, zoning, development, and resource management should promote increased diversity of employment and business opportunities, promote access to education and training, expand entrepreneurial opportunities, and promote the establishment of businesses in locations near existing housing, infrastructure, and transportation.

5. *Revitalization.* Planning, zoning, development, and resource management should facilitate the revitalization of established town centers and neighborhoods by promoting development that conserves land, protects historic resources, promotes pedestrian accessibility, and integrates different uses of property. Remediation and reuse of existing sites, structures, and infrastructure is preferred over new construction in undeveloped areas.

6. *Housing diversity.* Planning, zoning, development, and resource management should encourage diversity in the types of available housing, support the rehabilitation of existing

housing, and promote the location of housing near public transportation and employment centers.

7. *Community character.* Planning, zoning, development, and resource management should promote activities and development that are consistent with the character and architectural style of the community and should respond to local values regarding the physical character of the community.

8. *Natural resources and agricultural protection.* Planning, zoning, development, and resource management should emphasize protection, preservation, and restoration of natural resources, agricultural land, and cultural and historic landscapes, and should increase the availability of open spaces and recreational facilities.

9. *Sustainable design.* Planning, zoning, development, and resource management should promote developments, buildings, and infrastructure that utilize sustainable design and construction standards and conserve natural resources by reducing waste and pollution through efficient use of land, energy, water, air, and materials.

10. *Transportation diversity.* Planning, zoning, development, and resource management should promote expanded transportation options for residents of the community. Consideration should be given to transportation options that maximize mobility, reduce congestion, conserve fuel, and improve air quality.

Chapter 2 – Planning Process

STEERING COMMITTEE - PLANNING & ZONING COMMISSION

SMART PLANNING PRINCIPLE: COLLABORATION
Governmental, community, and individual stakeholders, including those outside the jurisdiction of the entity, are encouraged to be involved and provide comment during deliberation of planning, zoning, development, and resource management decisions and during implementation of such decisions. The state agency, local government, or other public entity is encouraged to develop and implement a strategy to facilitate such participation.

The Polk City Planning & Zoning Commission (P&Z) served as the Steering Committee for this Comprehensive Plan. The Steering Committee met monthly, starting in January 2015 and ending in MONTH 2016, at their regularly scheduled P&Z meetings.

The Steering Committee performed the initial review of all project components including maps of existing conditions as well as concept plans for transportation, parks & trails, land use plans, infrastructure plans, and similar elements. The Steering Committee helped plan Stakeholder meetings and events, provided direction for the message used for website updates, surveys, and social media. The Steering Committee reviewed the draft text and exhibits for each chapter of the Comprehensive Plan and made suggestions and refinements before the plan moved forward to City Council.

STAKEHOLDER COMMITTEE

It is important to include a variety of persons representing various groups such as Polk City Chamber of Commerce, Park Board, representatives of recreation leagues, various neighborhood groups, young professionals, city staff as well as the Planning and Zoning Commission and City Council. The following individuals comprised the Stakeholder Committee:

1. Park Commission – Audrey Bell
2. Polk City Development Corporation – John Calhoun
3. Chamber of Commerce President – Shawn Comer
4. Historic Preservation Commission Member - Deanna Deason
5. North Polk High School Student - Nick Miller
6. Local developer/builder - Kyle Hout
7. Polk City Square Newsletter Representative – Kimberly Knapp
8. Youth Recreation Leagues Representative -- Jason Plogg (soccer)
9. Original Town Area Resident – Ken Thornton
10. The Hill Area Resident (Tyler St/Westview Bend) – Joe or Jeannie Butler
11. Tournament Club of Iowa Area Resident – Tony Bolletta
12. Pine Ridge/Marina Cove Area Resident – Marie Stuckel
13. Dorfrank Acres Area Resident - Doug Larson
14. Steering Committee Members (P&Z Commissioners) as desired

15. Mayor & City Council Members as desired

Stakeholders assisted with identification of:

- ✓ Issues considered important to the city
- ✓ Unmet needs within the city
- ✓ Background information relevant to identifying specific issues and unmet needs
- ✓ Under-utilized community resources
- ✓ Development constraints
- ✓ Development opportunities
- ✓ Goals and Objectives

The Stakeholders met two times during the planning process.

Meeting #1 – The agenda for the first Stakeholder meeting included the following:

1. Existing Conditions
    a. Land Use Map
    b. Topographic Map
    c. Environmental Constraints
    d. Water, Sanitary, and Storm Sewer
    e. Street Network
    f. Parks and Trails
    g. Municipal Facilities
2. Population Projections and Demographics
3. Key Person Interviews Summary
4. Survey Results
    a. Resident Survey
    b. Business Owner Survey
5. Discuss Community Wide Goals
6. Next Steps

For agenda item number 5, the committee was broken up into three groups, facilitated by a member of the Snyder & Associates Consultant team. The groups reviewed the possible goals for the community based upon the information provided from the existing conditions, population projects and interview and survey results.

Meeting #2 – At the second Stakeholder Meeting, the committee reviewed draft text for the Comprehensive plan and future conditions map. The agenda for the second Stakeholder meeting included the following:

The agenda has not been developed yet, this is a placeholder.

1. Future Conditions
    a. Land Use Map
    b. Street Network
    c. Parks and Trails
2. Goals and Objectives
3. Implementation Methods
4. Next Steps

KEY PERSON INTERVIEWS

In addition to the Stakeholders meetings, we propose to hold meetings with people having specific concerns within the planning process. Key person interviews involve staff, elected officials, Polk City Development Corporation, and other leaders and residents. The interviews provide insight into the city and are useful in developing implementation strategies.

Key Person Interviews were conducted during January and February 2015.

Mayor	Jason Morse
City Administrator	Gary Mahannah
Public Works Director	Mike Schulte
Fire Chief	Dan Gubbins
Police Chief	Mark Bowersox
Librarian	Kim Kellogg
Former Mayor/Councilmember	Gary Heuertz
Council member	Robert Mordini
Council member	Ron Anderson
North Polk School Superintendent	Dan Mart

Additional Key Person Interviews were conducted in XX 2015 with

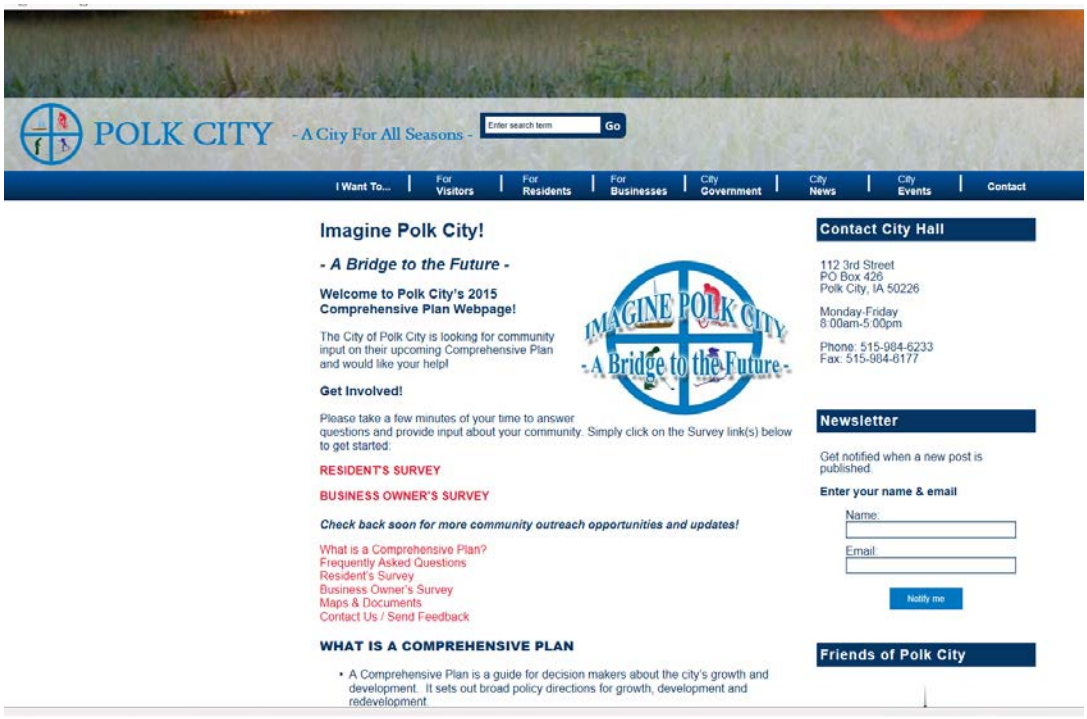
1. Knapp Properties - Gerry Neugent
2. Ankeny Planning & Building Department – Paul Moritz, Assistant City Manager?

ONLINE SURVEY

In mid-February 2015, two surveys were created to gather public input. One survey was designed for residents and a second survey was designed for businesses. Both surveys were posted on the City's website and advertised via the City's facebook page. The survey remained open through the end of July 2015. The resident survey received 389 responses and the business survey received 21 responses. A copy of the survey questions and results can be found in the appendix.

SOCIAL MEDIA

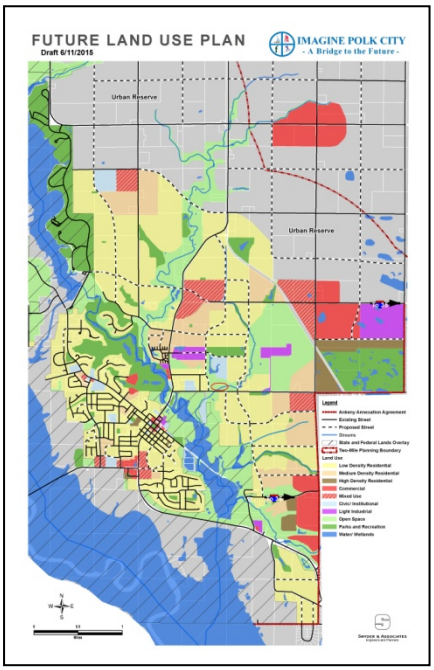
The City's Technical Director spread the word about the Comprehensive Plan, the online survey, and the planning process via the City's website, Facebook, and Twitter accounts.

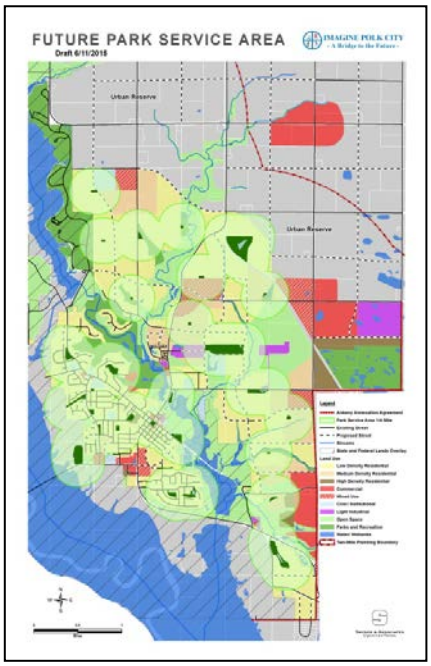


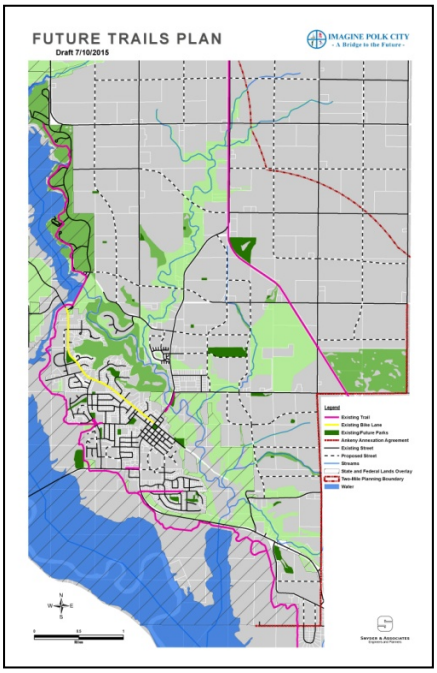
FOUR SEASONS FESTIVAL

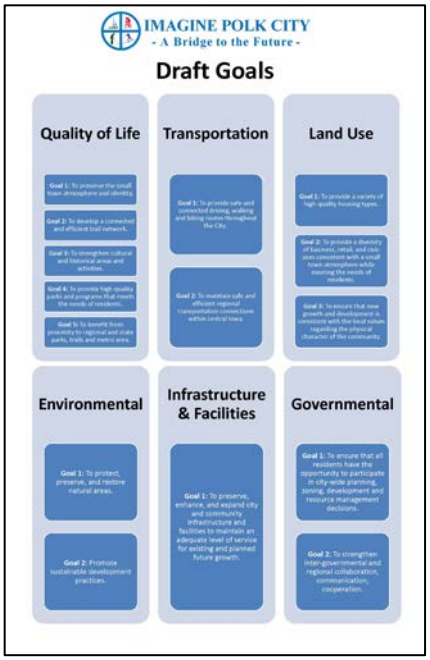
A creative way to gain public input is to include a display area for maps and exhibits at city-wide events. This public outreach increases community awareness of the project and provides the opportunity to gain insight from citizens that might not otherwise have time to attend an Open House. At the Four Seasons Festival, a booth was set up including six display boards and two areas for comment. The table was staffed by Planning and Zoning Commission and consultant team members from 10 am until 2 pm.

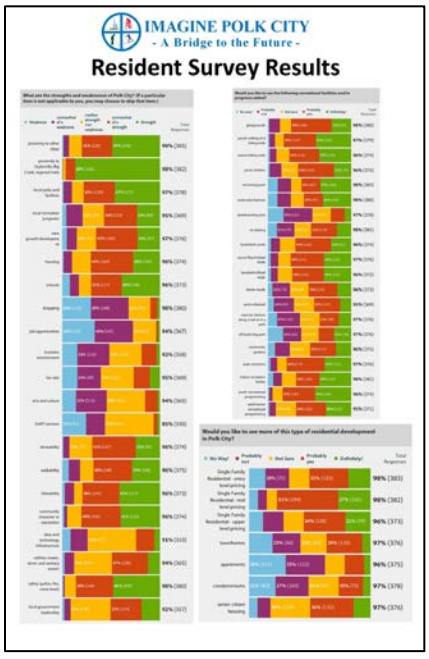
The display boards included three maps: proposed future land use, future park service areas, and future trails. There were three additional boards exhibiting: survey results, goals, and resident quotes. Visitors to the booth were encouraged to write their comments on the displays. They were given a "like" stamp and a "dislike" stamp to indicate what they agreed and disagreed with.

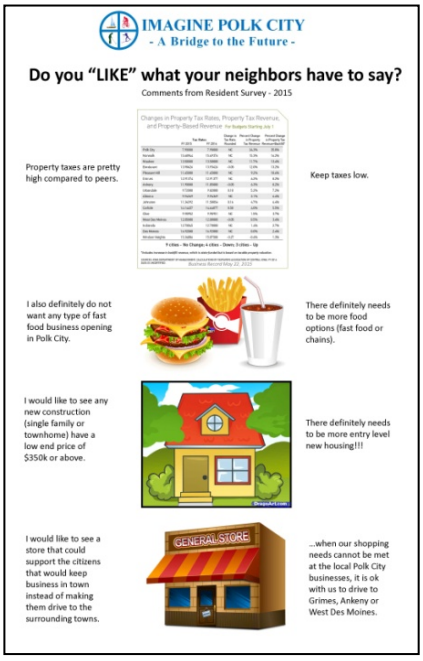




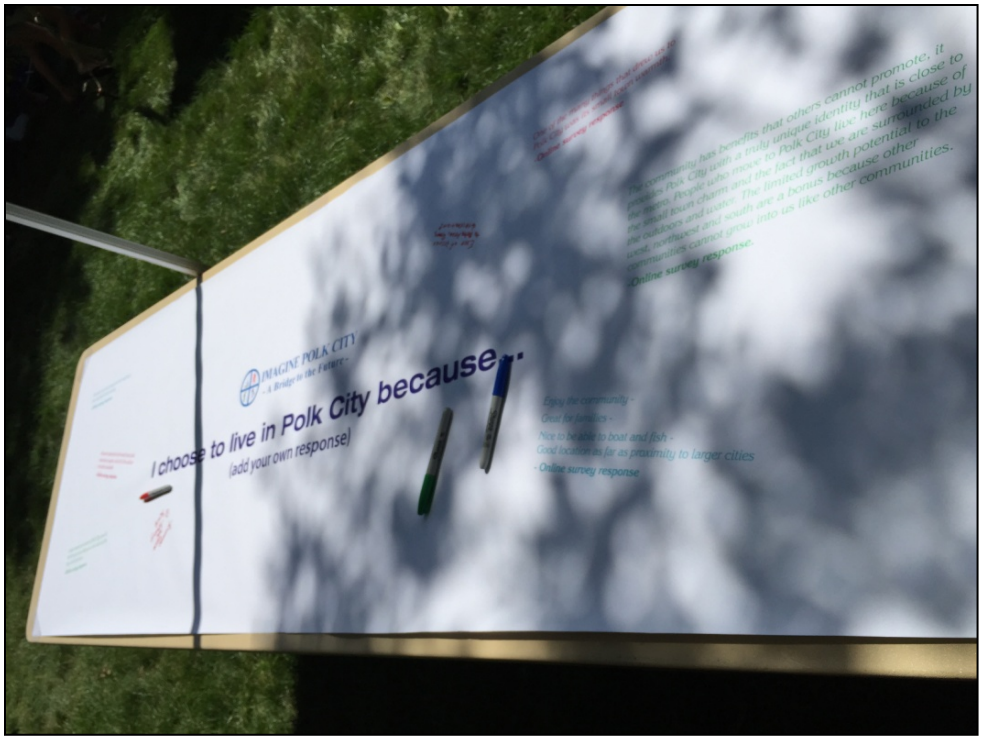


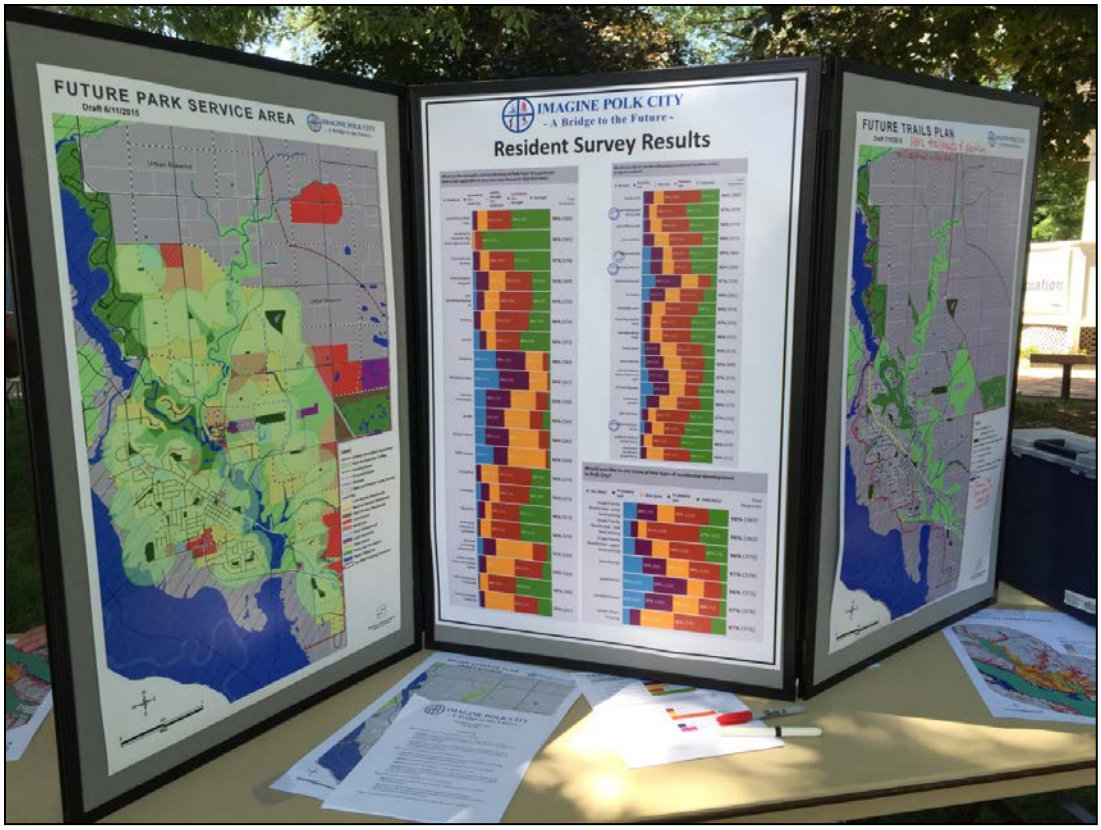






Tables were set up with two "banners." One of them said "I choose to live in Polk City because…" The other said, "I imagine a Polk City where I can…." Residents were asked to write down their comments on the banners and use a stamp to "like" other residents' comments.


IMAGINE POLK CITY
I choose to live in Polk City because...
(add your own response)
Enjoy the community -
Great for families -
Nice to be able to boat and fish -
Good location as far as proximity to larger cities
- Online survey response


FUTURE PARK SERVICE AREA
IMAGINE POLK CITY
- A Bridge to the Future -
Resident Survey Results
FUTURE TRAILS PLAN


IMAGINE POLK CITY
- A Bridge to the Future -
PUBLIC COMMENTS

PUBLIC OPEN HOUSE

Public open houses or workshops, hosted by the City and facilitated by Snyder & Associates, Inc. afford the public an opportunity to participate in a more informal setting. Various maps and exhibits are displayed on easels in a large open setting, with a team member at each display. The public can then view and comment on these exhibits at their leisure. The newspaper and radio station will be encouraged to print news release articles concerning the strategic planning process as well as the meeting date, time, and place.

CITY COUNCIL

City Council provided input at Stakeholder meetings and through key person interviews. Council member attendance was welcomed at the P&Z's steering committee meetings. City Council was updated monthly via the P&Z meeting minutes.

On MONTH, DAY, 2016, City Council held a public hearing on the draft Comprehensive Plan. There were/were not revisions requested at this meeting – expand on nature of the revisions if applicable. The City Council formally adopted the Comprehensive Plan on MONTH, DAY, 2016.

Chapter 3 - Community Profile

REGIONAL SETTING

Polk City is a suburban community located in central Iowa, approximately 16 miles northwest of downtown Des Moines and 20 miles north of Des Moines International Airport. Covering 5.14 square miles, Polk City is bordered to the west and south by Saylorville Lake, a 26,000 acre project located on the Des Moines River. Big Creek State Park, a 3,550 acre complex holding an 866 acre lake, borders Polk City to the north. Big Creek flows into the Saylorville Lake and Des Moines River along Highway 415 running northwest through town. The City of Ankeny is located to the east of Polk City, approximately two miles away. As of 2013, an estimated 3,976 people call Polk City "home."

Polk City retains its small town feel, but is well-connected to regional transportation networks. Highway 415 bisects the town from north and south. The highway provides transportation to Ankeny and Interstates 80 and 35 to the south, and the City of Madrid to the north. The "mile-long bridge" allows for a convenient connection to Highway 141, just three miles to the west and is the primary transportation route to the western suburbs of Des Moines. A short seven-mile drive east on NW 126th Avenue provides connectivity to Interstate 35 and Highway 69.

Polk City is recognized for its environmental and recreational settings. With miles of parks and lake opportunities, the community also benefits from one of the most notable trail systems in the state. The Neal Smith Trail, a 26-mile trail system, starts at Big Creek State Park and runs along the west side of Polk City, connecting to the John Pat Dorrian Trail in downtown Des Moines. The High Trestle Trail, a 25-mile trail from Woodward to Ankeny, is also located approximately one mile to the east of the corporate limits and provides additional recreational connectivity in Central Iowa.

The study area for this plan comprises the area within the existing corporate limits of the City of Polk City, as well as the entire area east to the Polk City-Ankeny Annexation Agreement which runs north along NW 44th Street to NW 118th Avenue, east to NW 16th Street and all areas north. The study area then runs north to NW 150th Avenue. The City of Polk City is approximately 5.14 square miles in size while the additional planning area consists of 14.8 square miles. Land to the west, northwest and south are owned by the Army Corps of Engineers and consists of Saylorville and Big Creek Lakes; therefore, this area was not considered in the planning area.

Insert regional setting map.

HISTORY

Native Americans first cut through the timber and prairie in the area, followed by white settlers in the late 1840's. The first Polk City settler was George Beebe, who arrived in 1846. Beebe was instrumental in laying out the town and he also donated land for a town square and mandated that the land be used as a park. The town square still remains the center of the community today.

Polk City was officially recorded as a town in 1850. Only five years later, the town outmatched Des Moines with a flour mill, five shoe shops, three general stores and five saloons. However, Des Moines (then known as Fort Des Moines) still managed to become the county seat of Polk County. Polk City fell just short of becoming Iowa's new state capitol in 1857.

In 1874, the Des Moines and Minneapolis Railroad built a line between Ames and Des Moines through Polk City. That line however did not last long. In 1879, the line was purchased by the Chicago-Northwestern company and the track was removed with a new line installed approximately two mile east in Crocker, bypassing Polk City. In response to protest, a compromise was made and the "Polk City Junction" line was established which was located approximately three miles north of Polk City. The track was eventually abandoned and removed in 1979.

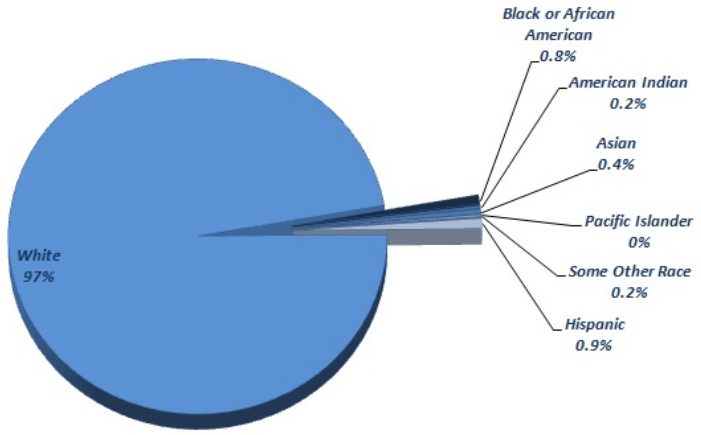
Significant growth was seen after the construction of the Saylorville Reservoir in the 1960's. The Army Corps of Engineers presented two alternative plans. The first option was to buy out and relocate Polk City residents in order to let Saylorville Lake encompass the area. The second, and chosen, option allowed for the preservation of Polk City by creating a second dam to form Big Creek Lake.

Throughout this growth, the community's identity has gradually shifted from a rural community to a recreational suburban community with strong quality of life and growth opportunities. (*source: PolkCityia.gov)*

DEMOGRAPHICS

Racial Composition (2010)

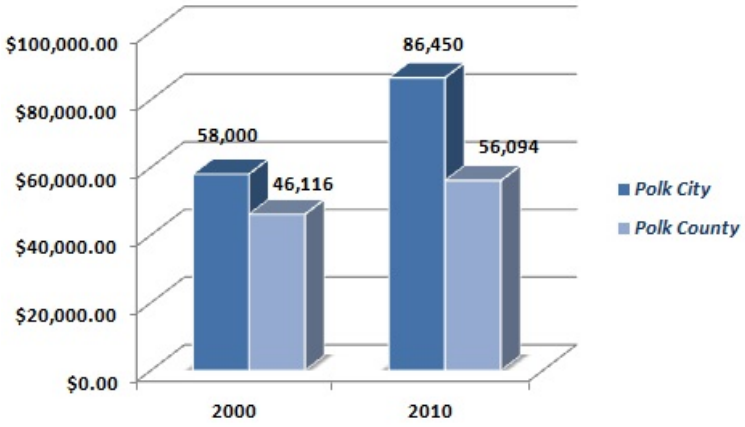
Polk City



Polk City's racial composition is predominantly white as it consumes 97.5% of the total population. This is a very slight change from 98.1% in 2000. No other racial group made up more than 1% of the population. Blacks and Hispanics account for 0.8% and 0.9% of the 2010 population respectively. With the increase in overall population growth, Polk City will likely see some increased diversity; however it will be a slow and minimal increase.

Median Household Income (2000-2010)

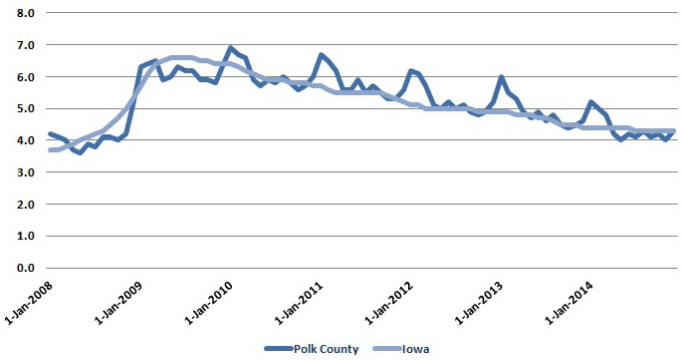
Polk City and Polk County



Polk City incomes are higher than the County level and are increasing at a faster rate. The 2010 median household income in Polk City was $86,450, while Polk County's median household income was $56,094, a difference of $30,356. Polk City has seen a growth of 49% since 2000, while Polk County has experienced a 22% increase in median income. The increase is the result in a positive shift among households in the higher income groups.

Unemployment Rate (2008-2014)

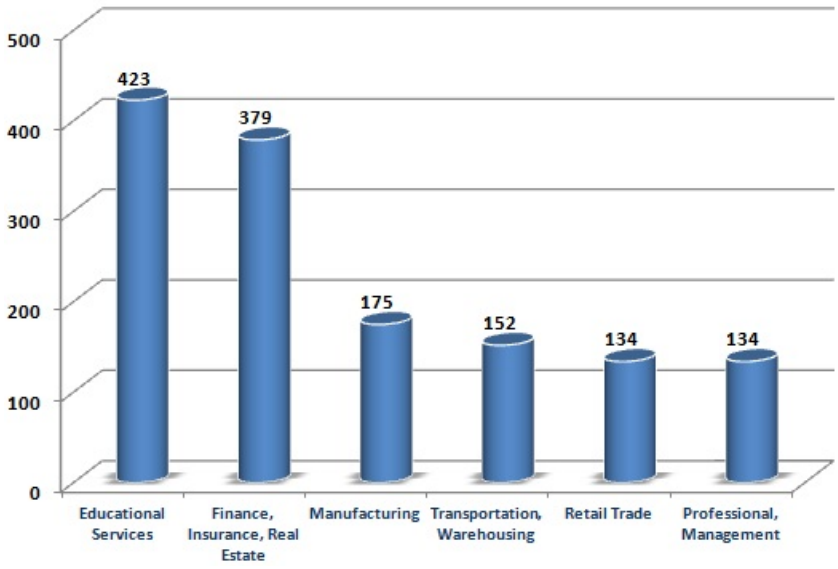
Polk County and Iowa



Unemployment rates are declining. The Bureau of Labor Statistics indicated that the unemployment rate at the end of 2014 for Polk County and the State of Iowa was 4.3%. This number is down from the six year high of 6.9% in January of 2010 for Polk County and 6.6% in August 2009 for the State. Polk County trends have fluctuated more than that of the State as rates tend to peak higher in the early months annually, only to smooth out the rest of the year.

Top Industries (2013)

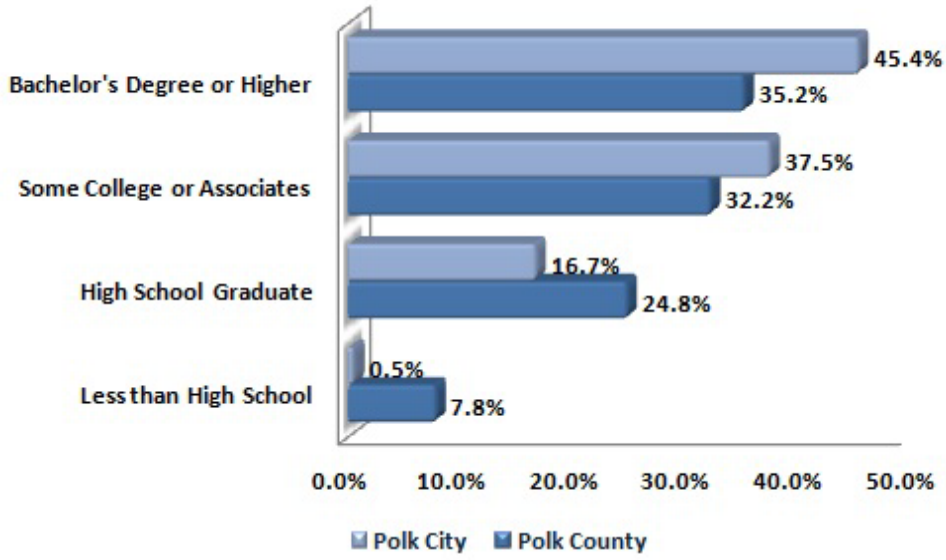
Polk City



Polk City is primarily a residential community, without major employers. As a result, most residents work in the surrounding metro area. Polk City has an estimated 2,559 residents age 16 years or older, with approximately 2,017 of those residents currently in the labor force. Educational Services makes up the largest employment sector within Polk City with 21.9% of the jobs. This is common among most small, rural towns across the state. Finance, Insurance and Real Estate sectors account for 379 jobs, or 19.6% of employment. These two industries account for roughly two in every five jobs. Other leading industries by employment include Manufacturing (9.1%), Transportation and Warehousing (7.9%) and Retail Trade and Professional, Management services both with 6.9%.

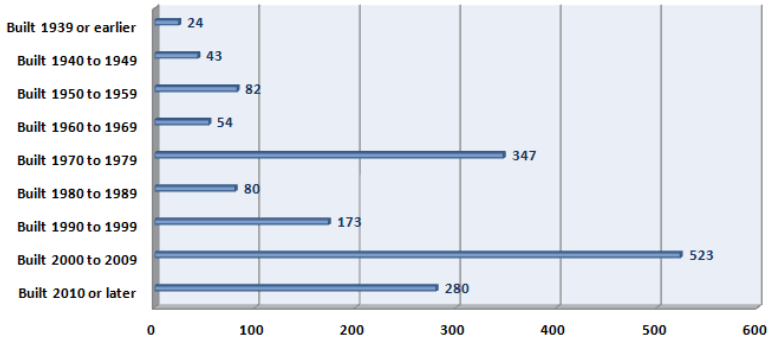
Educational Attainment (25+ Years of Age)

Polk County and Polk City



Polk City residents are well-educated. The 2013 American Community Survey states that 45.4% of Polk City residents have obtained a Bachelor's degree or higher. That's 10% more than Polk County as a whole. An additional 37.5% of residents have some college or an Associate's degree compared to 32.2% of the county. Polk City's well-educated residents provide highly-skilled workforce and can support emerging opportunities for a growing economy in Polk City and the surrounding metro.

Age of Housing Unit (2013)
Polk City



Polk City's housing stock is relatively new. Roughly 40% of the total housing units were built after 2000 and more than half (53.8%) of all units were constructed after 1990. This is consistent with the increased population within the last 25 years. Only 15% of the housing stock was built prior to 1970. The decade experiencing the most significant housing boom was 2000-2009, during which 38.4% of the housing stock was constructed.

Housing by Value (2013)
Polk City

The median home value in Polk City was $170,000 in 2013 and is projected to increase. At that time, 47.7% of the housing stock was valued between $100,000 and $199,999. An additional 25.8% was valued between $200,000 and $299,999. A total of 132 units were valued above $300,000, while only 44 units or 4.3% of the housing stock was valued below $99,999.

The typical housing unit in Polk City is an owner occupied, single family detached home with 2-4 bedrooms. Of the Polk City's 1,276 units, 1,026 (80%) are owner occupied, 206 (16%) are renter occupied and 44 (3%) are vacant. Eighty-seven percent of the population live in owner occupied housing while 12% rent. The median rent in Polk City is $791. The average household size is 2.73 individuals while the average family size is 3.11. There are a total of 1,017 single-family detached units in Polk City, 153 single-family attached, 13 duplexes, and 93 multi-family units.

Housing Summary
Polk City (2008-2013)

Total Housing Units	**1,276**	**100%**	**Housing Units by Total Number of Bedrooms**		
Owner Occupied	1,026	80%	**Total Housing Units**	**1293**	**100%**
Renter Occupied	206	16%	Studio	0	0%
Vacant	44	3%	1 Bedrooom	67	5%
Population by Tenure			2 Bedroom	303	23%
Population	**3,418**	**100%**	3 Bedroom	558	43%
Owner Occupied	2,984	87%	4 Bedroom	263	20%
Renter Occupied	420	12%	5+ Bedroom	102	8%
Housing Units by Type			**Other Information**		
Total Housing Units	**1,276**	**100%**	Median Home Value		170,700
Single-Family, Detached	1,017	80%	Median Monthly Rent		791
Single-family, Attached	153	12%	Average Household Size		2.73
Two Units/Duplex	13	1%	Average Family Size		3.11
Multi-Family	93	7%			
Mobile Home	0	0%			

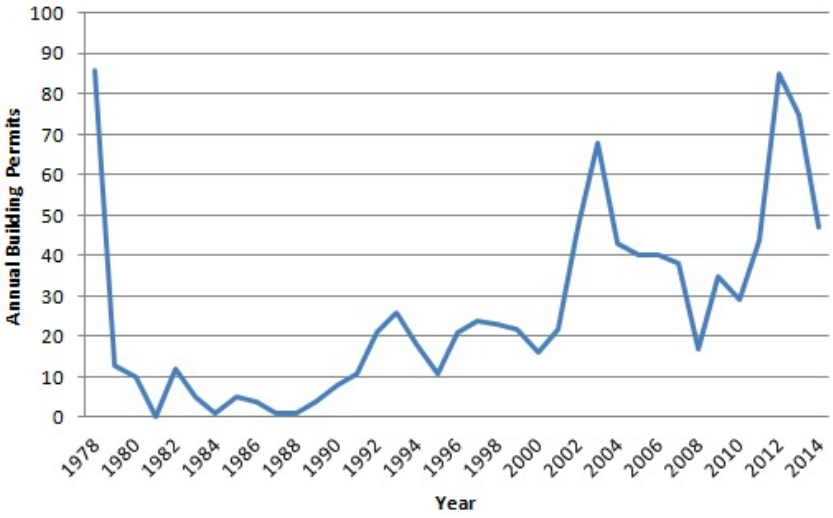
Source: 2008-2013 American Community Survey, U.S. Census

Percent Households with Children Under 18 Years		
Population	**2000**	**2010**
Polk City	44.6	43.8
Huxley	37.2	45
Slater	35.5	35.5
Nevada	34.6	34
Boone	31.7	29.4
Windsor Heights	24.2	24.7
Polk County	34.5	33.7
State of Iowa	33.3	30.6
Source: 2000-2010 U.S. Census		

Polk City has a larger percentage of households with children 18 years or younger. At 43.8 percent, they are much higher than the state of Iowa (30.6%), Polk County (33.7%) and many similar sized communities in central Iowa. Only Huxley has a higher percent at 45 than Polk City. This statistic is important for future planning efforts as it indicates the types of residents/ families moving to and living in Polk City. As shown below, the number of housing units has significantly increased since 2000. An increase in housing units and a relatively stable percentage of households with children indicates that more and more families are moving in to Polk City.

New Residential Building Permits (1978-2014)

Polk City



As shown, building permits in Polk City have varied historically. The late 1970's experienced high new construction with the addition of the Saylorville Dam and recreational draw. From 1980 to the mid 1990's building permits were issued at a slower rate. By the late 1990's, new construction picked up with the addition of the Tournament Club of Iowa. The average annual building permits issues since 2000 is 59.7 and is expected to remain stable with any new plats in development stages.

POPULATION TRENDS AND PROJECTIONS

In order to plan for the future needs of Polk City residents, it is important to characterize the demographics and anticipated trends over time. Forecasting population predicts growth based on current trends and can heavily impact decisions regarding future land use, housing and various infrastructure projects. This helps us understand where current policies might lead us to determine whether they are leading us in the direction we want to go. This section examines numerous alternatives to project the population in year 2035 based on Polk City's experienced growth since 1990.

Historical Trends

Historically, Polk City did not begin to see significant growth until the 1960's. The population remained steady between 300-400 until an increase of 68.7% in the 1960's brought the population up to 567. At this time, plans for the Saylorville Reservoir were submitted. The construction of the dam to create both Saylorville Lake and Big Creek Lake surrounding the community ultimately changed the community's growth pattern. During the 1980's, Polk City more than doubled in size, increasing to 1,658 residents. As of 2010 census, the population was 3,418; indicating growth of 45.8% since 2000. It is anticipated to see this growth increase over the next 25 years.

Despite experiencing 192% growth between 1960 and 1980, Polk City tracked slower growth than its metro counterparts; compared to Johnston at 1,038% growth, Pleasant Hill at 780%, Clive at 706% and Ankeny at 421%. It is important to note, however, that several of those metro communities (Clive, Johnston and Pleasant Hill) were not incorporated until the late 1950's or 1960's, skewing the data during the first few years of incorporation.

From 1980-2000, Polk City was much more consistent, though still grew at a slower rate compared to other cities within the metro. Johnston saw the largest increase of 242%, followed by Waukee (130%) and Clive (112%). Polk City's growth of 41% was similar to the growth of communities such as Pleasant Hill and Urbandale. Since then, Polk City has increased its share of the metro and outpaced other metro communities. With a 46% percent change between 2000-2010, Polk City reflected a larger growth rate than Altoona (41%), Urbandale (36%) and Clive (20%).

Total Population Percent Change

Metro Comparison

	1960	1970	1980	1990	2000	2010	% Change 1960-1980	% Change 1980-2000	% Change 2000-2010
Polk City	567	715	1,658	1,908	2,344	3,418	192%	41%	46%
Ankeny	2,964	9,151	15,429	18,482	27,117	45,582	421%	76%	68%
Altoona	1,458	2,883	5,764	7,242	10,345	14,541	295%	79%	41%
Clive	752	3,005	6,064	7,462	12,855	15,447	706%	112%	20%
Waukee	687	1,577	2,227	2,512	5,126	13,790	224%	130%	169%
Johnston	N/A	222	2,526	4,702	8,649	17,278	1038%	242%	100%
Urbandale	5,821	14,434	17,869	23,500	29,072	39,463	210%	63%	36%
Pleasant Hill	397	1,535	3,493	3,671	5,070	8,785	780%	45%	73%
Polk County	266,315	286,101	303,170	327,140	374,601	430,640	14%	24%	15%

With the increased growth of Polk City, decision makers will need to analyze the population change at a deeper level. By evaluating movements amongst age cohorts, officials can determine what type of infrastructure to invest in for the future. For example, with an increase in younger population, development efforts may be focused on school and recreational infrastructure. On the contrary, older populations would indicate funding efforts on health care and affordable living.

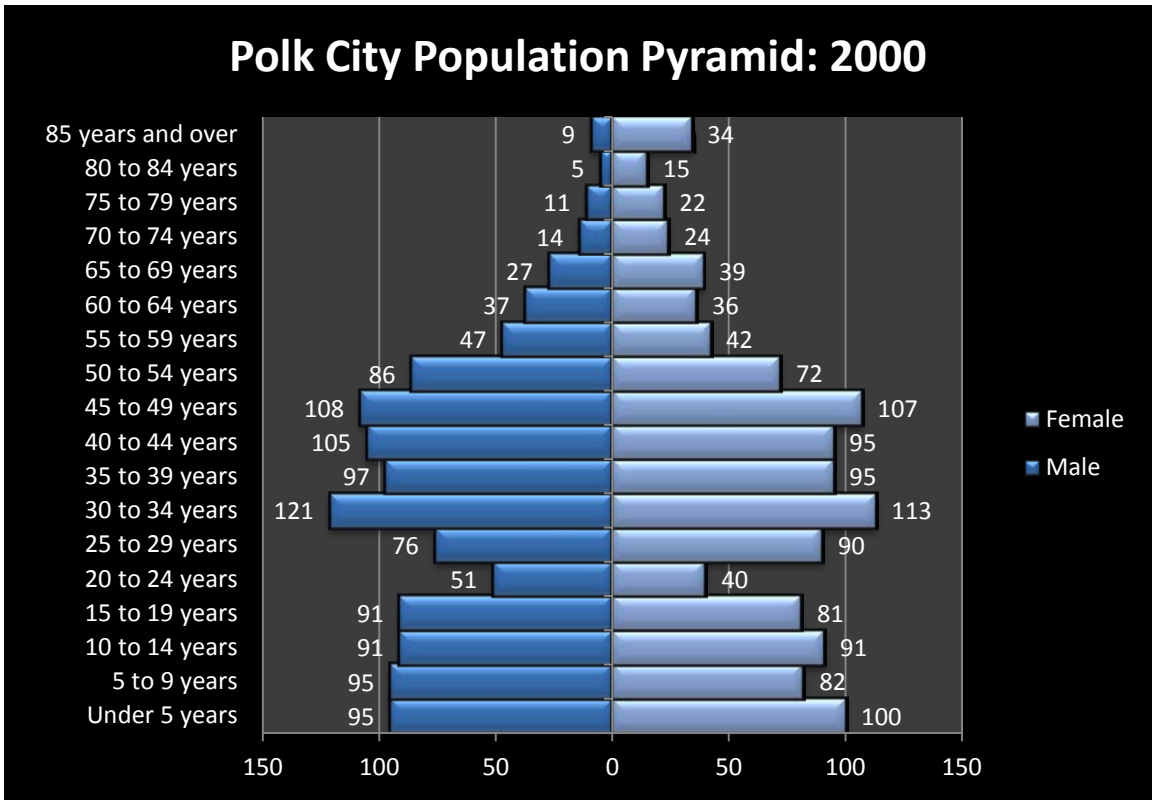
In 2000, the median age of Polk City was 34.1 years. That number has stayed relatively consistent as the 2010 median age was 34.4 years. It is important to look further into the specific age cohorts to determine which age groups are growing, and at what rate. The table below illustrates the percent change and absolute change from 2000-2010 amongst various age cohorts. School-aged children less than 19 years old saw the biggest absolute jump in population of 377 people, resulting in 52% growth. Ages 60 years and over saw the largest percentage increase of 58%, a total of 158 additional residents. Residents aged between 20-39 years increased by 38% and ages 40-59 years increased by 42%.

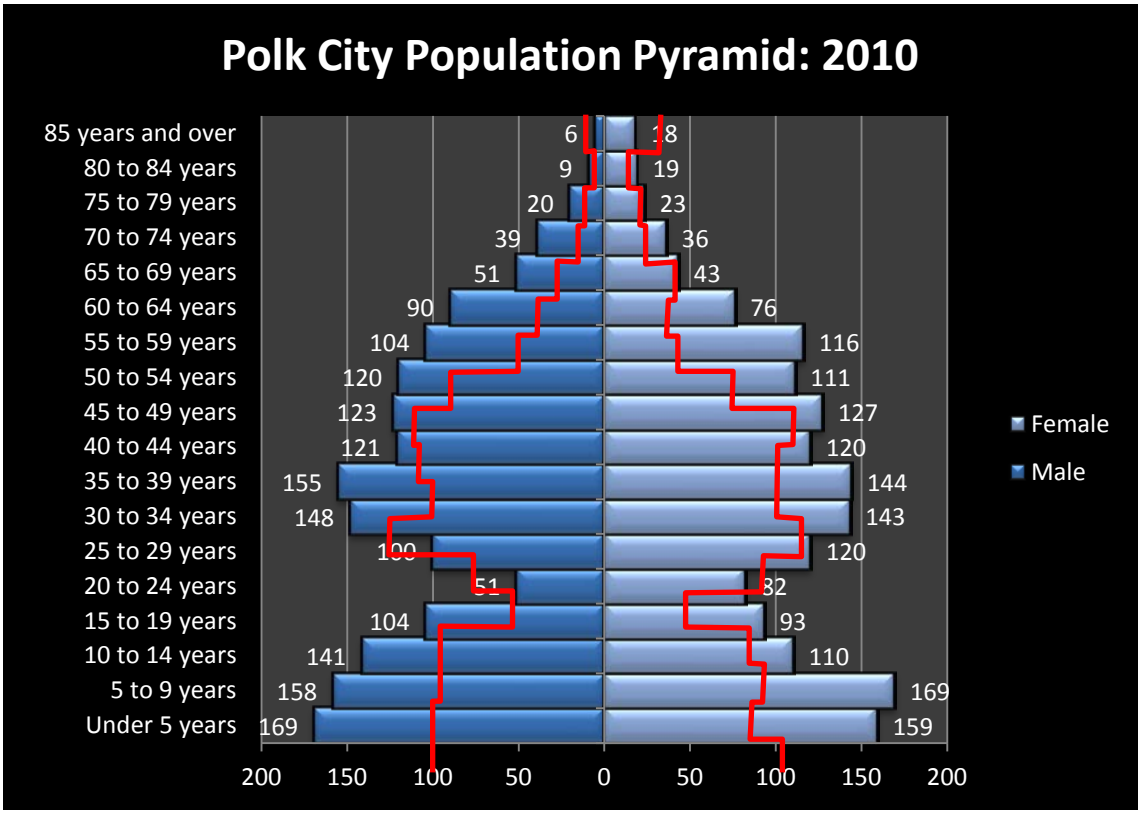
Age Cohort Population Change 2000-2010
Polk City

Age Group	2000	2010	% Change	Absolute Change
Under 5 years	195	328	68%	133
5-9 years	177	327	84%	150
10-14 years	182	251	37%	69
Under 19 years	726	1103	52%	377
20-39 years	683	943	38%	260
40-59 years	662	942	42%	280
60 years and over	273	431	58%	158

To further illustrate the movement in populations, the population pyramids displayed the figures below show the comparison of population change from 2000-2010 in five year cohorts. The main populations worth noting include residents under the age of 5 which increased approximately 68.2 percent, ages 5-9 increased at a rate of 84.7 percent and ages 10-14 increased by 37.0 percent. In 2010, approximately 32% of the population was school aged residents under the age of 19 years old compared to 30% in 2000. This increase is projected to continue amongst the younger school aged population due to the current development trends, and to meet future development goals. Therefore, these trends will need to be addressed moving forward when making growth decisions. The red line on the 2010 pyramid reflects the 2000 population levels to further illustrate the change amongst cohorts.

Population Pyramid


Polk City Population Pyramid: 2000
85 years and over
80 to 84 years
75 to 79 years
70 to 74 years
65 to 69 years
60 to 64 years
55 to 59 years
50 to 54 years
45 to 49 years
40 to 44 years
35 to 39 years
30 to 34 years
25 to 29 years
20 to 24 years
15 to 19 years
10 to 14 years
5 to 9 years
Under 5 years
9 34
5 15
11 22
14 24
27 39
37 36
47 42
86 72
108 107
105 95
97 95
121 113
76 90
51 40
91 81
91 91
95 82
95 100
150 100 50 0 50 100 150
Female
Male


Polk City Population Pyramid: 2010
85 years and over
80 to 84 years
75 to 79 years
70 to 74 years
65 to 69 years
60 to 64 years
55 to 59 years
50 to 54 years
45 to 49 years
40 to 44 years
35 to 39 years
30 to 34 years
25 to 29 years
20 to 24 years
15 to 19 years
10 to 14 years
5 to 9 years
Under 5 years
6 18
9 19
20 23
39 36
51 43
90 76
104 116
120 111
123 127
121 120
155 144
148 143
120
51 32
104 93
141 110
158 169
169 159
200 150 100 50 0 50 100 150 200
Female
Male

2020 Population Estimate

The 2020 population was estimated as a result of numerous contributing factors including U.S. Census Bureau data and current local development trends and studies. It will then be used to project the future population to 2035.

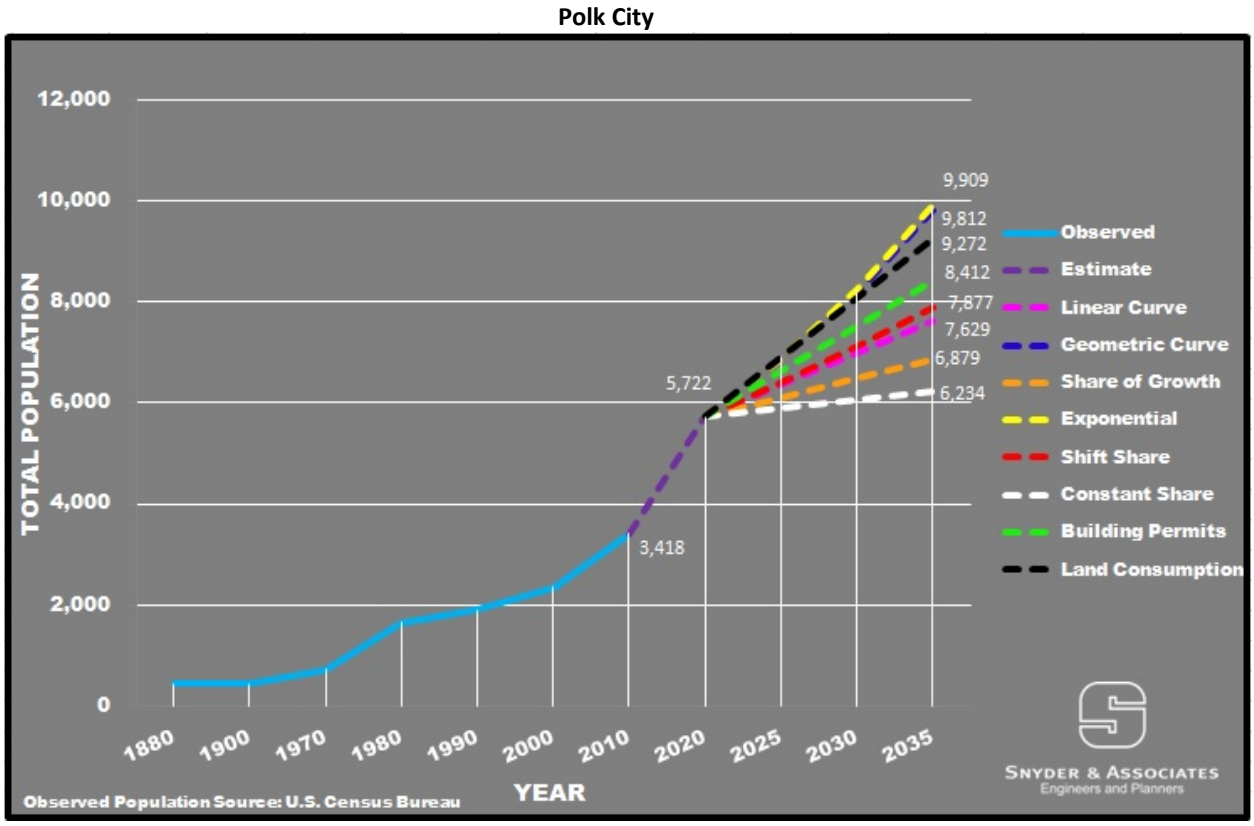
According to the American Community Survey's five year estimates, the population of Polk City was approximately 3,976 people in 2013. This number was used as the base population in which the estimated population over the following seven years will be calculated. A *2014 Report on Economic Indicators* of Polk City was published in January of 2015. This report outlines historical building permits by year and category along with average single family housing values. The report indicates that there were a total of 47 residential building permits issued in 2014. The City also completed a study on the *Single Family Active Subdivisions in Polk City* and future development already in the platting stages or in early discussions. Most of these subdivisions will be platted for construction by 2018. The estimated number of additional lots to be built upon by 2018 is 535. Based on recent trends, it is estimated that most of these lots will be fully developed by the year 2020.

The 2010 Census indicates that the average family size in Polk City was 2.73 people. Since then, Polk City has experienced a significant influx of young families as indicated by the growth of the school district. Since the community is younger on average than surrounding communities, a safe estimate of 3.00 people will be used to estimate the additional population. Using this estimate, the addition of 582 single family residential lots multiplied by 3.00 people per household, amounts to an additional population of 1,746 from 2013-2020. Added to the 2013 population of 3,976, the estimated 2020 population of Polk City will be 5,722. Numerous projection alternatives were then used to calculate an additional 15 years.

Projection Methods

The following projection methods are using 1990 data as the base year and calculating the population change over the 30 year period to the 2020 population estimation. Projections are prepared for a 20 year time period with an incremental update every five years. Projection method comparisons are illustrated in Figure 3 below.

Population Projection Alternative Comparisons



Alternative 1: Linear Curve Projection

The Linear Curve Projection assumes that the future population will change by the same absolute number over a given period of time, as occurred during the base period. The absolute population change between 1990 and 2020 is 3,814. Over the 30 year period, the average change in population per year was 127.13 residents. Using this same growth rate over an additional 15 years, the 2035 population is projected to be 7,679.

Alternative 2: Geometric Curve Projection

The geometric alternative is a calculation that assumes that the future population will change by the same percentage rate over a given increment of time, as occurred during the base period. The calculated rate of change between 1990 and 2020 was 1.036% per year. Using this same growth rate over an additional 15 years, the 2035 population is projected to be 9,812.

Alternative 3: Exponential Projection

The exponential alternative is similar to the geometric method but views change as occurring continuously rather than at discrete intervals. It uses the natural logarithm of 2.71828 to calculate the exponential growth annually. This method projects the 2035 population to be 9,909.

Alternative 4: Constant Share Projection

Alternative 4 assumes that the smaller area's share of the larger population is held constant at a level observed during the base period and that small areas will grow at the same rate as the larger area. It is estimated that Polk City was 0.0123% the size of Polk County in 2020. Using the projected population of Polk County in 2013 of 505,656, the total population of Polk City in 2035 will be 6,234 (0.0123% of 505,656).

Alternative 5: Share of Growth Projection

The Share of Growth projection technique or apportionment, assumes the smaller areas share of the percent change in population in the larger area will be the same over the projection horizon, as occurred during the base period. Using a simple linear curve projection for Polk County, the estimated population in 2020 will be 464,097. That is an absolute change of 136,957 people and 41.8% change in growth since 1990. Polk City's absolute change during that time span using the estimated 2020 population was 3,814. Therefore, Polk City holds 2.78% of the total growth throughout Polk County. According to the 2.78% county share, the 2035 population of Polk City will be 6,879.

Alternative 6: Shift Share Projection

The Shift Share alternative is designed to deal with changes in population shares. It modifies the constant share method by adding a shift term to account for differences in population variables and characteristics. The projected growth is assumed to be equal to the observed growth from the past period. This projection method indicates that the population in 2035 will be 7,877.

Alternative 7: Average Building Permit Projection

Alternative 7 used for the analysis uses the average number of building permits from 2000-2020 based off the *Single Family Active Subdivision* study and the *2014 Report on Economic Indicators* provided by the City and developers. Using this data, the average number of building permits issued per year was 59.7 permits. The year 2000 was used as a base year rather than 1990 in order to provide a better assessment of the recent growth for Polk City. With 59.7 new permits issued per year and an estimated three people per household, the additional population per year would be 179.25 resulting in a 2035 population projection of 8,412.

Alternative 8: Land Use Consumption Capacity

Additional analysis was conducted based on available acres for development. An estimated 567 acres located within corporate limits were used to estimate the current maximum capacity for development. By using an average lot size of 0.33 acres, an additional 1,718 homes could be constructed. With the average household size of 3.0 persons, that calculation of an additional

5,155 people combined with the projected 2014 population of 4,117 would give a max capacity of 9,272 residents. If residential construction continues to increase, this projection could be a reality by 2035. At that time, Polk City will need to annex additional acres for future growth.

Population Projection Evaluation

In attempting to accurately project the population of Polk City in 2035, the alternatives were analyzed. Three methods were selected indicating distinct ranges; low, medium and high projection. Using the alternatives to develop a growth range gives decision-makers and planners tools to use for future development assessments. Choosing an appropriate population projection range is extremely important. Selecting a range that is too high or too low can lead to serious challenges when developing land, housing and infrastructure. Underestimating the rate of population growth can lead to shortages of infrastructure and land, while overestimating can result in unnecessary upgrades and money spent. All alternatives were considered and the selected range in population projections is approximately 8,000 to 9,500 people by 2035. Alternatives methods were selected as low, medium, and high projections with slight alterations.

- **LOW PROJECTION:** Alternative 6 (shift share) of 7,877 people was selected as the low alternative. As indicated in Table 1, Polk City has experienced growth rates at a much higher rate than that of Polk County since the 1960's. If that trend continues, Polk City's share of the county population will be increasing at a higher rate than the method projects. Therefore, this method will be considered to be the low end projection.

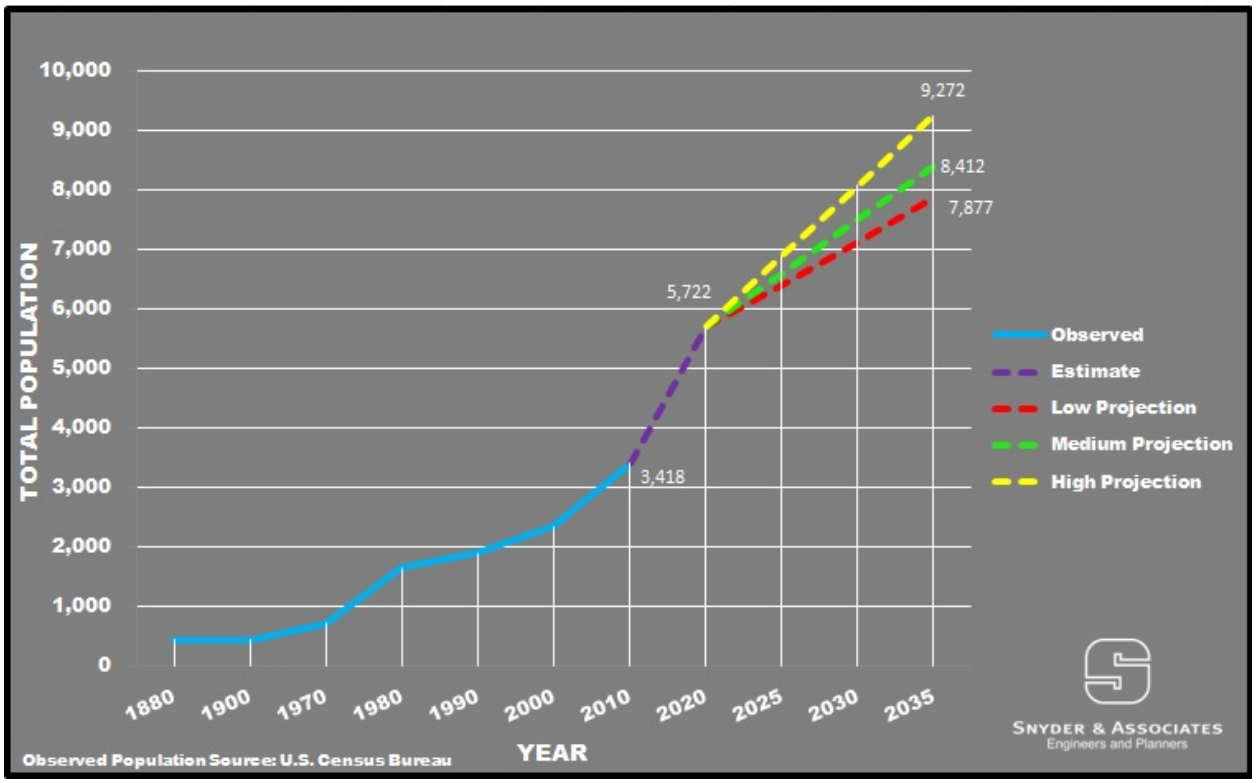
- **MEDIUM PROJECTION:** Alternative 7 (average building permits) was selected as the medium projection due to its actual observed growth trends within the community. This projection is assuming there will be an average of 59.7 building permits per year, with approximately 3.0 persons inhabiting each of the new units. Growth should continue to be monitored through the tracking of building permits and other indicators to determine the accuracy of this projection method.

- **HIGH PROJECTION:** The high projection was selected from Alternative 8 (Land Consumption Capacity). The population was projected at 9,272. This method was used as the maximum growth with the current City owned acres available for development.

The spread between the three projections varies in terms of the average annual population growth rate after 2020, with the low projection assuming a 2.1% annual average growth rate, the medium projection assuming 2.6%, and the high projection assuming 4.1%. If the 2010 age cohort percentages continue, there will be an estimated range of 2,520-2,995 school aged children 19 years or younger, 2,126-2,559 ages 20-39 and 40-59 each, and a range of 945-1,168 ages 60 and over. The selected methods are displayed below.

Population Projections: Selected Alternatives

Polk City


10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
TOTAL POPULATION
1880
1900
1970
1980
1990
2000
2010
2020
2025
2030
2035
YEAR
9,272
8,412
7,877
5,722
3,418
Observed
Estimate
Low Projection
Medium Projection
High Projection
Observed Population Source: U.S. Census Bureau
SNYDER & ASSOCIATES
Engineers and Planners

PART II – DISCOVER AND VISUALIZE

Chapter 4 - Opportunities and Constraints

The planning process identified the opportunities and constraints facing Polk City. As a result of the stakeholder and steering committee meetings, public meetings, online surveys, and one-on-one interviews, the following opportunities and constraints came to the forefront.

OPPORTUNITIES/ASSETS

(This is a preliminary / first draft list based on the interviews only)

Primary

Recreation –

- Proximity to recreational activities (x4)
- Access to lakes (x4)
- Access to trails
- Have a lot to offer during all seasons

Location -

- Commute to downtown is the same time as from western suburbs
- Everything you need is within a short drive
- Proximity to Des Moines area and to Ames (x2)
- Beauty and setting of the town
- Being a destination due to the location

Quality of Life -

- Relatively new community
- Small city/town feel (x6)
- Feels safe
- Not trying to be like the suburbs (uniqueness)
- It is a "hidden gem"
- Beauty of surrounding natural areas
- Good reputation for being family friendly
- Demographics of being highly educated, high income, low median age
- A lot of services are provided in town (don't have to travel)

Secondary

City Staff/Council –

- Staff and council, boards and commissions, people working to make Polk City a better place
- Council works well with employees. There is good teamwork.

- City leadership (Council and staff) are/have been building infrastructure to prepare for new growth
- City government is forward thinking (thinks about public safety AND quality of life amenities)
- Friendly community
- To become part of the greater metro area – play a bigger role politically
- People

Schools –
- School system has a good reputation

Tax Rate -
- Low tax rate

Types of Development -
- Additional commercial development will add to the tax base and provide employment opportunities
- Identifying and bringing in small businesses of 20-30 employees
- Polk City has good quality ordinances and development

CONSTRAINTS/OBSTACLES

Maintaining Services and Infrastructure
- Infrastructure (sewer, water, streets)
- Ability to provide services for rapids growth (x2)
- Funding the maintenance of existing infrastructure (x3)
- Funding future infrastructure to supply new residents
- Larger homes are a bigger challenge for fire suppression
- Concern that the school will not be able to accommodate the growth (will be overcrowded) (x2)
- Servicing quality of life items (sports fields and local trail)
- Find more quality of life opportunities for residents (x2)
- Need recreational facilities (x2)
- Need programming for adult and youth (x2)
- Meet the demands of what the residents want/need (e.g. sports fields)
- Will need more water capacity and storage

City Facility Space
- Will need more space (can expand in current building if other uses move out)
- Will need more space, but can add on to existing building
- Need to have a one-stop-shop for city services
- Current city hall facility isn't inviting (but it is historic and iconic)
- Will need a new fire station, but can be shared with Ankeny

City Staffing Levels

- Will have more contract work (cleaning, mowing, fertilization). Some concern with a lower quality of service from contractors vs city staff
- Administrative functions – will need more staff, already stressed
- Will need a full time recreation director
- Delaying need for additional staff will reduce essential services to the public
- Will need more staff/catch up to staffing standards (x10)
    - Police Staff – Midwest average for Cities under 10,000 is 2.7 sworn police officers per 1000 population (this would equal 10.7 officers; have 6)

Budget

- School taxes will need to grow
- Tax dollars won't be enough to fund everything

Rate of Growth

- Concern about getting landlocked
- Managing growth (people finding out about the "hidden gem") (x4)
- Where will the growth be located?
- Maintaining small town feel but allowing growth – finding a good balance
- Can't lose its identity and community pride; charm of small town
- Need for commercial development (x2)
- Maintaining quality of life
- Could do commercial growth better – need this for tax base, employment, and goods and services
- Attract more commercial – restaurants, hardware, etc. (x2)

Affordable Housing Options

- Need to look at accommodating starter homes
- Should consider multi-family housing/apartments
- Should consider need for senior assisted living housing

Chapter 5 - Goals and Objectives

The following goals were drafted based the opportunities and constraints that were identified during the planning process, which included ample input from stakeholders and the general public. These goals are intended to guide Polk City to achieve the desired future as a vibrant community with a high quality of life and a small town atmosphere.

QUALITY OF LIFE

Goal 1: To preserve the small town atmosphere and identity.

Objective 1: Regulate the characteristics (e.g. size, design, quality, etc.) of new developments and development plan modifications to ensure they are consistent with the small town atmosphere.

Examples:

- Consider zoning changes that:
  - Establish 0-foot setbacks in the town square area
  - Create a highway commercial zoning district for future growth areas to accommodate "big box" stores and limit size of buildings in existing commercial areas.
  - Require that mixed use developments be zoned to Planned Unit Development which is tied to a master development plan.
  - Establish architectural standards for multi-family buildings, including garages, such as articulated building facades and pitched roofs.

Objective 2*:* Ensure that the goals and objectives of this Comprehensive Plan, which have been written to support the small town atmosphere and identity, are adhered to during decision-making processes.

Examples:

- Include a Comp Plan Compliance section to staff reports for Planning and Zoning Board consideration.
- Establish a Comp Plan Compliance checklist for new developments and rezoning applications.

Goal 2: To develop a connected and efficient trail network.

Objective 1: Connect the Neal Smith Trail to the High Trestle Trail while incorporating Polk City businesses and neighborhoods along the routes.

Objective 2: Investigate options for citywide trail connections to the Town Square.

Objective 3: Complete trail connections to existing and future parks.

Objective 4: Preferred characteristics for future trails, such as width and location (along woodlands, in rear/side yards, along street), should be defined by this plan and followed at the time of development.

Examples:

- Trails should be a minimum of 10 feet wide to allow for users to safely travel side by side and pass oncoming users.
- Trails should be constructed on city-owned property whenever possible. If acquisition of private property is necessary, the City should opt for fee title acquisition rather than an easement.
- The width of property necessary to be acquired should be at least 20 feet, with 30' preferred, to accommodate trail design and maintenance.
- Trails should be located along greenways, through scenic areas, and with as few conflict points with motorized traffic as possible.

Goal 3: To strengthen cultural and historical areas and activities.

Objective 1: Maintain City Hall as the hub of the community by retaining its location on the Town Square.

Objective 2: Continue to provide adequate library services and facilities to meet the needs of the residents.

Objective 3: Establish guidelines, such as façade design criteria and building maintenance standards, which would preserve and contribute to the historical character of the Town Square and adjacent businesses.

Goal 4: To provide high quality parks and programs that meets the needs of residents.

Objective 1: Increase recreational programs for all ages and in all seasons while working in conjunction with the City, library, school and other interest groups from throughout the community.

Objective 2*:* Parks should be available to serve all residents within a safe, continuously paved ¼ mile walk route.

Objective 3: Improve existing or create new amenities within newly acquired park spaces.

Examples:

- Develop a 5-year Capital Improvement Program for parks and establish an annual budget amount.
- Prioritize park improvements throughout the system.
- Designate specific, larger future parks as regional parks with amenities that serve the community as a whole.

Objective 4: Develop a new recreation complex providing additional ball fields, trails and year-round activities.

Objective 5: Include snowmobile routes on trail maps and continue to use ordinances to limit times and location of riders throughout the City.

Goal 5: To benefit from proximity to regional and state parks, trails and metro area.

Objective 1: Include the surrounding recreational amenities and proximity to the metro area in marketing efforts put forth by the City, the Chamber, and Polk City Development Corporation, to the extent appropriate for each marketing effort.
Example:

- The Polk City Guide should include maps and descriptions of surrounding recreational amenities and commute times to downtown Des Moines.

Objective 2: Include surrounding recreational amenities on maps produced by the City to the extent appropriate for each map.

Objective 3: Consider implementing various marketing tools (signage, brochures, art, websites, social media, etc.) to further advertise surrounding amenities.

TRANSPORTATION

Goal 1: To provide safe and connected driving, walking and biking routes throughout the City.

Objective 1: Improve sidewalk connectivity and accessibility throughout the community and specifically along E Southside Drive and 3rd Street connecting to the Town Square.

Examples:

- Encourage a minimum sidewalk width of 6 feet in commercial areas.

Objective 2: Investigate the need for improved traffic control and/or geometrics to improve public safety at heavily trafficked intersections such as:

- S 3rd Street & Broadway
- S 3rd Street & West Bridge Road
- Parker & West Bridge Road
- E Southside Drive and W Pine Ridge Drive

Example:

- Monitor increases in traffic volumes at S 3rd Street and West Bridge Road to determine if a signal is warranted.

Objective 3: Ensure new street designs are supportive of the small town atmosphere while protecting the integrity of roadways in Polk City.

Examples:

- Design new streets in a gridiron pattern to support connectivity, walkablity, alternative routes, and reduce reliance on collector roadways.
- Keep low traffic speeds on most roadways, particularly on local streets, through speed limits and roadway design (lane widths, curvature, landscaping, etc.).
- Promote complete street development that considers all users (motorists, bicyclists and pedestrians) in design by including sidewalks and bicycle facilities.
- Identify specific major streets as parkways, including elements such as bike lanes, recreational trails, street trees and landscaping, benches, and signage to enhance the street for all users.

Objective 4: When reconstructing existing streets having rural cross sections, install new streets having an urban cross-section with sidewalks, curb, gutters and storm sewers whenever possible.

Objective 5: Transportation Facilities should operate at a “D” Level of Service or better (as defined in the Highway Capacity Manual).

Goal 2: To maintain safe and efficient regional transportation connections within central Iowa.

Objective 1: Investigate metro transit and ride-share options for commuters.

ENVIRONMENTAL

Goal 1: To protect, preserve, and restore natural areas.

Objective 1: Develop a tree preservation ordinance.

Objective 2: Continue planting programs through City development standards.

Objective 2: Ensure that there is quality water available to serve existing areas and new development by monitoring usage, capacity and nutrient levels.

Objective 3: Monitor and address erosion and storm water management concerns; utilize erosion prevention techniques such as buffers.

- Strengthen stormwater management ordinances
- Encourage regional detention in growth areas north of the city
- Require full detention for per SUDAS for single-family development

Objective 4: Protect environmentally-sensitive areas from negative impacts due to future development and mitigate those which are unavoidable.

- Develop 10 foot buffers on top of embankments.

Goal 2: Promote sustainable development practices.

Objective 1: Ensure that there are adequate and sustainable storm water detention facilities to serve existing areas and future growth.

Objective 2: Encourage renewable energy use and increase energy efficiency.

Objective 3: Encourage city-wide efficiency in operations and other sustainable practices, including coordination of waste haulers within neighborhoods.

LAND USE

Goal 1: To provide a variety of high quality housing types.

Objective 1: Encourage senior housing options to address the current residents and future growth of the community.

Objective 2: Ensure there is adequate variety of housing types including entry level housing that will meet the affordable housing needs of all income and age levels.

Objective 3: Review the City's ordinances and policies related to multi-family rental options including zoning regulations, market need, potential effects on land use compatibility, and aesthetics.

Objective 4: Establish design standards related to multi-family residential uses.

Goal 2: To provide a diversity of business, retail, and civic uses consistent with a small town atmosphere while meeting the needs of residents.

Objective 1: Establish standards to improve aesthetics of Town Square including façade, streetscape, and landscaping while maintaining the small-town character; concentrate on downtown as a unique area of Polk City and plan accordingly for appropriate land uses, parking areas, pedestrian and bicycle facilities, including bicycle parking.

Objective 2: Identify specific land uses that are needed to serve the citizens and visitors, such as daycares, restaurants, retail, personal service businesses, places of worship, and other civic land uses that are compatible with existing and planned future land uses.

Objective 3: Establish land use policies to proactively encourage/attract new small and mid-sized businesses such as retail and office space that enhance the quality of life in Polk City.

Objective 4: Establish design standards related to commercial and mixed uses.

Goal 3: To ensure that new growth and development is consistent with the local values regarding the physical character of the community.

Objective 1: Create attractive gateways at principal entry points to the City and develop a design theme that can be used throughout the community on items such as signage.

Objective 2: Identify and brand the City and square as a unique destination; utilize its proximity and strengths to develop a marketing scheme in order to attract customers and promote additional growth and development.

Objective 3: Encourage and facilitate development types and sizes that are consistent with the existing character of Polk City neighborhoods.

Objective 4: Strengthen architectural design standards to enhance the community's visual and aesthetic appeal.

SERVICES & FACILITIES

Goal 1: To preserve, enhance, and expand city and community services and facilities to maintain an adequate level of service for existing and planned future growth.

Objective 1: Ensure that adequate basic services and facilities meet current needs and are available concurrent with new development, including, but not limited to:

- The public safety of residents and visitors should be protected through sufficient fire and police services.
- City Hall and related services should continue to be open for service during normal business hours.
- Public Works should be staffed to a level necessary to provide a safe, clean and efficient community as it relates to services provided for roads, sewers, water, street lighting, and other items that may be assigned to the Public Works Department.

Objective 2: Ensure the City has adequate high speed communication capacity through installation of City-wide fiber optic infrastructure or other equivalent means.

Objective 3: Cooperate with North Polk Schools to provide high-quality educational facilities and opportunities while addressing population growth with facility updates and expansion; anticipate additional school buildings and encourage communication district wide.

GOVERNMENTAL

Goal 1: To ensure that all residents have the opportunity to participate in city-wide planning, zoning, development and resource management decisions.

Objective 1: Continue efforts to provide community outreach through various avenues such as the City's website, social media, emails, mailings, meetings, signage, and printed materials and encouraging public involvement in decision-making.

Objective 2: Continue to ensure reasonable and competitive tax rates to the extent fiscally possible.

Objective 3: Develop a plan for the use of the City's low and moderate income funds.

Objective 4: Evaluate the status of goals and objectives within this Comprehensive Plan on an annual basis and issue a public report of the findings including recommendations for Comprehensive Plan modifications.

Objective 5: Review existing policies and ordinances related to incentives for development and re-development and modify as necessary to meet the goals of this Comprehensive Plan.

Goal 2: To strengthen inter-governmental and regional collaboration, communication, cooperation.

Objective 1: Continue to enhance the relationship with the North Polk School District.

Objective 2: Foster relationships with surrounding entities such as the Army Corps of Engineers, Iowa Department of Natural Resources, Polk County and surrounding metro and central Iowa communities to improve regional communication and development efforts.

Chapter 6 – Existing and Future Conditions

LAND CONSUMPTION

Monitoring land growth/ consumption over time is important when developing a comprehensive plan. In order to accurately plan what type of facilities and land uses are needed for the future, historical growth and future projections are needed. If the City is running out of developable land, annexation or rezoning should be considered. By analyzing the capacity for a specific land use, you can determine how many additional acres should be designated for future development. This section uses numerous variables to determine past land consumption and estimates on current and future capacities.

- **Land Consumption by Acres**
  One method of evaluating Polk City's land use consumption is to compare the total developed acres over time. A comparison of historical imagery was used to compile the shift in development from the 1990's to the most recent aerial image of 2014. Acres were calculated based off of what was visible in the imagery and is only an approximation. The map shows that the estimated developed acres in the 1990's imagery were 840 acres. By 2002, 952 acres were developed. Between 2002 and 2009, an additional 435 acres were developed. This includes all of the Tournament Club of Iowa golf course. Approximately 1,506 acres were developed based on the 2014 aerial image.

- **Land Consumption by Land Use Classification**
  Another way to evaluate development trends is to look at the different land use changes over time. A comparison of current land use in contrast to the 2002 Comprehensive Plan is summarized in the table below.

Polk City Land Consumption: Land Use Classification Acres

Land Use	2001	2015	14 Year Change	Average Annual Land Consumption
Residential	292.7	791.0	498.3	35.6
Commercial	22.4	31.8	9.4	0.7
Industrial	2.5	15.4	13.0	0.9
Civic/Institutional	37.4	87.5	50.1	3.6
Agriculture/Open Space	1365.5	926.3	-439.2	-31.4
Parks/Recreation	17.9	678.1	660.2	47.2
Total Urbanized Area	1738.3	2530.1	791.8	56.6

While there are some differences in the way information was gathered and tabulated for each of the plans, it is still possible to draw some general conclusions about changes in the

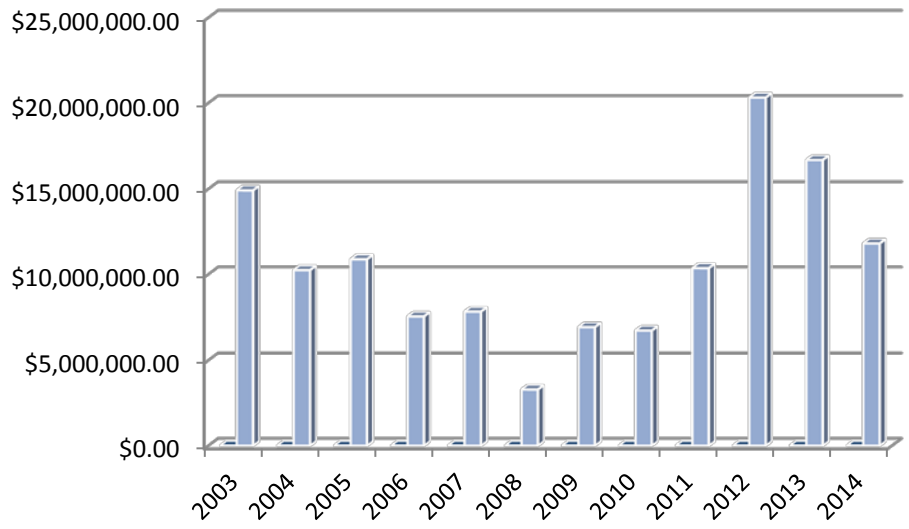
city's land consumption over the last fifteen years. As you can see, the number of acres designated as residential has nearly doubled over the last 14 years. This number should continue to grow at a higher rate than other land uses. The addition of the golf course and Big Creek Park to the incorporated city limits significantly increased the parks/recreation classification. Though this should continue to increase with more residential development, it will not develop at this rate in the future. In the last 14 years, a total of 439 acres have since been developed in Polk City.

Insert land consumption map

- **Number of Building Permits by Development Type**
  A third way to evaluate development trends is to look at the number of building permits issued over time. This provides an alternative way to establish recent development rates, thereby assisting in growth projections. The table below illustrates the number of building permits issued by Polk City since 2003 for both residential and commercial buildings. Permits related to additions, renovations or pools were not included in the data table created. The 12-year average for single-family building permits is 40.16 permits per year for new construction. The average number of commercial permits issued is 1.16 per year.

Year	SF Residential	Duplex	Other Residential	Commercial
2003	56	5	7	3
2004	33	9	1	0
2005	32	6	1	1
2006	39	1	0	0
2007	34	2	0	1
2008	17	0	0	1
2009	35	0	0	1
2010	26	4	0	1
2011	44	0	0	1
2012	70	3	12	2
2013	51	6	28	2
2014	45	2	0	1

- **Valuation of New Construction**
  A final way to look at development trends and the growth of a community is to review the annual increase in building valuations related to new construction. Valuation is probably one of the best indicators of growth in a community. Continued growth shows that your community is moving forward with the constant changes in rollback. The graph below illustrates the total valuation for new construction on an annual basis since 2003. As illustrated, Polk City has had a healthy increase in valuation over the last 12 years. The average valuation since 2003 is $10,623,315 with a maximum value in 2012 of $20,318,629. This graph shows that there has been a positive increase in valuation each year since the construction of TCI. Future trends are projected to look very similar to the previous 12-year period as there are many lots available for future development.



EXISTING LAND USE

Understanding a community's existing conditions brings to light various issues and opportunities that can be addressed throughout the Comprehensive Plan. This section highlights Polk City's existing physical conditions and policies regarding land use, transportation network and environmental constraints.

The existing land use pattern within Polk City will have significant influence on the type of character of future development. Polk City is primarily comprised of residential, parks and open space, and agricultural uses with pockets of industrial, commercial and civic/ institutional developments. Residential districts are predominantly composed of single family detached homes complemented by a mix of single family attached and multi-family housing. Commercial uses are located along the Town Square and along Highway 415 and Bridge Road on the south edge of town.

A complete inventory of land use is essential in creating a picture of how the city functions on a day-to-day basis. This section includes a brief summary of the individual land uses that collectively create the functional framework for development throughout the community. This section will also identify current land use needs based off of the existing conditions report.

- **Residential**
  - Low Density Residential: Detached single-family homes located on individual parcels make up the low density residential classification. A total of 729.7 acres (28.8% of incorporated acres) of low density housing are located within the Polk City with an additional 426.3 acres of rural low density housing located in the planning area. These areas are characterized by 1-3 dwelling units per acre. Low density residential can be found scattered throughout the incorporated area. Eighty percent of Polk City residents live in single-family detached dwelling units.

- Medium Density Residential: The medium density classification consists of multiple single family dwellings, or attached residential structures including duplexes and townhomes. Polk City has an approximate 52.7 acres (2.1% of incorporated acres) of medium density housing and is characterized by 3-5 dwelling units per acre. Medium density neighborhoods include the Parker Townhomes, duplexes along Tyler and Forest Streets, townhomes located along N Cherokee Drive and Tournament Club Way along with the Wolf Creek Townhome Development. Thirteen percent of Polk City residents live in single-family attached dwelling units.
- High Density Residential: In Polk City, high density residential housing is classified as more than 5 dwelling units per acre, such as apartment complexes. A total of 8.6 acres (0.3% of incorporated acres) of high density housing is present in Polk City. High density neighborhoods in Polk City consist of the apartments at Sandpiper Court and South 5th Street, and apartments along Van Dorn Street. An estimated 7% of Polk City residents live in multi-family dwelling units.

- **Commercial**
  Commercial uses vary based on acres, parcel size and surrounding land uses. They range from isolated businesses in older neighborhoods, to mixed commercial uses surrounding the Town Square, to larger commercial retail development along Highway 415 and Bridge Road. Common land uses in the commercial classification include retail/service, hotel, office and mixed commercial uses. Polk City has an estimated 31.8 acres (1.3% of incorporated acres) of commercial use.
- **Industrial**
  Industrial uses consist of a range of business uses, such as research and development, distribution, light manufacturing, and service and consumer-oriented business. Industrial uses are mostly confined to the Big Creek Technology Campus. A total of 15.4 acres (0.6% of incorporated acres) are classified as industrial use. An additional 36.8 acres of industrial land use is located in the Polk City planning area.
- **Civic/Institutional**
  Civic and Institutional land uses in Polk City consist of facilities that define Polk City's quality of life and local culture. It includes both public facilities, such as the library, schools and the City Hall, as well as private facilities such as religious institutions. Civic and Institutional uses can be found scattered throughout the City. Polk City has an estimated 87.5 acres (3.5% of incorporated acres) of civic/institutional uses.
- **Parks/Recreation/Golf Course**
  Parks and recreation land use categories include city parks, Big Creek State Park, the Tournament Club of Iowa Golf Course, and other areas designated for recreation and preservation of natural features such as woods, wetlands or bodies of water. These areas can be either public or private. Polk City has an approximate 678.1 acres (26.8% of incorporated acres) of parks/ recreation/ and golf course uses.
- **Open Space**
  Open Space in Polk City is classified as undevelopable land that consists of woodlands, wetlands, bodies of water and other lands owned and maintained by the Army Corps of Engineers. Polk City has a total of 456 acres (18% of incorporated acres) of open space.

- **Agriculture/ Vacant**
  An estimated 470.3 acres (18.6% of incorporated acres) of Agriculture or vacant land is located in Polk City. An additional 8,916.7 acres are located in the Polk City planning area. These land uses are classified by parcels for farming operations such as groves, orchards, farms or pastures, along with empty lots that are suitable for development/ redevelopment and host no other active use. These areas are scattered throughout the incorporated area.

A summary of the existing land use distribution is displayed in the chart below.

The Open Space and Agriculture/ Vacant land uses were excluded to calculate the percentage of urbanized area since the amount of land designated agricultural land is often more a function of annexation policy than of urbanized land use. The open space classification is also not open for development. A total of 1,603.8 acres of urbanized area was used to calculate the percentage.

With 49% of Polk City classified as residential land use and only approximately 2% classified as commercial or industrial, it is apparent that Polk City is a "bedroom community" yet still offers significant quality of life opportunities with 26.8% of the incorporated area classified as parks and recreational uses.

Polk City Land Use Distribution					
Land Use	Area (Acres)	Area (Sq. Miles)	% of Total Area	% of Urbanized Area	Acres per 100 Residents
Low Density Residential	729.7	1.1	28.8%	45.5%	21.3
Medium Density Residential	52.7	0.08	2.1%	3.3%	1.5
High Density Residential	8.6	0.01	0.3%	0.5%	0.3
Commercial	31.8	0.05	1.3%	2.0%	0.9
Industrial	15.4	0.02	0.6%	1.0%	0.5
Civic/ Institutional	87.5	0.14	3.5%	5.5%	2.6
Parks/ Recreation/ Golf Course	678.1	1.06	26.8%	42.3%	19.8
Open Space	456	0.71	18%	-	13.3
Agriculture/ Vacant	470.3	0.73	18.6%	-	13.8

Insert existing land use map

FUTURE LAND USE

The following section summarizes the issues and opportunities related to land use and development within the City of Polk City. Identifying future land use needs is one of the most important elements of the Polk City Comprehensive Plan. It outlines where investments and resources should be placed to address the projected growth in Polk City, while meeting the Comprehensive Plans' goals and objectives.

Land use needs are assessed based on historic land consumption rates, combined with population and development projections as outlined previously in the plan. The medium population projection used an average of 59.7 additional building permits annually of which the majority of these are to be single-family residential. The projection was developed based off of the *Single Family Active Subdivision Study* and the *2014 Report on Economic Indicators* provided by the City and local developers. It is recommended to use 3.00 persons per household, as used in the population projections, and to address the increase in younger families and households as a whole. Using this projection, Polk City will have a 2035 population of 8,412 persons.

Other data needed to properly project the specific land use needs includes the following:

- Polk City's vacancy rate as of 2010 is a low 3%. This could be attributed to the lack of entry level housing provided in Polk City as indicated by the high median housing values.
- With the recent growth of Polk City, the housing stock is in relatively good condition. Therefore, the loss of existing units will not be an issue when projecting the future units needed.
- Though the City has a relatively low median age, the community's growth will indicate some additional needs for non-household population such as nursing homes or retirement homes.

SMART PLANNING PRINCIPLE - HOUSING DIVERSITY. Planning, zoning, development, and resource management should encourage diversity in the types of available housing, support the rehabilitation of existing housing, and promote the location of housing near public transportation and employment centers.

- **Residential**

  With an average of 59.7 additional building permits per year, 1,194 new construction units are anticipated to be developed between 2015 and 2035. Using the average of 3 people per household, that would add an additional 3,582 residents by 2035. Add that to the 2015 projected population and the estimated 2013 population is 9,304, right in line with the projected range of 7,877-9,272. In 2010, 80% of households were single-family detached, 12% single-family attached and 8% multi-family. We will assume these percentages will stay relatively consistent throughout the next 20 years. Therefore, of the 1,194 additional units, approximately 955 single family detached units will be needed to meet the demand. An estimated 143 single-family attached units and 95 multi-family units will be needed to meet growth needs.

On average, three single family detached units will require one acre of land, resulting in **319** acres. Six single-family attached units will require one acre of land resulting in **24** acres. The average density of multi-family units per acre of land is 12 units, resulting in an additional need of **8** acres of land.

Polk City should ensure there is an adequate variety of housing types including entry level housing that will meet the affordable housing needs of all income and age levels. To meet the residential demands, an additional **351** acres of land will need to be designated for residential uses. We recommend using a rule of designating land at a rate of two times the "hard demand" this suggests a total reservation of land for residential development of about **702** acres.

Though the population is relatively young, there is still an increase older aged individual. Polk city should encourage senior housing options to address the current residents and future growth of the community. The city should also review the City's ordinances and policies related to multi-family rental options including zoning regulations, market need, and potential effects on land use, compatibility and aesthetics.

SMART PLANNING PRINCIPLE - OCCUPATIONAL DIVERSITY
Planning, zoning, development, and resource management should promote increased diversity of employment and business opportunities, promote access to education and training, expand entrepreneurial opportunities, and promote the establishment of businesses in locations near existing housing, infrastructure, and transportation.

To calculate the remaining land use needs, it will be assumed that the ratio of residential to other land uses will remain constant. Therefore, as the residential districts grow, so too will the commercial, industrial, etc. at a rate that is consistent with the current land use percentages. This will help to maintain the small town atmosphere that has been established through provision of low density housing, abundant parks and open space, and thoughtfully selected commercial and industrial uses.

- **Commercial**

With 791 existing residential acres, the commercial classification is roughly 4.0% that size with 31.8 acres. With the addition of 351 new residential acres, an estimated **14.04** additional acres will be needed to meet the commercial demand of Polk City in the next 20 years. Though, with the goal of attracting new businesses and increasing the economic base within Polk City, it is recommended to reserve 1.5 times the "hard demand" to address the goals set forth by the City. This would require a total of **21** acres of commercial land designation. The city should also consider the use of mixed land uses by establishing standards related to mixed use development of commercial and residential uses, potentially through the use of a PUD.

As the business districts continue to develop and emerge, standards should be made to improve the aesthetics of town. These standards should include façade, streetscape and landscaping while maintaining the small-town character of Polk City. Land uses that are needed to serve the citizens and visitors, such as daycares, restaurants, retail, personal services and places of worship should be identified for future development. Policies should be created to proactively encourage/ attract new small and mid-sized businesses such as retail and office space that enhance the quality of life in Polk City.

- **Industrial**
  Currently, industrial uses are approximately 1.9% the size of residential uses with 15.4 acres. To accommodate growth, an additional **seven** acres will be recommended if the city desires to accommodate more industrial land uses. With expansion available in the Big Creek Technology Campus, light industrial uses will be recommended to be isolated to these areas. Using the rule of about three times the hard demand for industrial space, this analysis suggests that the plan reserve about **21** acres for industrial uses.

- **Parks/Recreation**
  To calculate the parks/ recreational use, we will only consider the existing city parks, which have acreage of 37.1. At 4.7% the size of residential uses, an additional **17** acres will be needed for additional parks. With the proposed Pines Park and new Sports Complex an estimated **35** acres will be needed to support these two parks alone. Therefore, to meet additional growth demand, a recommendation of three times the hard demand will be used, suggesting an additional **52** acres be designated for Future Park and recreation demand.

- **Civic/Institutional**
  With 87.5 acres, civic/institutional land uses are approximately 11% the size of residential uses. Therefore, an additional **38** acres will be needed to supplement additional residential growth.

The table below assesses the 2035 land use needs based on recommended classification demands and developable land currently within the Polk City corporate limits. As displayed, a total of 567 acres of incorporated land is classified as developable land taking into account the environmental constraints within Polk City. A hard demand of 427 acres is required to accommodate the projected growth of 2035. This does not consider the need for transportation and ROW uses to provide mobility throughout additional development.

To preserve competitive land pricing, provide consumer choice and to accommodate additional growth, an additional 407 acres be demanded for availability. To meet the growing city's growth and market demand, the city will need to annex an additional 17 acres of parks/recreation, 36.22 acres of civic/institutional and 218 acres of residential land; this totals 271 additional acres of land.

Note that this is based on the medium population projection of 8,412 persons. The City is encouraged to monitor the number of building permits issued annually. Numbers closely resembling 59.7 permits annually will result in a fairly accurate land use needs projection. Permits issued at a slower or faster rate will require changes to the land use demands and will need to be monitored moving forward.

Polk City 2035 Land Use Needs					
Land Use	Hard Demand	Additional Demand	Total Demand	Zoning Designated Land	Annexation Needed
Residential	351	351	702	484.01	217.99
Commercial	14	7	21	21.59	-
Industrial	7	14	21	24.14	-
Parks/ Recreation	17	35	52	35	17
Civic/ Institutional	38	-	38	1.78	36.22
Total	427	407	834	566.52	271.21

Future land use map

ENVIRONMENTAL ASSESSMENT

SMART PLANNING PRINCIPLE - NATURAL RESOURCES AND AGRICULTURAL PROTECTION
Planning, zoning, development, and resource management should emphasize protection, preservation, and restoration of natural resources, agricultural land, and cultural and historic landscapes, and should increase the availability of open spaces and recreational facilities.

Polk City is an environmentally unique community, set along the banks of Saylorville Lake to the west and Big Creek Lake to the north. Iowa Highway 415 enters the community from Ankeny to the south and continues west over the mile-long bridge towards Grimes and Iowa Highway 141. The area surrounding the city is dominated by rolling terrain, steep slopes, woodlands, rivers and tributaries. These features provide an exceptional and challenging natural environment for the community.

The Des Moines River/Saylorville Lake borders the community to the west, flowing southeasterly. Big Creek bisects the community from the north as it flows southeasterly toward the Des Moines River. Eight major tributaries of Big Creek, including Wolf Creek, extend to the north and east of Polk City's planning area. Five-hundred year floodplains follow all lakes, rivers and tributaries in Polk City's planning area.

As Polk City continues to develop, City officials should strive to protect, preserve and restore its natural areas. Development of tree preservation and planting program is recommended.

The city completed a water quality report in 2013. The report contained information regarding water testing, source, quality, and other general information. The City should continue to ensure there is quality water available to serve existing areas and new development areas by monitoring usage, capacity and nutrient levels by additional reports and studies.

- ***Flood Hazard Areas***
  Flood hazard areas associated with the Des Moines River and Big Creek and their tributaries are designated on the map as 500-year floodplains and floodways. The floodplain map is based on the 1984 FEMA mapping. At this time the 100-year floodplains have not been mapped for this area but recent flood studies have been completed and will be released in 2015. The flood hazard areas are generally not suitable for development purposes. Some limited development in these areas may be acceptable if appropriately located and properly mitigated. For example, in flood fringe areas, recreational facilities or wood waste recycling may be permitted. Development should not increase the extent of the floodplain or cause damage to erosion to improvements along the waterways.
- ***Wetlands***
  Wetlands as recognized by the National Wetlands Inventory and the Waters of the U.S. are denoted on the map; however, all wetlands have not been identified. Where wetlands are present or suspected to be present, proper permitting is required. If identified jurisdictional wetlands are permitted to be disturbed by development, mitigation may be required.

- ***Severe Slopes***
  The rolling terrain and significant water routes surrounding the community comprises areas of extreme slopes that make development difficult. The areas of primary concern are steep, having greater than 10 percent slope. These areas are generally located adjacent to waterways and woodlands. Since areas having severe slopes typically require more extensive grading in order to develop the site, erosion is a concern. Stormwater management ordinances should developed and strengthened to require full detention per SUDAS standards for single-family development. Regional detention plans should be encouraged and allow for alternative designs such as bioswales.
- ***Soil Suitability***
  Though not specifically shown on the Environmental Constraints map, Soils Maps are available from the Natural Resources Conservation Service. Polk City is located within the geomorphic region referred to as the "Des Moines Lobe," wherein the area is typified by Wisconsinan age glacial-derived sediments. These sediments consist of either glacial-derived sand or glacial till, which consists of a mixture of sand, silt, and clay. These soils tend to have higher runoff rates; their slow percolation rates may not be suitable for use as leach fields for septic systems. In addition, clay shale may be found which may cause construction limitations. In areas where the potential for unsuitable soils exists, exploration and analysis by a geotechnical engineer is recommended.

The developable land map shows the environmental constraints and will assist with future development and annexation decisions. Currently, Polk City has 567 acres of developable land located within the corporate limits. Approximately half of these acres (244 acres) can be found in the sections north and south of Northwest 118th Avenue in the annexed areas. Other areas consist of planned or platted subdivisions in the community. Additionally, the planning area located outside of the corporate limits consists of 6,967 acres of developable land. Annexation for future growth will need to use this map as a decision-making tool to identify the most cost effective, efficient and construction-ready parcels and sections to purchase for future development.

Polk City should continue to promote sustainable development practices. The City recently adopted a wind energy conversion ordinance. Similarly, the City should also address the use of solar panels and other means of renewable energy use. Efficiency in city-wide operations such as maintenance and waste haulers should be encouraged as well.

Insert topographic map

Insert environmental constraints map

Insert developable land map

TRANSPORTATION PLAN

Most travel occurs through a network of interdependent roadways, with each roadway segment moving traffic through the system towards various destinations. A functional classification system is used to define the particular role a roadway segment plays in serving this flow of traffic throughout the network. When developing the classification system, roadways should be designed with effective access and mobility. Accessibility is the ability to reach a specific destination. However, in order to do that, efficient movement, or mobility is needed. Roadways displaying mobility functionality provides few opportunities for entry and exit and therefore low travel friction from vehicle access/egress. Roadway accessibility functionality provides many opportunities for entry and exit, which creates potentially higher friction from vehicle access/egress.

This section covers the transportation system within Polk City and the surrounding area. The section includes recommendations that aim to build upon the strengths of the existing system and meet the evolving needs of residents, businesses and industry.

Functional Classification

Polk City's system of streets and highways is the most visible aspect of the overall transportation system. It includes a series of arterials, collectors and local streets that provide regional and local access to various destinations. The City should continue to work with the local Metropolitan Planning Organization and other planning officials to maintain a network of streets that support the efficient and safe movement of traffic in the region. This will offer several benefits, including an increase in the overall efficiency of the roadway system, appropriate levels of access to different types of land use, and the protection of residential areas from commercial and industrial traffic. The City should continue to evaluate and implement street designations and design standards. The area is currently served by the following hierarchy of roadways:

SMART PLANNING PRINCIPLE - TRANSPORTATION DIVERSITY
Planning, zoning, development, and resource management should promote expanded transportation options for residents of the community. Consideration should be given to transportation options that maximize mobility, reduce congestion, conserve fuel, and improve air quality.

- **Major Arterials**
  These roadways serve major centers of metropolitan areas, provide a high degree of mobility and can also provide mobility through rural areas. They are generally wider, faster and have limited access along the route to allow travel to and through an area. These roads are regional in nature and link interstate, intra-state and regional activity centers. They are built to accommodate the highest traffic volume and longest travel routes. The existing transportation network contains 5.45 miles of major arterials consisting all of Highway 415.

- **Minor Arterials**
  Minor arterials provide service for trips of moderate length, serve geographic areas that are smaller than their higher arterial counterparts and offer connectivity to the higher arterial system. Minor arterials should be identified and spaced at intervals consistent with population density, so that all developed areas are within a reasonable distance of a higher level arterial. Parker Boulevard, Broadway Street, 3rd Street, NW 44th Street, and E Northside Drive make up the minor arterials in Polk City, a total of 6.4 miles.

- **Collectors**
  Collectors are responsible for gathering traffic from local roads and funneling them to the arterial network. Collector streets prioritize access to property over mobility, and are more locally-oriented. E Southside Drive, Deer Haven Street, Davis Street, Washington Avenue, Booth Street, E. Madison Street and NW Hugg Drive are all currently classified as collectors in Polk City. A total of 4.55 miles hold this classification.

- **Local Roads**
  Locally classified roads account for the largest percentage of all roadways in terms of mileage. They are not intended for use in long distance travel, except at the origin or destination end of the trip. They are often designed to discourage through traffic. Local roads usually have frequent controlled intersections. Compared to other roadway types, local streets are narrower with slower speeds through areas such as residential neighborhoods. The remaining 17.68 miles of roadway in Polk City fall into this classification.

- **Park**
  In the context of the Polk City roadway classification, these roadways are located in the Big Creek State Park limits and are maintained by the Iowa Department of Natural Resources (IDNR). A total of 5.59 miles are classified as Park roadways.

As Polk City continues to grow, the overall city-wide infrastructure footprint, regardless of functional classification, should continue to be closely evaluated and support cost-effective and sustainable growth. A Complete Streets design approach should be used to balance opportunities for both motorized and non-motorized transportation. This approach considers all modes of transportation, removing the singular priority of vehicular traffic and balancing that with the needs of pedestrians, bicyclists, transit users, and people of all ages and physical abilities. The City should adopt and implement a complete streets policy that would allow decision makers to plan, design, and construct streets to accommodate all anticipated users.

Although challenging with the physical characteristics and landscape of Polk City, it is important to implement a connected grid system within the City. A grid system provides easy and predictable navigation within a City and supports connectivity and walkability. Traffic has the ability to easily reroute to the next street over and provides quick and efficient travel times to and from destinations. The grid system should be implemented as opposed to a traditional hierarchies, auto dependent design and use of cul-de-sacs. When reconstructing rural streets

and installing new streets with urban cross-sections, roadways should be encouraged to be designed to keep traffic speeds low through lane width, curvature, limitation of collector streets and landscaping designs. This will ensure that new street designs are supportive of the desired small town atmosphere in Polk City.

The chart below displays the future street classification network. Existing roads are labeled under the corresponding classification along with their distance. Proposed streets are also listed in the table. The following future transportation plan map includes recommendations intended to take advantage of these systems based on local land use and the intended character of the community. The future transportation plan map displays the following classifications:

Future Street Network	
Major Arterials	**Distance (miles)**
Highway 415	5.54
Proposed Major Arterials	0
Minor Arterials	
W. Broadway Street	2.48
3rd Street	4.93
NW 44th Street	5.74
Northside Drive	2.66
NW 126th Street	2.18
Proposed Minor Arterials	23.97
Collectors	
Parker Boulevard	1.05
Washington Avenue	0.34
Booth Street	0.2
NW 134th Street	2
Proposed Collectors	5.45
Local Streets	
Existing Local Streets	46.2
Proposed Local Streets	23.97
Park	
Existing Park	5.59
Proposed Park	0

As new streets are erected, traffic control measures and/or geometrics to improve public safety should be considered. The following intersections have been identified as potential traffic control investigation:

- South 3rd Street and Broadway

- South 3rd Street and West Bridge Road (especially when it converts to a four-way intersection)
- Parker Boulevard and West Bridge Road
- E Southside Drive and W. Pine Ridge Drive

On-Street Bikeways

Add info about existing bike lanes on W Broadway
Future shared lane markings on Washington / Booth and others as determined

Commercial Nodes and Gateways

Also on the Future Streets Map are commercial nodes and gateways. Gateways are extremely important to a community's sense of place and vitality. Gateways are network points that act as an entrance to another network. The existing gateway nodes in Polk City are located along Highway 415 from the west, Highway 415 from the east, north on West Broadway and east on Northside Drive. Future gateway nodes consist of north from R38 and east from NW 66th which has access to Interstate 35.

With continued growth in Polk City, additional gateways should be created. A design theme should be used throughout the community and be shown consistently on signage and gateways. The City and the Square should be branded as a unique destination. Utilizing the proximity and strengths to develop a marketing scheme in order to attract customers and promote additional growth and development.

Commercial nodes are geographic points where economic or social resources and activities are, or will be concentrated for the benefit of a community. The designated commercial nodes should be focused on pedestrian-oriented, limited-impact neighborhood development consisting of good landscaping and mobility planning. The existing commercial node exists at the Town Square. Additional commercial nodes are recommended based off of the future land use plan at the following locations:

- Intersection of N 3rd Street and NW 126th Street
- Intersection of NW 44th Street and NW 126th Street
- Intersection of NW 44th Street and E Southside Drive

Future transportation plan map

Chapter 7 – Parks and Trails

PAST STUDIES

The City of Polk City contracted with Snyder & Associates, Inc. to develop a Park & Trail Master Plan, which was completed on March 3, 2008. This plan included public input on desired facilities, areas needed improved, and other comments. At that time, residents were concerned with sledding, updated playground equipment, trail and sidewalk connections and loops, trail signage, trail lighting, pool/aquatic facilities, basketball, town square beautification, elderly activities, community entrances, additional sports facilities, track, skate park, and disc golf. The designs incorporated these concerns and set forth a master plan for parks and trails including a development plan and cost opinion for each of the following parks:

1. Sports Complex
2. Lakeview Acres Park
3. Lakeside Park (now Leonard Park)
4. Lakeside Linear Park (now Woodhaven Linear Park)
5. Lakeside/West Elementary School Park
6. Miller Park
7. Kiwanis Park (concept plan for a future park)
8. The Pines Park
9. Marina Cove Park

The 2008 plan also provided a system of proposed and future trails and sidewalks. This included future trail connections to the Neal Smith Trail and through downtown. The High Trestle Trail was not completed until 2011, so connections to it were not contemplated at the time of the 2008 plan. The plan resulted in either a trail or sidewalk connection to every park in the City.

There is also a master plan for Doc Simmer Memorial Park, which was completed in 2014 and a concept plan for Lost Lakes Estates Park, completed in 2015.

PARK AND TRAIL FACILITY INVENTORY

Different types of parks serve different segments and areas of the community. Polk City has neighborhood parks, which primarily serve the surrounding neighborhood, and community parks, which serve the entire City. Polk City also has one special use park, which is a sports complex. Polk City's two cemeteries are also included in the park facility inventory.

One of Polk City's greatest assets is its location near regional recreational amenities including Saylorville Lake, Big Creek State Park and regional trails.

Neighborhood Parks

Park Name	Acres	Amenities
Lost Lakes Estates Park		2015 Concept Plan for basketball, shelter, playground, trail, parking. Not yet developed.
Westside Park		Graded for use as open field, benches.
Woodhaven Linear Park		2008 Master Plan shows trail, trailhead parking area shelter, restrooms. Not yet developed.
Leonard Park		playground, trail, 2008 Master Plan shows parking area which has not yet been constructed.
Miller Park		Indoor Shelter house, 2 tennis courts, playground, parking.
Kiwanis Park		Full basketball court, soccer, parking, picnic shelter, sand volleyball
Lakeview Park		Greenspace. 2008 Master Plan shows planting beds and walking trail which are not developed.
Doc Simmer Park		2014 Master Plan shows picnic tables, playground, and parking
Twelve Oaks Park		Pond. No concept plan
Marina Cove Park		pond, trail, playground, benches.

Community Parks

Park Name	Acres	Amenities
City Square Park		historic bandstand, picnic tables, benches, playground, bell

Special Use Parks

Park Name	Acres	Amenities
Sports Complex		1 baseball field, 3 softball fields, 1 full size soccer, 4 pee wee soccer fields, 2 medium soccer fields, 1 playground

Trails

Name	Length	Location

Southside Drive Trail		Connects Neal Smith Trail to East Southside Drive
Leonard Park Trail		Connects Neal Smith Trail, under Parker Blvd., to W Washington Ave.
N 3rd Street Trail		Connects south end of Kiwanis Park to East Northside Drive

Cemeteries

Polk City Cemetery - Located off of East Northside Drive, the cemetery is the resting place for many of the early pioneers of the area, builders of Polk City and forty five Civil War veterans. The hold vault, originally built in 1880, was restored in 1995.
http://www.polkcityhistory.org/
Are there still burials? If so, how much room is left? How many acres?

Beebe Cemetery – Located on East Broadway Street, this cemetery is a burial ground for the children of George and Hester Beebe, who were the town founders. The cemetery was operational from 1846 to 1880 and no longer accepts burials. The City of Polk City restored the cemetery in 2001.
http://www.geocaching.com/geocache/GC5QK4Q_beebe-pioneer-cemetery?guid=26f5fd9f-0769-420d-ba59-a190c6f14ce2

Regional Parks & Trails

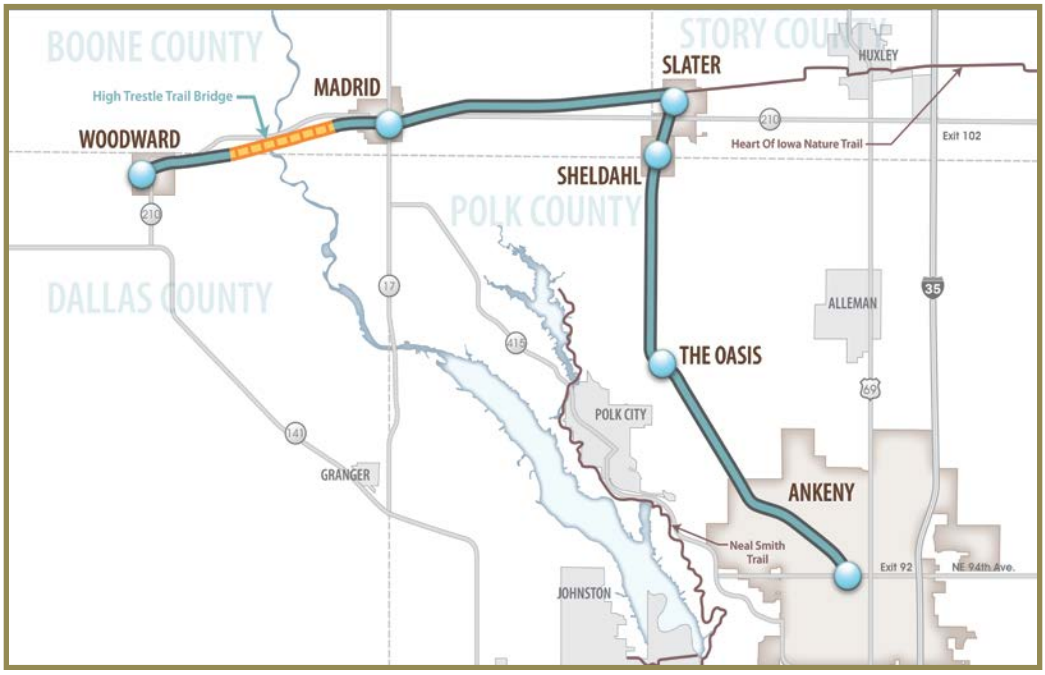
Saylorville Lake – managed by the Rock Island District of the US Army Corps of Engineers. In addition to providing flood control, this 26,000 acre project fulfills a truly multipurpose role. The reservoir provides a minimum downstream river flow for water supply and water quality during drought periods. Park Rangers actively manage the natural resources, conserving river, woodland, wetland, and prairie habitats. Saylorville staff, volunteers and contractors take pride in offering quality outdoor recreation including camping, boating, fishing, hiking, biking, wildlife watching and more.
http://www.mvr.usace.army.mil/Missions/Recreation/SaylorvilleLake.aspx

Big Creek State Park – Managed by the Iowa Department of Natural Resources, Big Creek State Lake was created as part of the Saylorville project to protect Polk City from floods. A diversion dam which forms the 866-acre Big Creek Lake was primarily developed as a flood control project but also offers a wide variety of recreation. Big Creek State Park and the adjoining public hunting areas provide recreation for visitors of all ages and interests. The focal point of the 3,550-acre complex is the lake.
http://www.iowadnr.gov/Destinations/StateParksRecAreas/IowasStateParks/ParkDetails.aspx?ParkID=610157'

Neal Smith Trail – Originally constructed in 1982, the Neal Smith Trail is one of the oldest trails in the Central Iowa Trail Network. It extends 24.7 miles between downtown Des Moines and Big Creek State Park - establishing a portion of the Central Iowa connection of the American Discovery Trail. The Neal Smith Trail is considered to be the north-south "spine" of the 670-

mile Central Iowa Trail network, providing connections to numerous other trails and jurisdictions. It is well-known for its hills, curves, and beautiful, natural setting.

High Trestle Trail – The 25-mile long High Trestle Trail connects the cities of Woodward, Madrid, Slater, Sheldahl and Ankeny through Dallas, Boone, Story, and Polk Counties. Since its completion in 2011, the trail has become extremely popular and well-known for the 2,530-foot long, 130-feet high, High Trestle Trail Bridge over the Des Moines River.



Insert existing parks and trails map

RECREATIONAL PROGRAMMING

City Parks Programs

The Summer Recreation Program offers swimming lessons and involves trips to nearby sites such as:

- Ames Aquatic Center
- Ledges State Park
- Nevada Aquatic Center
- Climb Iowa
- Sky Zone

Little League

Soccer

Adult Softball League

Art Camp

Senior Meal Site?

Polk City Community Library Programs

The Polk City Library operates with three full-time and one part time staff and is open 54 hours per week. The facility provides many services to the community such as:

- Wireless public internet access
- Children's story times
- Adult and teen book clubs
- Interlibrary loan
- Copy machine — photocopies 20¢/page
- Public meeting room (available for rent)

In addition to an extensive book collection, the library also checks out:

- Magazines
- Books on tape and CD
- Video's and DVD's
- Music CD's
- Cake pans
- Rubber stamps

Programs include: Story time, Family Movies, Puppet Shows, Magic Shows, Coffee Wednesdays, Book Clubs, Open Cribbage, Men's Coffee, Sit N Stitch, Tween Time, Dinner with the Doctor.

Soccer Needs

Number of Teams vs. number of fields

Baseball/Softball Needs

Number of Teams vs. number of fields

Year	Number of Little League Participants	Percent Growth
2014	270	-1%
2013	274	22%
2012	225	22%
2011	185	19%
2010	155	24%
2009	125	-

***includes baseball and softball**

Anticipates a growth of 300 to 326 for 2016

The Polk City Sports Complex, with a total of 4 ball fields and 2 soccer fields.

- Southwest field
  - baseball field with mound and grass infield
  - 60' baselines and 200' outfield.
  - Used by Minors and Majors baseball teams.
- Southeast field
  - softball field with no mound
  - 60' bases and 200' outfield.
  - Used by U8, U10, U12, U14
- Northwest field
  - baseball field with a mound
  - 60' bases and 190' outfield.
  - Used by U8, U10, U12, U14; Rookies, Minors, Majors? U6 and t-ball?
- Northwest field
  - ballfield with no mound
  - 60' bases and 230'-285' outfield.
  - Used by adult softball leagues, U8, U10, U12, U14? Rookies, Minors, Majors? U6 and t-ball?

There is also a small temp field on the city-owned "Harvey property" on S. 3rd/Davis with 60' bases and undefined outfield.

In 2015, the number of teams were as follows:

	Baseball	**Softball**

T-ball	8	5 (U6?)
Pee-Wee	3	0 (U8?)
Rookies	3	4 (U10?)
Minors	5	1 (U12?)
Majors	2	1 (U14?)

When the kids move up to the Junior level, they play on the larger baseball field in Alleman. If they are over 12 years old on January 1, then they plan on a North Polk middle school team rather than a Little League Team.

LEVEL OF SERVICE ANALYSIS

The National Recreation and Park Association (NRPA) is the nation-wide resource for parks and recreation research and trends. The NRPA once published the "Recreation, Park and Open Space Standards and Guidelines" to assist agencies in the planning and development of park and recreation facilities. NRPA no longer considers the use of this document to be a best practice for agency management and planning. Instead, NRPA advocates the use of comparative benchmarking. The Parks and Recreation Operating Ratio and GIS (PRORAGIS™) system is a NRPA-created tool to collect and analyze data about parks and recreation agencies across the country, allowing users to compare themselves to departments that they identify as similar to themselves – whether similar in geography, climate, size, or number of total employees. Users complete a survey that captures data about their agency and its responsibilities, and are then able to analyze their data and compare themselves to individual agencies or aggregated groups of agencies.

Number of children in the community
Need to complete development of existing parks -

Acres of Parkland

A common factor used to analyze level of services is the number of acres of parkland per 1000 population. *NRPA's 2015 Field Report* provides a summary of the resulting number based on the density of each jurisdiction. The City of Polk City has 665 people per square mile and can be compared to other agencies that have between 500 and 1500 people per square mile. According to the report, the median number of acres per 1000 population within this density range is 12.1 acres. The lower quartile is 6.3 acres per 1000 population and the upper quartile is 19.9 acres per quartile. Polk City provides close to the median with 10.85 acres per 1,000 people using the 2010 population.

Walking Distance

Comprehensive plans often set a goal that all homes are within a certain distance (either straight line or walking distance) of a park or recreational facility. When choosing this distance, it is important to take into consideration any major barriers to that route, such as major street crossings or large land uses that one must walk around or through.

The preferred maximum distance varies from community to community based on factors particular to each area, such as climate or land use density. Various studies and planning research have identified quarter-mile, one-third and a half-mile walks all as reasonable distances to expect most people to be able to walk to a destination. An individual's willingness to walk varies depending upon age, health, time availability, quality of surroundings, comfort of the route, safety, weather, and many other factors. Some of these factors can be improved through actions taken by the City such as connecting and maintaining sidewalks and trails. (http://cityparksblog.org/2011/05/13/pedestrians-and-park-planning-how-far-will-people-walk/)

The existing parks and trails map exhibits the quarter-mile service area. The area to the north appears to be void of parkland. This is the location of the Tournament Club of Iowa, in which the golf course surrounds the homes located on the various cul-de-sacs. These residents are benefitting from the view of the golf course itself and several treed corridors that run through the development. Despite the proximity to the greenspace, parkland is still necessary for these residents to participate in other types of activities such as picnicking, playing on a playground, or participating in other sports.

The other areas outside the park service boundary are the E Madison Drive and North 6th Street areas. This area could better connect to Kiwanis Park via an expanded sidewalk and/or trail system.

Operating Expenditures

Another method for determining adequate level of service is to compare the departmental operating budget to other similar communities, in this case, other communities with 500-1500 people per square mile. This can be compared on both a per capita and per acre basis. *NRPA's 2015 Field Report* provides a summary of the per capita and per acres expenditures which are broken down by the density of each jurisdiction.

Per capita – for communities with 500 to 1500 people per square mile – $31.82 is the lower quartile; $63.50 is the median, and $111.68 is the upper quartile.
Polk City is XXXX

Per acre - for communities with 500 to 1500 people per square mile - $3000 lower quartile; $5,276 is the median, and $10,749 is the upper quartile.
Polk City is XXXX

FUTURE PARKS AND TRAILS PLAN

Future Parks

The future land use analysis identifies a need for 52 acres of additional park land. This can be distributed among neighborhood or community parks. It is most important that future parks are located such that residents can access them within ¼ mile walk, which is the preferred level of service for Polk City.

To calculate the parks/ recreational use, we will only consider the existing city parks, which have acreage of 37.1. At 4.7% the size of residential uses, an additional **17** acres will be needed for additional parks. With the proposed Pines Park and new Sports Complex an estimated **35** acres will be needed to support these two parks alone. Therefore, to meet additional growth demand, a recommendation of three times the hard demand will be used, suggesting an additional **52** acres be designated for Future Park and recreation demand.

Future Trails

One of Polk City's greatest assets is its location near regional recreational amenities including two major regional trails – the Neal Smith Trail and the High Trestle Trail. The Neal Smith Trail skirts the western boundary of the City, while the High Trestle Trail is less than a mile from the City boundary to the east. There are multiple areas where Neal Smith Trail users can connect into Polk City, but there is no connection for High Trestle Trail users to get to the City.

A future trail connection between the High Trestle Trail and the Neal Smith Trail has multiple layers of significance. It will be locally significant as it is important to the economy and quality of life in Polk City. A trail connection through Polk City would help guide trail users to the City Square and local businesses, where they may wish to enjoy a meal or purchase supplies. A trail extension into the City also benefits Polk City residents by expanding their opportunities for recreation, fitness, and transportation. As a potential segment of the American Discovery Trail, a trail route between the High Trestle Trail and the Neal Smith Trail through town gains both statewide and national significance. A similar proposed connection north of Polk City along NW 142nd Avenue is listed by the Des Moines Area Metropolitan Planning Organization (DMAMPO) as a Regional Trail Gap.

Future Trails

Name	Length	Location
South 3rd Street Trail		Connects X to X
North 3rd Street Trail		Connects X to X
Parker Boulevard Trail		
West Bridge Road Trail		
Sports Complex Trail		
High Trestle Trail Connector		

Insert future parks map
Insert future trails map

PARK AND RECREATION TRENDS

The *NRPA 2015 Field Report* identifies 5 trends that will impact the future of parks and recreation. Many of these are applicable to Polk City.

Trend 1. Programs are key to great park attendance. This trend indicates that programming is crucial to getting people to visit and support the city's park spaces. It will be important for Polk City and its partners to provide recreational programming within the city's park space to sustain public support of those parks. Some recreational programming can be provided for little to no cost, particularly if the City can partner with other organizations to provide their programs within park space or use volunteers to lead programs for which they are knowledgeable.

Trend 2. The perceived value of distributed services results in agencies functions assigned to various departments. This simply means that parks departments and other departments, such as public works, are taking on additional duties. NRPA advised that the operations are most effective within a single department that carries out all park and recreation responsibilities. However, in a smaller community like Polk City it may be unreasonable and unnecessary to have separate maintenance staff for parks in addition to other municipal facilities. In Polk City, the Public Works department provides all of the park maintenance.

Trend 3. Agencies are pioneering new funding methods. Revenue-producing facilities help park agencies to maintain services during recessions. Other funding mechanism may include value-capture property taxes related to park proximate values (properties that are near parks and open spaces are valued higher than similar properties that are located farther from park spaces. The additional tax value can be dedicated toward parks and recreation). Another idea that some communities have implemented is a dedicated sales tax on recreation-related goods and equipment. Some of these ideas or others may occur beyond the local government level; therefore, Polk City should be engaged with Iowa Parks and Recreation Association to remain informed of development of new funding methods.

Trend 4. The infrastructure deficit means parks will have to fight harder for public dollars. There are competing needs with maintaining and expanding infrastructure and providing park space. Parks and greenspace should be part of the discussion when looking at the extension and maintenance of roads and sewers. In Polk City, parks and open space need to be considered as vital as other infrastructure such as roads and sewers which serve previously undeveloped areas. Parks and open space should also be considered for their environmental functions such as stormwater management, species diversity, and animal habitat.

Trend 5. Walkable cites draw millennials, fueling a suburban exodus. Millennials are the cohort of people born between the 1980's and the mid-2000s. They represent 1/3rd of the total U.S. population in 2013. Research and trends show that millennials are drawn to walkable environments with cultural amenities. In Central Iowa, this may result in millennials choosing to live in downtown Des Moines and similar areas. One possible impact of that trend is gentrification causing disadvantaged populations to move out of the city and into the nearby suburbs and smaller towns which may be more affordable.

Chapter 8 – Utilities and Facilities

WATER SYSTEM

The City of Polk City's water system provides service to its residents, businesses, and Big Creek State Park. The City connected to the Des Moines Water Works (DMWW) water system in 2003 and currently purchases the majority of the water used from DMWW. The City's water treatment plant continues to be utilized on a daily basis, which decreases the overall cost of providing water. Polk City's current average daily water demand is 361,000 gallons per day and its peak day demand is 797,000 gallons per day. A water supply study is currently being completed by Snyder & Associates. The estimated future peak day water usage for year 2035 has been projected to be between 1.654 and 2.201 million gallons per day (MGD).

Supply

The majority of the water used in Polk City is purchased from DMWW. The water rates for purchase from DMWW are based on the peak day usage from the prior year. Therefore, limiting the peak day usage provides a financial benefit for the remainder of the year through lower water rates. The amount of capacity in DMWW treatment facilities that the City currently owns is also a factor in the water purchase rates from DMWW. The City currently owns 350,000 gallons per day of purchased capacity. It would provide the City a financial benefit to purchase additional capacity if it can be purchased near the cost of the most recent capacity sales (approximately $2.60 per gallon per day). The DMWW transmission main to Polk City has a current capacity of approximately 750 gallons per minute, which is equivalent to 1.08 MGD using a 24 hour basis, which is less than the projected 2035 peak day water demand. Therefore, continued use of the City's water treatment plant or other capacity improvements will be necessary. A Joint Water System Master Plan including Polk City, Des Moines Water Works, and the City of Ankeny is expected to be completed in April 2016. This study is expected to determine capacity improvements in the DMWW system and costs to provide greater water supply capacity to Polk City and to provide a joint water storage facility.

The City's water treatment plant capacity was originally built in 1963 and most recently expanded in 1992. The plant has been maintained very well and is in good condition. The plant is currently run at a flowrate of approximately 250 gallons per minute but has a rated capacity of 408 gallons per minute. The plant treats water through the processes of aeration, detention, filtration, and disinfection.

The City has three wells in use with ages approximately 13 to 36 years old, located north of the water plant and west of NW 3rd Street. The wells are all approximately 60 feet deep and the combined capacity is approximately 577 gallons per minute. Improvements are in progress to improve flood protection for the City's wells.

Storage

The City has one finished water storage tank, which is a 300,000 gallon elevated storage tank located west of the downtown area. This tank was built in 1975, was last repainted in 1999, and

was last inspected in 2011. The tank appears to be in good condition, but repainting should be anticipated in the near future. The existing tank does not have enough capacity to meet the current recommended storage capacity. Depending on the storage criteria used and future population growth, at least an additional 500,000 gallons of storage is recommended for the year 2035.

Distribution

The water distribution system conveys water from the DMWW connection and the City's treatment plant to the elevated storage tank and then to the users. A significant portion of the City's distribution system is relatively new due to the large amount of growth and development the City has experienced in the last 15 years. The City conducts annual maintenance including flushing of water mains and valve exercising. A continual program of rehabilitation of older and smaller water mains, valves, and hydrants is recommended to provide the highest degree of distribution system reliability and fire flow capacity.

Recommendations:

1. Supply – Continue operation and maintenance of the City's wells and water treatment plant. Consider improvements to increase capacity.
2. Supply – Continue purchase of water from DMWW. Purchase additional capacity when available if available at a reasonable cost.
3. Supply – Complete a source water protection plan for the City's existing wells.
4. Storage – Continue periodic maintenance of the existing elevated storage tank.
5. Storage – Budget for and repaint the existing elevated storage tank in the near future.
6. Storage – Construct additional finished water storage capacity. Consider partnering with the City of Ankeny, DMWW, and any other feasible entities as this could significantly reduce the cost for additional storage.
7. Distribution – Continue the annual flushing program, and valve and hydrant replacement and exercising programs.
8. Distribution – Continue the existing water meter replacement program. Install meters at any properties not currently metered. For any meters not read, begin reading every month to provide data for use in future water leakage calculations.
9. Distribution – Complete leak location studies periodically and repair any leaks located.
10. Distribution – Replace undersized and old water mains, valves, and hydrants.
11. Distribution – Construct approximately 200 feet of water main along West Bridge Road east of Parker Boulevard to finish the major water main loop in this area.
12. Distribution – Construct water main across the Big Creek Diversion Dam and along NW Hugg Drive to complete a northern system loop as development occurs in this area of the City.
13. Distribution – Construct water main across the Saylorville Lake Barrier Dam to complete a southern system loop and increase redundancy for the DMWW water supply. This would require approval of the US Army Corps of Engineers and Iowa DOT, which may be difficult to obtain.
14. Distribution – Construct water main along Highway 415/NW Polk City Drive from Winding Creek Circle east to NW 44th Street to complete a system loop and eliminate a long water main dead end.

15. Distribution – Loop the water mains between the town square and the development to the southeast.
16. Distribution – Construct 12” water main loops on 0.5 to 1 mile intervals as development occurs.
17. Distribution – Continue to require new development to adhere to current building codes. Layout of water system improvements should include looped systems with no dead ends wherever possible.

Insert existing water utility map

SANITARY SEWER SYSTEM

The City's sanitary sewer system was first constructed in 1963. In 2010, Polk City became a member of the Des Moines Metropolitan Wastewater Reclamation Authority (WRA), in order for the City's wastewater to be treated at the WRF wastewater treatment facility in southeast Des Moines. In March 2013, the final connection in the Rock Creek Trunk Sewer Project was made and all of Polk City's wastewater flow began being conveyed to the WRF for treatment. Although the City is no longer directly responsible for treatment of its wastewater, the City remains responsible for the operation and maintenance of its wastewater collection system.

Collection System

The City's sanitary sewer system includes various piping materials including vitrified clay pipe, concrete pipe, PVC truss pipe, and PVC pipe. The City currently cleans and inspects the sewers by television inspection with a rotation cycle of approximately every 5 years, with a portion of this completed each year. This allows defects to be identified for repair in a more timely manner and minimizing emergency repairs. This also allows prioritization of infiltration and inflow (I&I) mitigation efforts. Preventing infiltration and inflow in the collection system is even more beneficial now since wastewater treatment costs are most likely higher on a per gallon basis than before when the City provided treatment of wastewater. Preventing I&I also preserves the existing sewer capacity so this capacity is available for additional development without extensive improvement projects to increase pipe and pumping capacity.

Lift Stations

The City has three sanitary sewer lift stations, as shown on the existing sanitary sewer map. One is located along West Bridge Road just west of Parker Boulevard, which was constructed in 1993 and not used until recently. More recent development along Parker Boulevard has started contributing flow to this lift station. A much smaller lift station serving the concession stand and restrooms at the sports complex was constructed in 2008, and pumps flow to the lift station near Parker Boulevard. The third lift station is the TCI Plat 6 lift station located just north of Big Creek in the TCI development, which was constructed in 2014. The TCI Plat 6 lift station provides service to the portion of Big Creek State Park east of the lake, as well as the TCI Plat 6 (Big Creek Valley) development planned, and an area of 157 acres north of NW Hugg Drive, west of NW 72nd Street, and east of Big Creek State Park.

There are two WRA-operated lift stations which pump all of Polk City's wastewater flow to the Rock Creek Trunk Sewer, which is the first sewer downstream of Polk City utilized to convey Polk City's flow to the WRF treatment facility. The locations of these lift stations are shown on the existing sanitary sewer map. These two lift stations were constructed in 2012 and became operational in 2013. The WRA also operates the equalization basin at the north lift station which can be used to store excessive wastewater flows for a short time period during times of high flow. Polk City is responsible for site maintenance at the two lift stations and equalization basin including mowing and snow removal.

The two WRA lift stations have experienced issues due to accumulation of fat, oil, and grease (FOG) from Polk City's wastewater system. Due to this, the City must pump the FOG from the pump stations on a periodic basis to prevent operational problems at the lift stations. Polk City should continue working with WRA's FOG group to identify the sources of FOG and minimize the discharge of FOG to the collection system. This should decrease the need for pumping the FOG from the lift stations at Polk City's cost. This would also be beneficial in minimizing sanitary sewer blockages and depending on the location of the sources, may provide benefits in operation of the City's own lift stations.

Future Sewers

The future sanitary sewer map shows selected potential sewer service areas, major sewers, and general drainage patterns for undeveloped land in and near Polk City.

The Northwest Service Area shown in purple in the northwest portion of the City is the service area for the TCI Plat 6 lift station. The lift station is sized for the flow from this area but the third uninstalled pump should be added when necessary due to development.

The North Service Area shown in Yellow in the northern portion of the City is the potential service area for the future Northern Trunk Sewer. This trunk sewer would connect to the existing East Trunk Sewer where Big Creek crosses NW Sheldahl Drive. The sewer would run northerly along NW Sheldahl Drive and Wolf Creek between NW Sheldahl Drive and NW 72nd Street. Depending on the development density, the existing East Trunk Sewer downstream of the connection may need to be upgraded to accommodate the higher flows for this trunk sewer service area.

The East Service Area shown in teal in the east portion of the City is the service area that could flow to the WRA Rock Creek South lift station. Of this area, roughly the portion north of the major drainage way south of East Northside Drive could alternatively flow to the sewer on East Northside Drive. Depending on the development density and area, the sewers along and downstream of East Northside Drive may need to be upgraded to accommodate the higher flows under this alternative.

Recommendations:

1. Collection System – Continue cleaning and televising program.
2. Collection System – Identify sources of I&I and make repairs to minimize this flow.
3. Lift Stations – Continue efforts to identify and minimize sources of FOG.
4. Lift Stations – Monitor flows to the West Bridge Road lift station and upgrade pumps when necessary due to increased development in this area.
5. Lift Stations – Monitor flows to the TCI Plat 6 lift station and add the planned third pump when necessary due to increased development in this area.
6. Lift Stations – Consider standardizing alarm notification systems to match the TCI Plat 6 lift station. This alarm notification system has benefits including decreased telephone service cost and increased operational data availability.

Insert existing sanitary sewer map
Insert future sanitary sewer map

DRAINAGE AND STORM SEWER

Insert existing storm sewer map

MUNICIPAL FACILITIES & SERVICES

Insert existing municipal facilities map

PART III - STRATEGIZE

Chapter 9 – Moving Forward

Development Guidelines

Growth Management Policies

Implementation Plan

SMART PLANNING PRINCIPLE - ***Efficiency, transparency, and consistency.***
Planning, zoning, development, and resource management should be undertaken to provide efficient, transparent, and consistent outcomes. Individuals, communities, regions, and governmental entities should share in the responsibility to promote the equitable distribution of development benefits and costs.

APPENDICES

Compilation of interviews
Resident survey results
Business survey results

Compilation of Key Person Interviews (as of 2/5/2015)

4 of 12 interviews included below

What is Polk City's biggest asset?

RECREATION

- Recreational opportunities
- Amount of Army Corps property – good because it provides parkland and open space, but it also breaks up the community (need neighborhood connectivity to counteract that separation).

LOCATION

- Proximity to Des Moines metro area and to Ames (x2)

CITY STAFF AND COUCIL – PEOPLE!

- Staff and council, boards and commissions, people working to make Polk City a better place
- Council works well with employees. There is good teamwork.

OTHER

- School system has a good reputation
- Good reputation for being family friendly
- Low tax rate

Why do people want to live/work/visit here?

RECREATION

- Proximity to recreational activities (x3)
- Access to lakes (x3)
- Access to trails

LOCATION

- Commute to downtown is the same time as from western suburbs

QUALITY OF LIFE

- Small city/town feel (x2)
- Not trying to be like the suburbs (uniqueness)
- It is a "hidden gem"
- Relatively new community
- Demographics of being highly educated, high income, low median age

What is Polk City's biggest challenge over the next 20 years?

MAINTAINING SERVICES AND INFRASTRUCTURE

- Ability to provide services for rapids growth
- Funding the maintenance of existing infrastructure (x2)
- Funding future infrastructure to supply new residents

- Tax dollars won't be enough to fund everything

MANAGING GROWTH
- Concern about getting landlocked
- Managing growth (people finding out about the "hidden gem")
- Where will the growth be located?
- Finding new leadership
- Can't lose its identity and community pride; charm of small town
- Meeting the needs/expectations of long-time residents as well as new residents
- Maintaining small town feel but allowing growth – finding a good balance

What is Polk City's biggest opportunity over the next 20 years?
GROWTH-RELATED
- Being a nicer/faster growing suburb – "upscale"
- Growth – more people means more opportunities
- Vacant land is being sold
- Additional commercial development will add to the tax base and provide employment opportunities
- Managing our growth in a smart way
- More recreational opportunities.
- People want a sense of security and belonging and close-by recreational opportunities.

What is Polk City doing right? What works well?
STAFFING/LEADERSHIP
- City leadership (Council and staff) are/have been building infrastructure to prepare for new growth
- Teamwork between council and employees
- Have equipment they need
- Watching the tax rate

DEVELOPMENT TYPES
- Getting well-planned, high quality building
- Land use is good
- Have learned from past development issues (ex. Accommodating parking appropriately)
- Growing at a pace that is acceptable to the established older regime (growth is slow enough)
- Infrastructure projects – Polk City doesn't have decaying sewers because they have new infrastructure. Most growth is since 1980.

What could Polk City do better?
BUDGET/MAINTENACE
- Budgeting – maintenance of infrastructure and services
- Delaying need for additional staff will reduce essential services to the public

COMMERCIAL

- Could do commercial growth better – need this for tax base, employment, and goods and services

RECREATION/QUALITY OF LIFE

- Find more quality of life opportunities for residents
- Need recreational facilities
- Need programming for adult and youth

HOUSING

- Need to look at accommodating starter homes

How will population growth affect your department/area of expertise? What will your departmental needs be over the next 20 years?

STAFF NEEDS

- Will need more staff - have same staffing level as 10 years ago (x2)
- Staff – Midwest average for Cities under 10,000 is 2.7 sworn police officers per 1000 population (this would equal 10.7 officers; have 6)
- Will need to catch up to staffing standards (x2)
- Will have more contract work (cleaning, mowing, fertilization). Some concern with a lower quality of service from contractors vs city staff
- Administrative functions – will need more staff, already stressed
- Will need a full time recreation director
- May need to create a city development department (planning, building, and engineering)

SPACE/FACILITY NEEDS

- Will need more building space
- Need to have a one-stop-shop for city services
- Need to give citizens access to services and decision makers
- Current city hall facility isn't inviting (but it is historic and iconic)

What land use and/or infrastructure needs do we need to keep in mind as we plan for additional growth in order to meet the needs of your department?
(e.g. road width for emergency vehicles / dumpster enclosures in commercial development for public works / curb and gutter for storm sewer / street lights for public safety/sufficient park land for new residential growth / landscaping/ buffers / parking lot islands / setbacks)

- Lighting in commercial areas
- addressing/street naming should carry on as their own (not county addressing)
- Polk City has good quality ordinances and development

- Sign ordinance can be re-visited (can't see business names in square due to trees)
- Curb stops being concreted in
- Manhole castings being concreted in
- Water meters are added after completion, but contractors are using water during the construction process. May use $500 worth of water during construction (e.g. for trenching in).

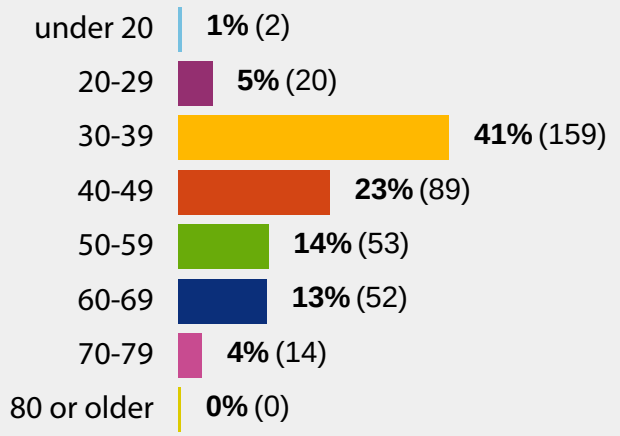
Anything else you'd like to share?

- We have to grow. Staying stagnant is reverse, but growth puts demands on services.
- We should annex up to 142nd street to ten north (at least) so that we are not land locked
- Need property in future land use plan to accommodate more facilities (public services)
- Need more commercial areas
- Look at traffic safety
    - 3rd & Broadway
    - 3rd & West Bridge Road
    - Parker and West Bridge Road
    - Turn lane on 415 – with E Southside Drive and W Pine Ridge Dr.
- Importance of maintaining infrastructure
- Will need to plan for more water storage
- Concern about sewer bills expected to triple in cost (according to IDNR)

Polk City Residents' Survey

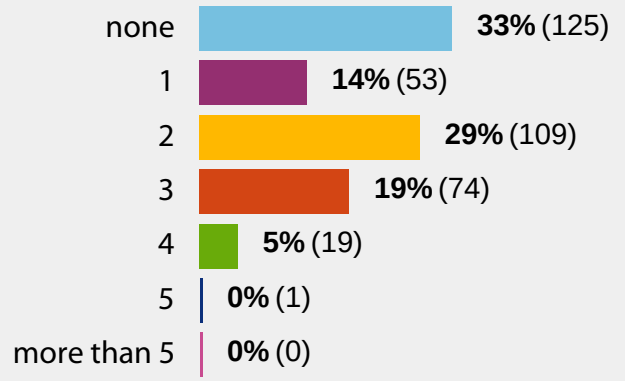
Final Results - 389 responses

How old are you?



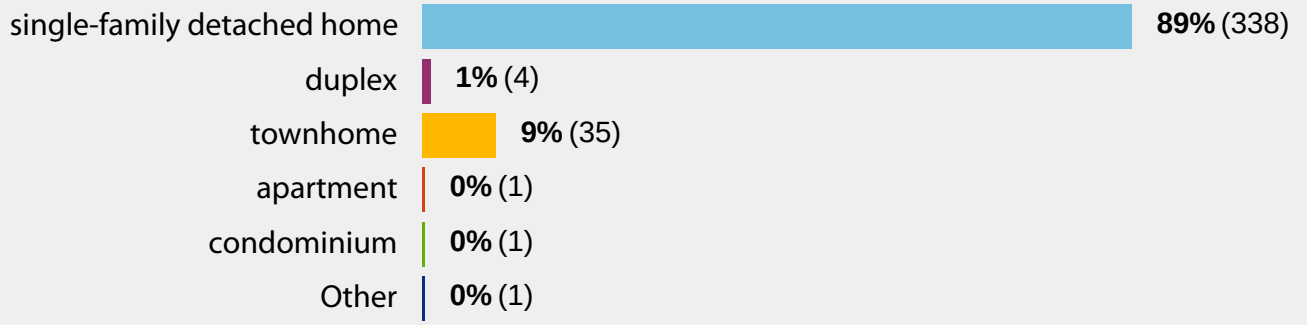
* 389 total responses, 100% of submissions

How many children (18 & under) reside in your home?



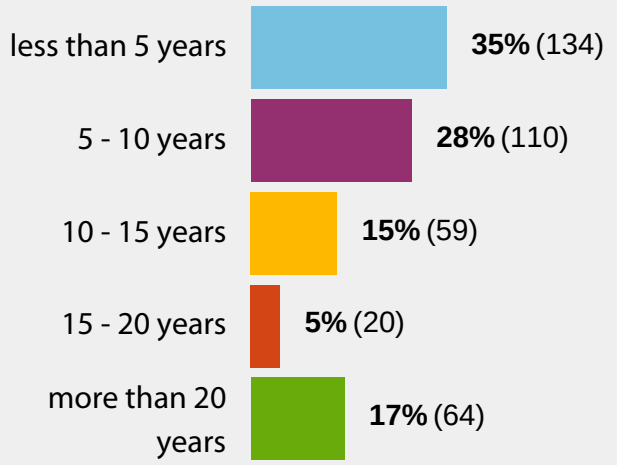
* 381 total responses, 98% of submissions

What type of residence do you live in?



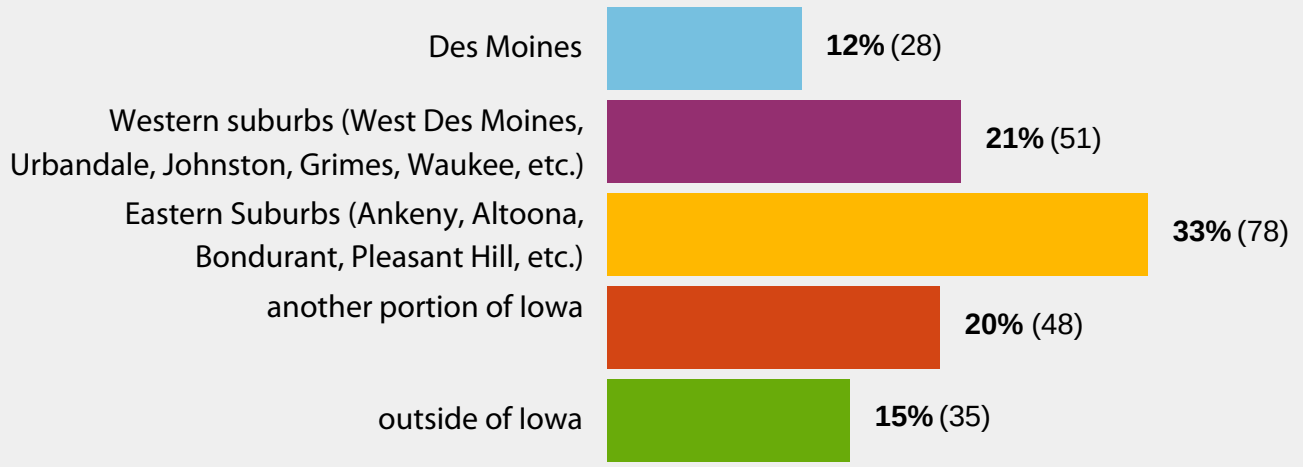
* 380 total responses, 98% of submissions

How long have you lived in Polk City?



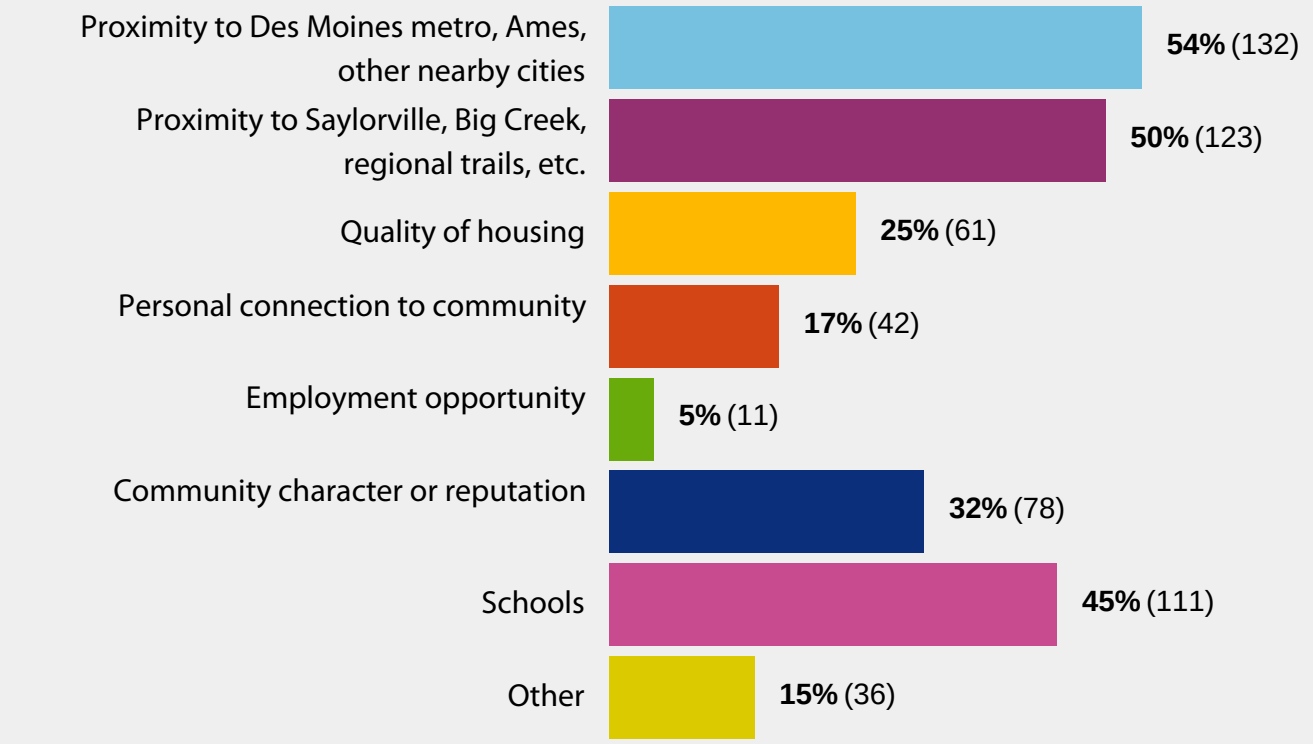
* 387 total responses, 99% of submissions

Where did you move from?



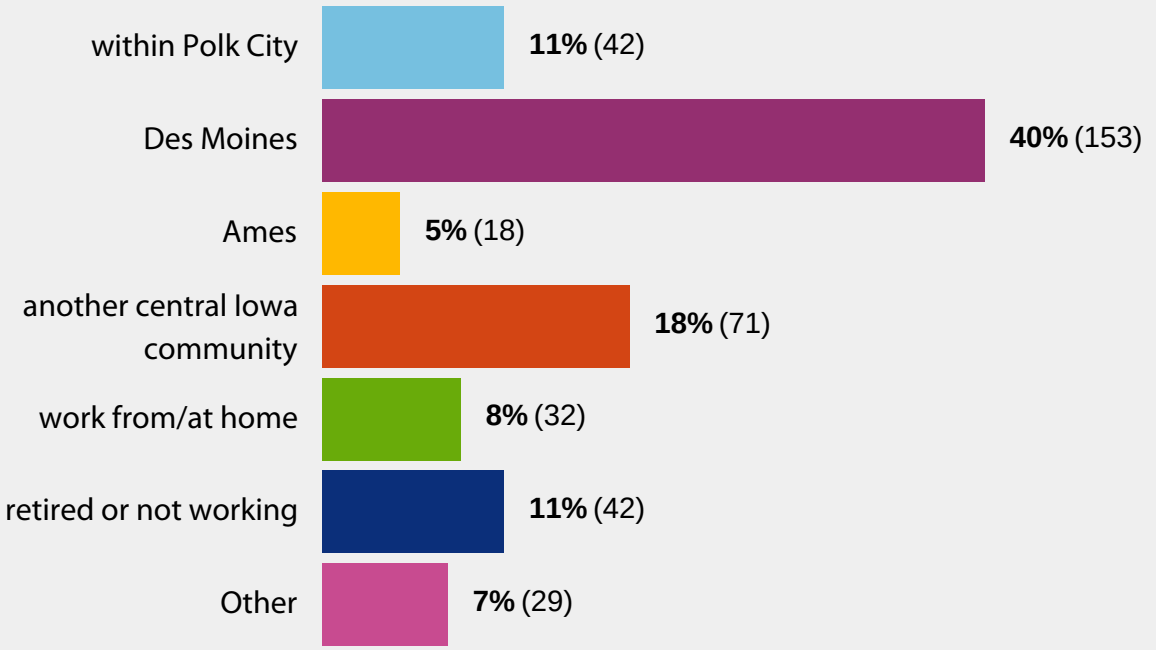
* 240 total responses, 62% of submissions

What were your top three reasons for moving to Polk City?



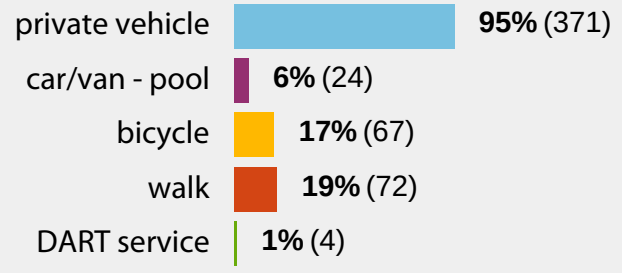
* 244 total responses, 63% of submissions

Where do you work?



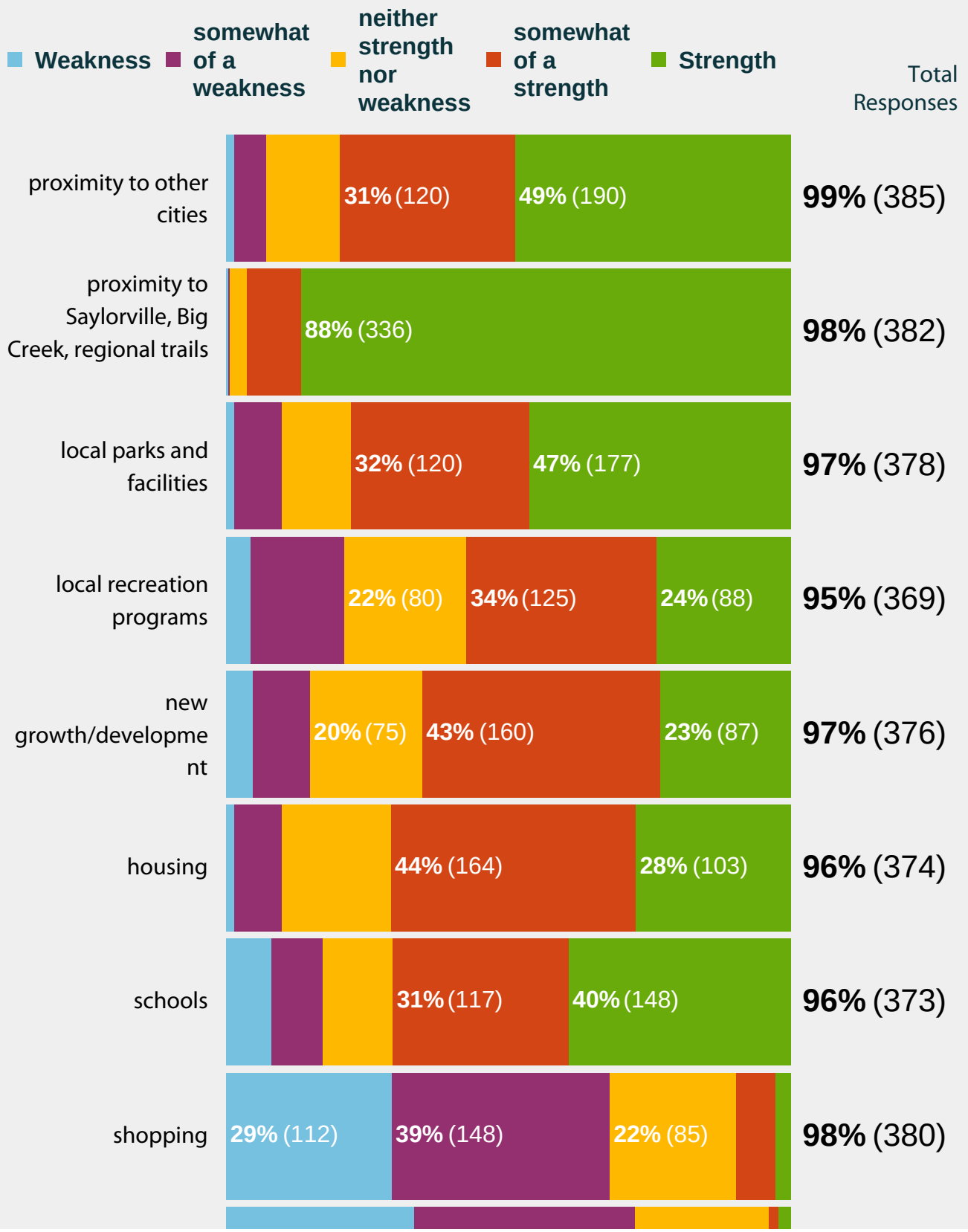
* 387 total responses, 99% of submissions

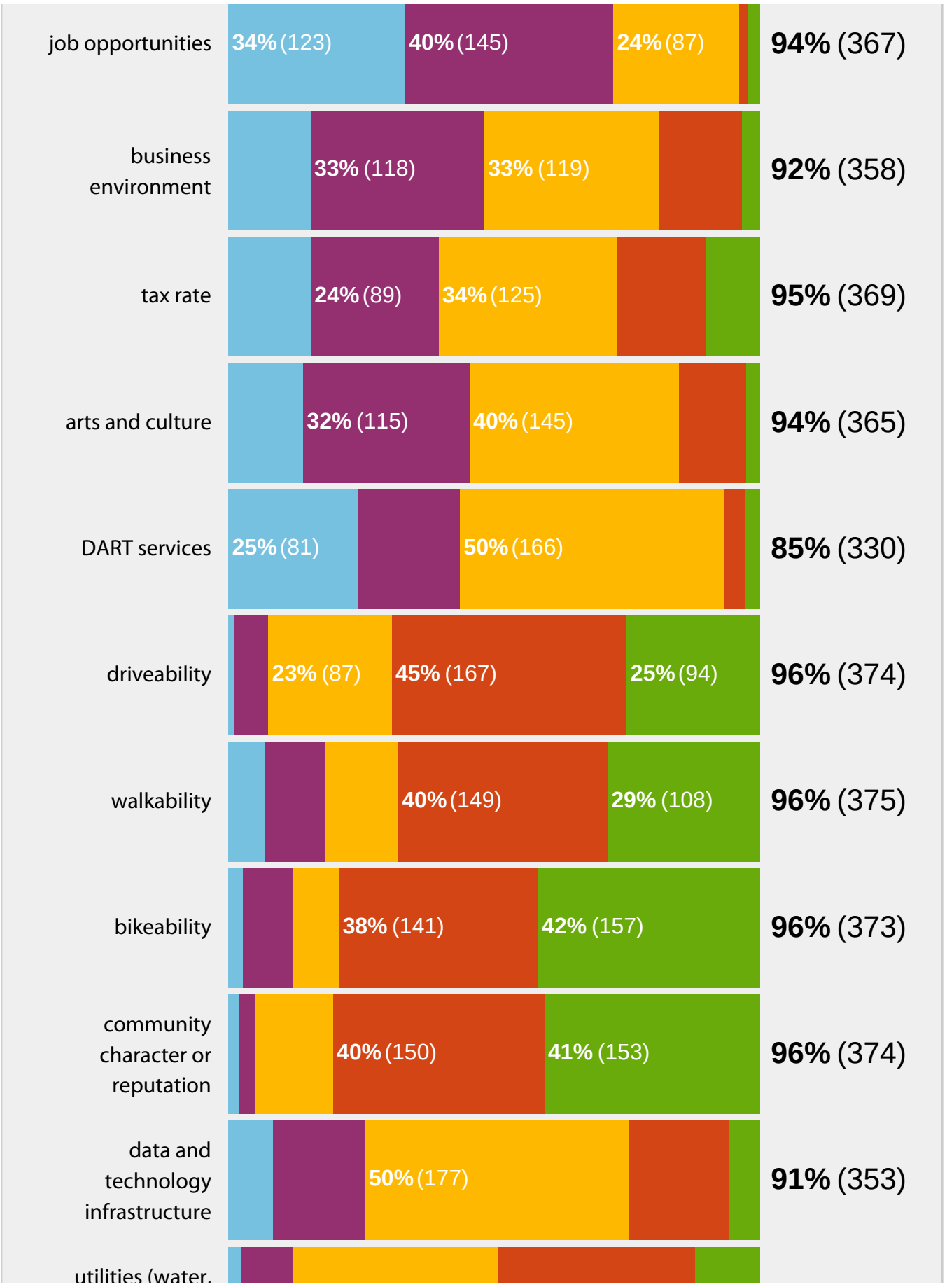
What modes of transportation do you regularly use? (check all that apply)

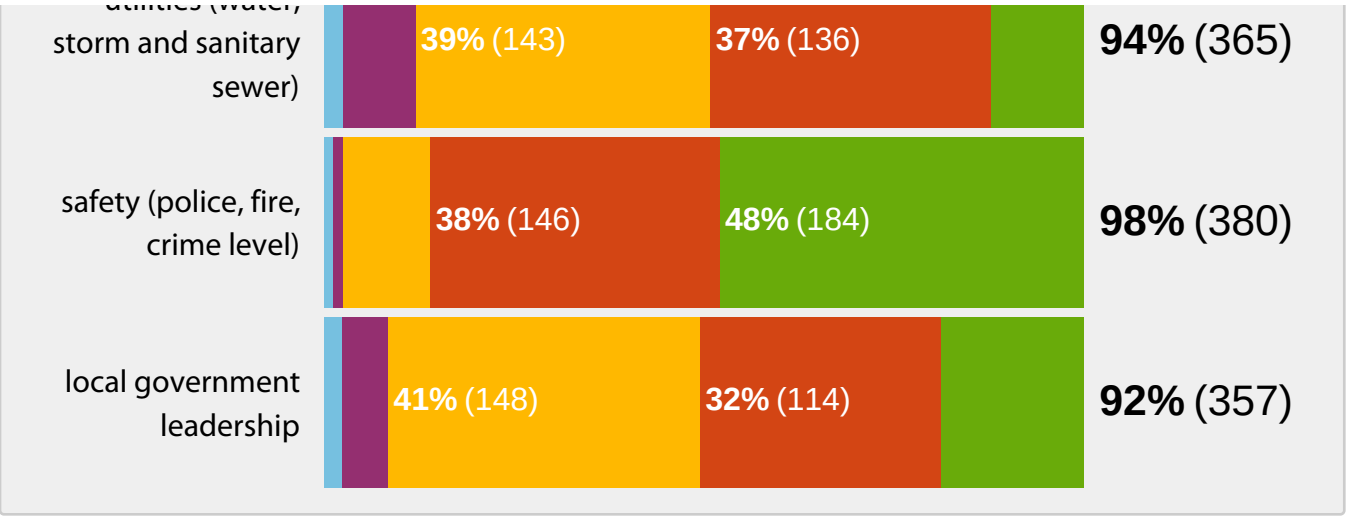


* 389 total responses, 100% of submissions

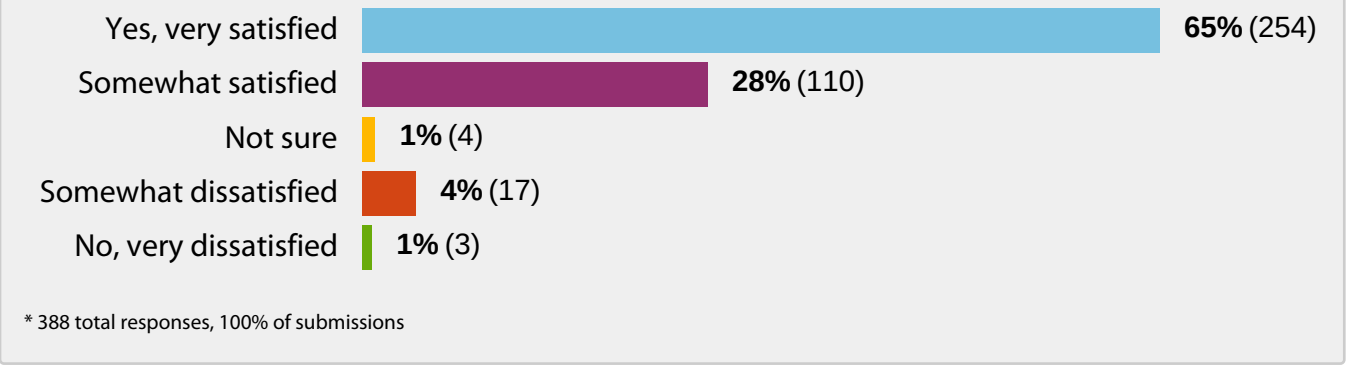
What are the strengths and weaknesses of Polk City? (If a particular item is not applicable to you, you may choose to skip that item.)




job opportunities
34% (123)
40% (145)
24% (87)
94% (367)
business environment
33% (118)
33% (119)
92% (358)
tax rate
24% (89)
34% (125)
95% (369)
arts and culture
32% (115)
40% (145)
94% (365)
DART services
25% (81)
50% (166)
85% (330)
driveability
23% (87)
45% (167)
25% (94)
96% (374)
walkability
40% (149)
29% (108)
96% (375)
bikeability
38% (141)
42% (157)
96% (373)
community character or reputation
40% (150)
41% (153)
96% (374)
data and technology infrastructure
50% (177)
91% (353)
utilities (water,

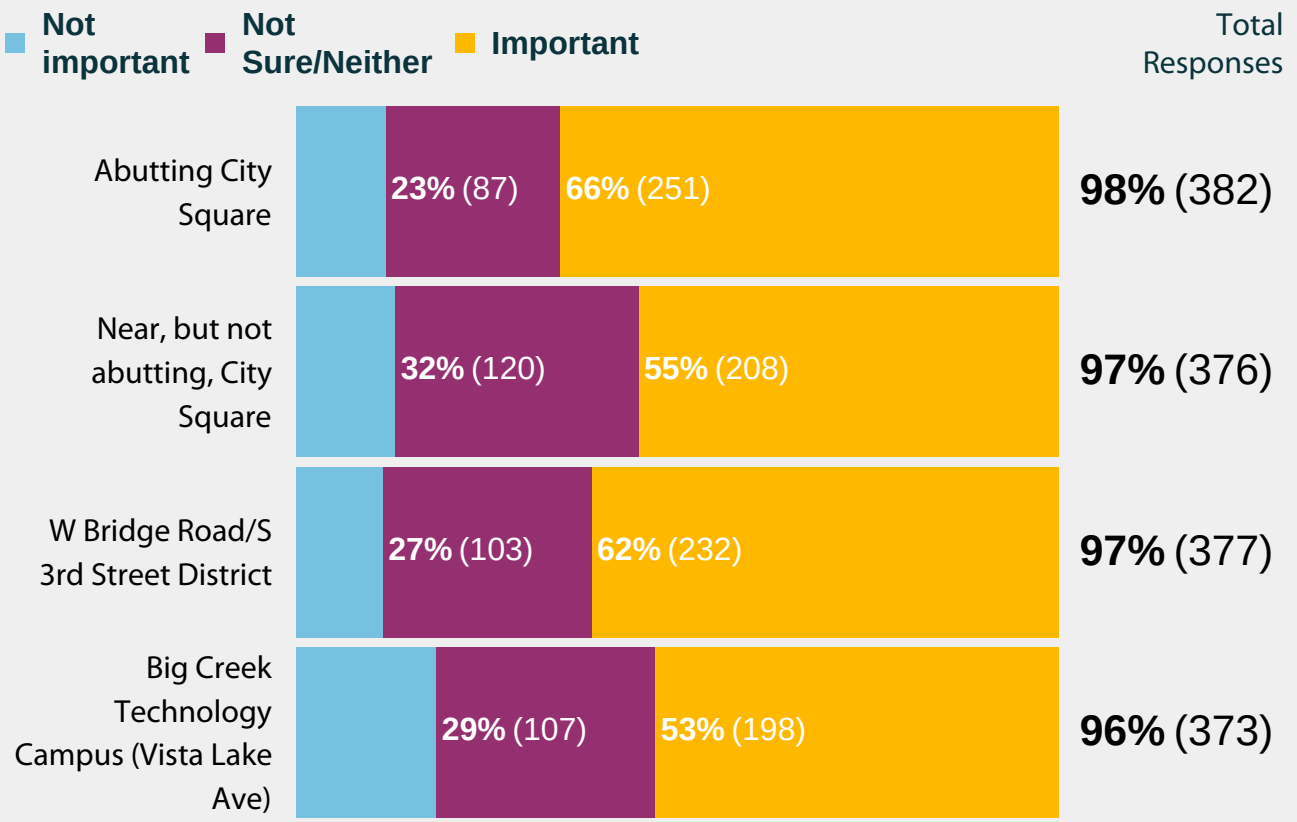


Are you satisfied with the overall quality of life in Polk City?

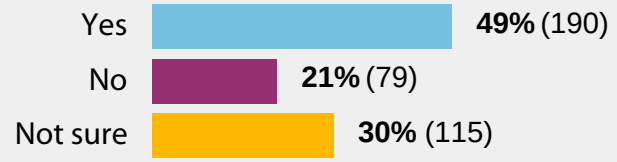


* 388 total responses, 100% of submissions

How important is it for Polk City to attract new businesses/uses to various portions of the City?

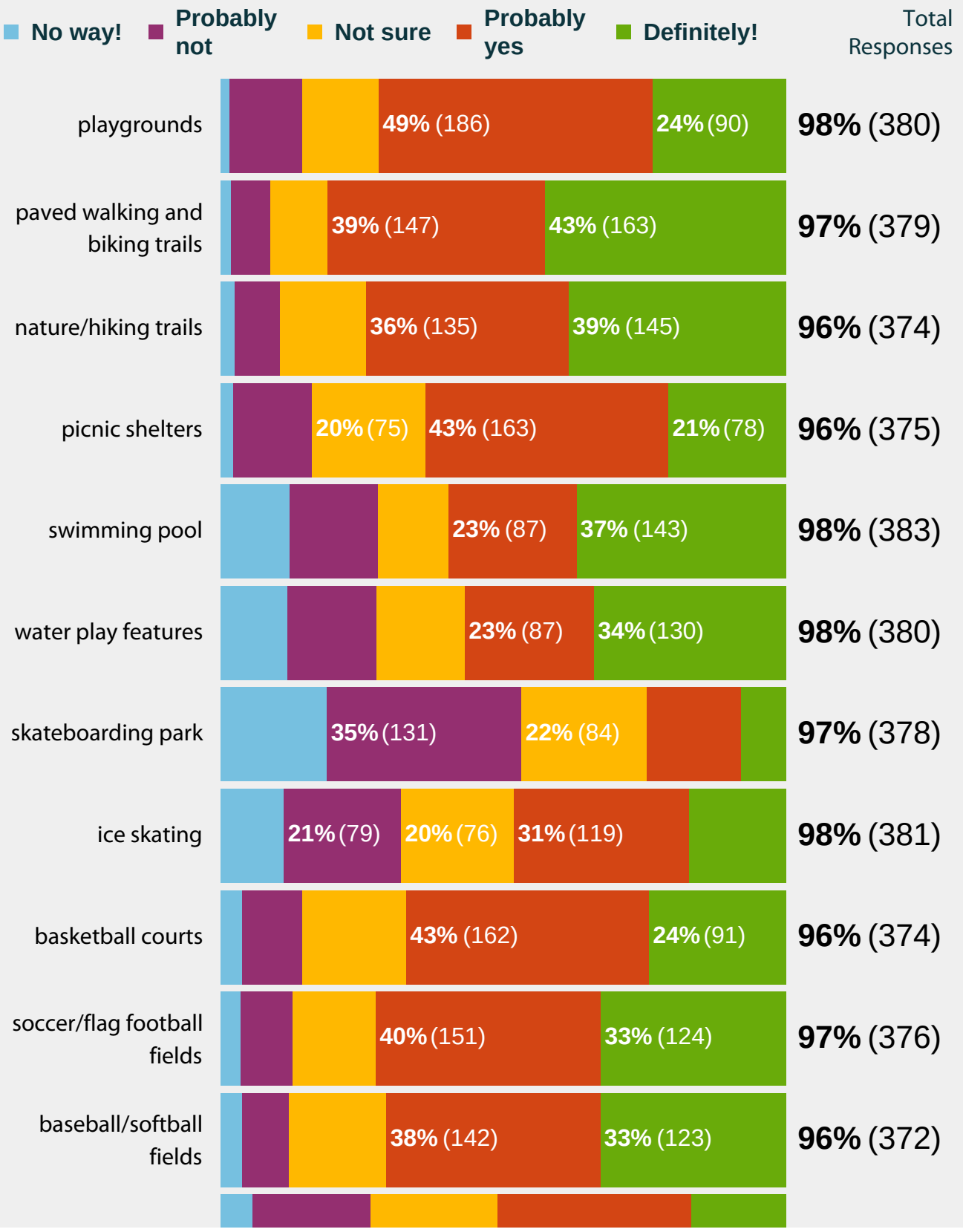


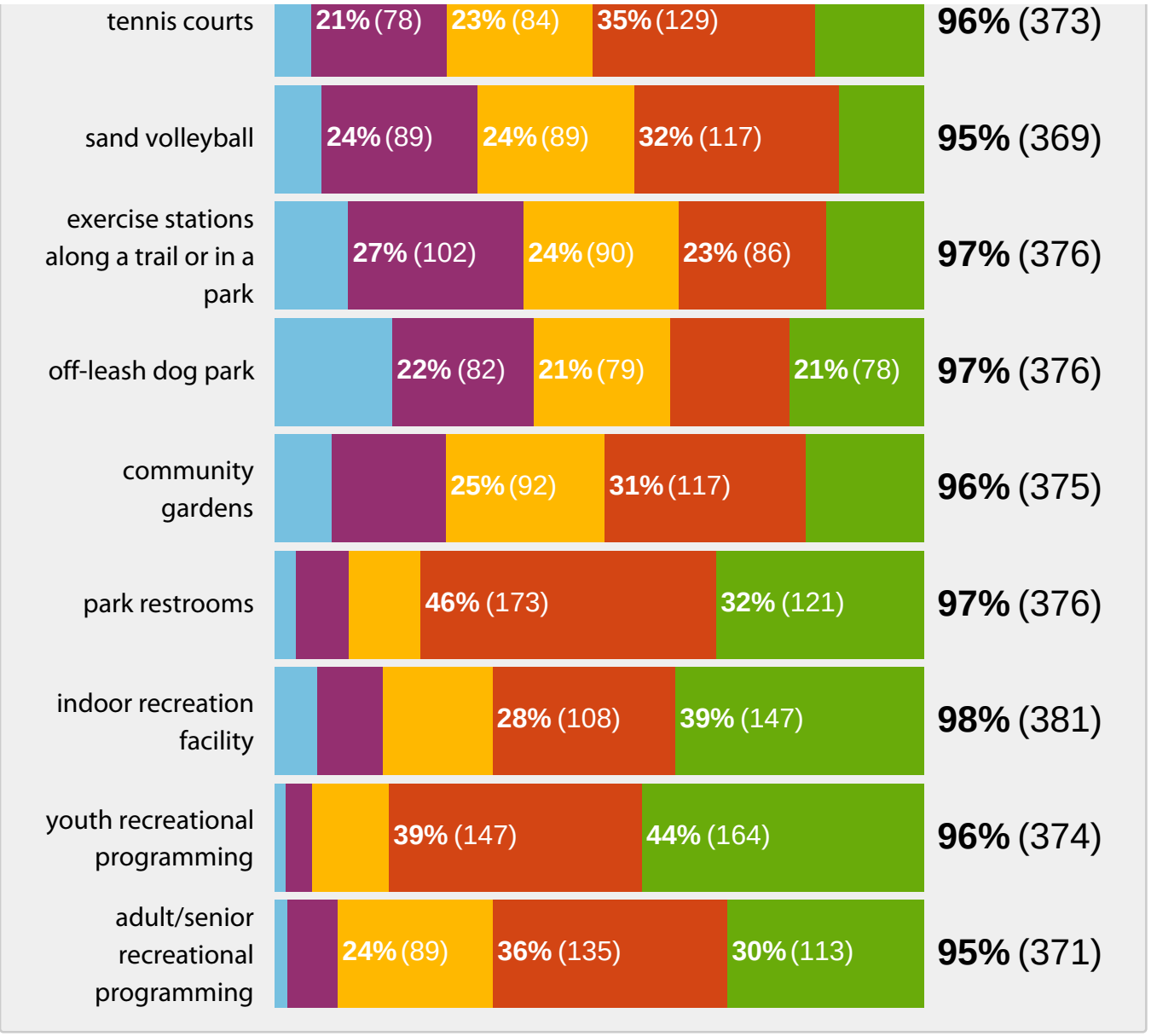
Would you support the use of tax incentives to retain existing businesses and attract new businesses to Polk City?



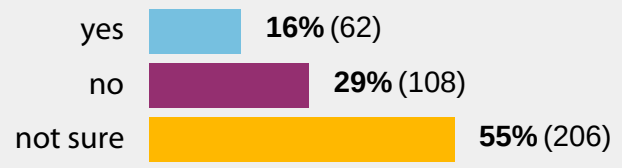
* 384 total responses, 99% of submissions

Would you like to see the following recreational facilities and/or programs added?



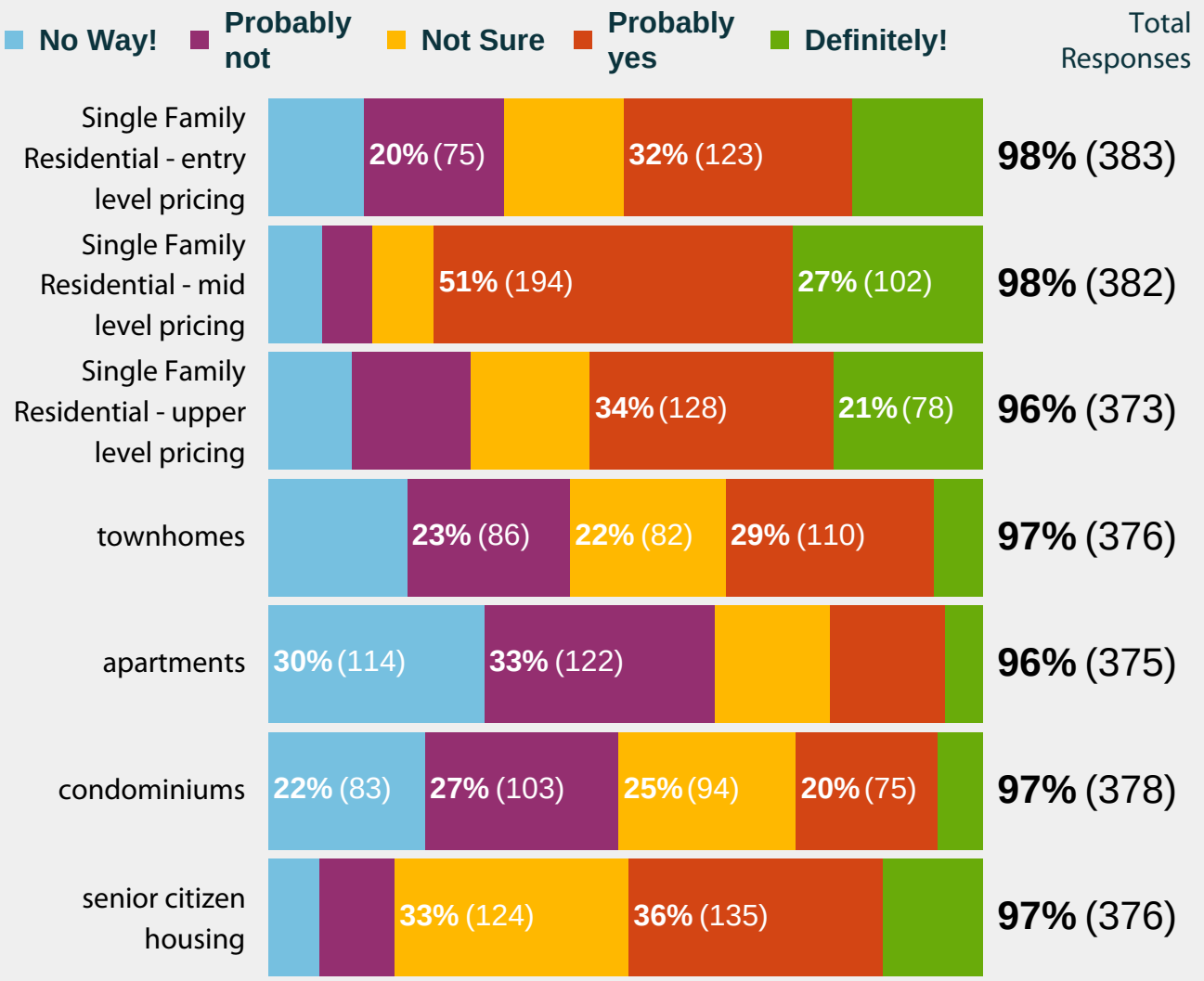


Would you like to see an additional cemetery developed within Polk City?

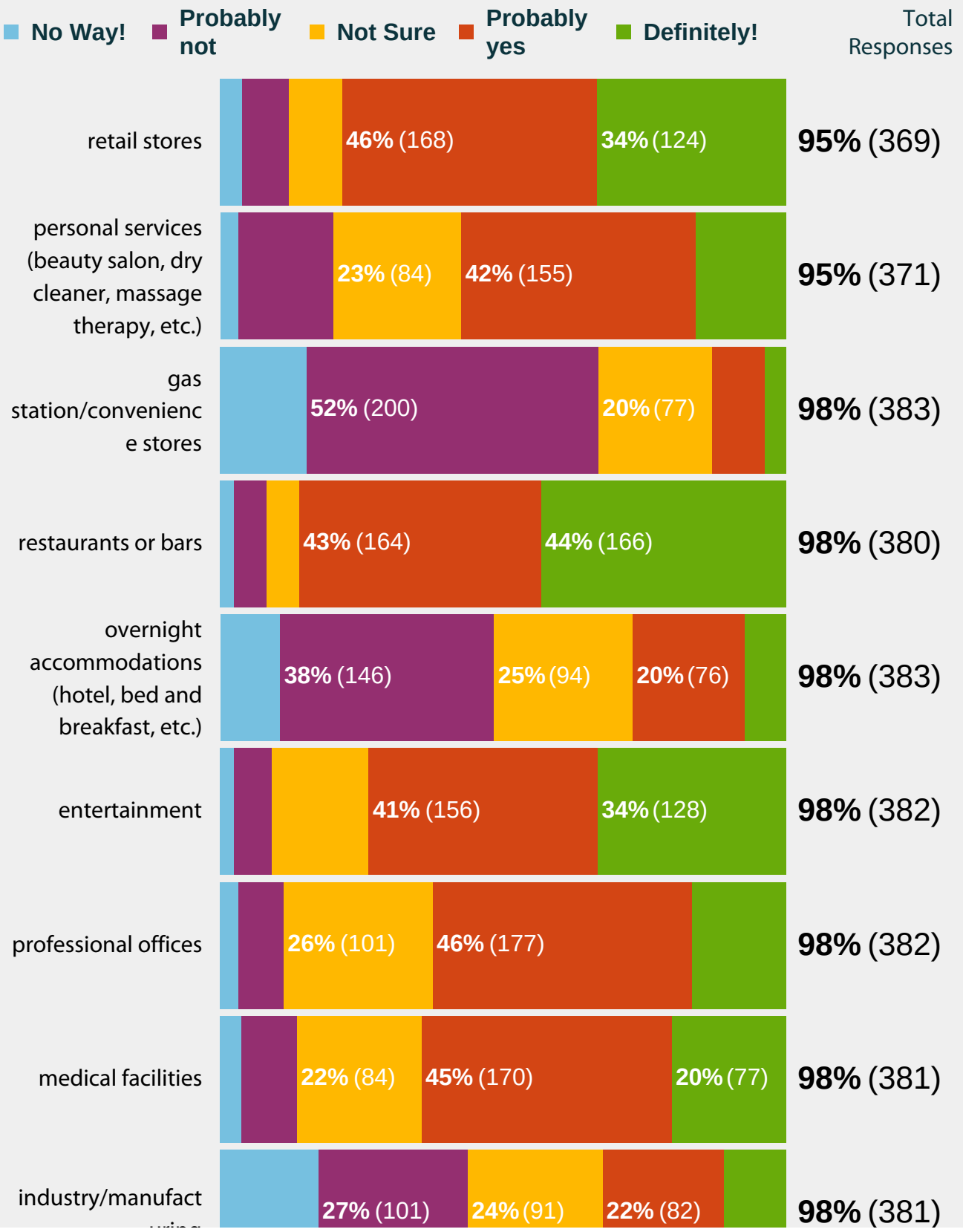


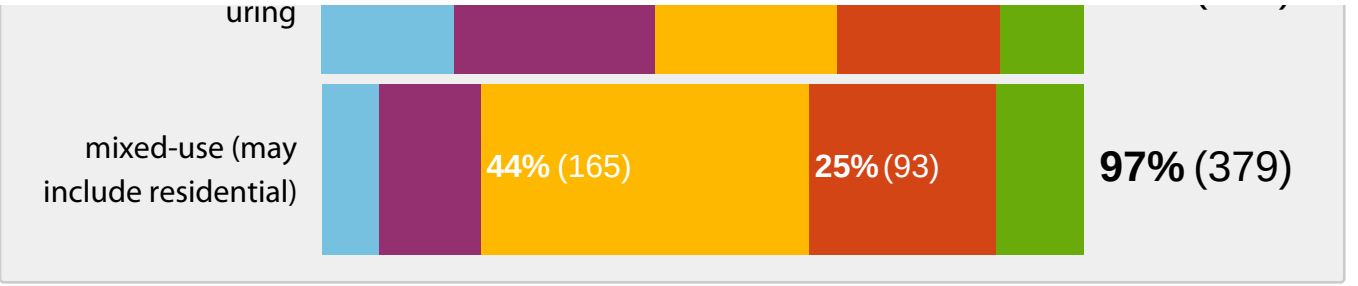
* 376 total responses, 97% of submissions

Would you like to see more of this type of residential development in Polk City?

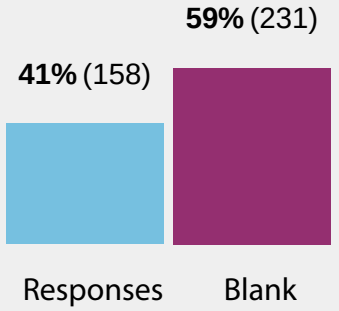


Would you like to see more of this type of non-residential development or services in Polk City?



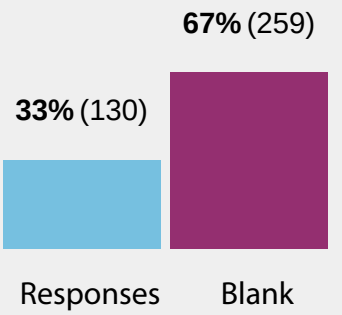


Would you like to comment on your answers for any of the previous questions?



* 158 total responses, 41% of submissions

Please provide your email address if you'd like to be included on future correspondence related to Imagine Polk City. This may include public input opportunities, draft maps, draft goals, and Plannin

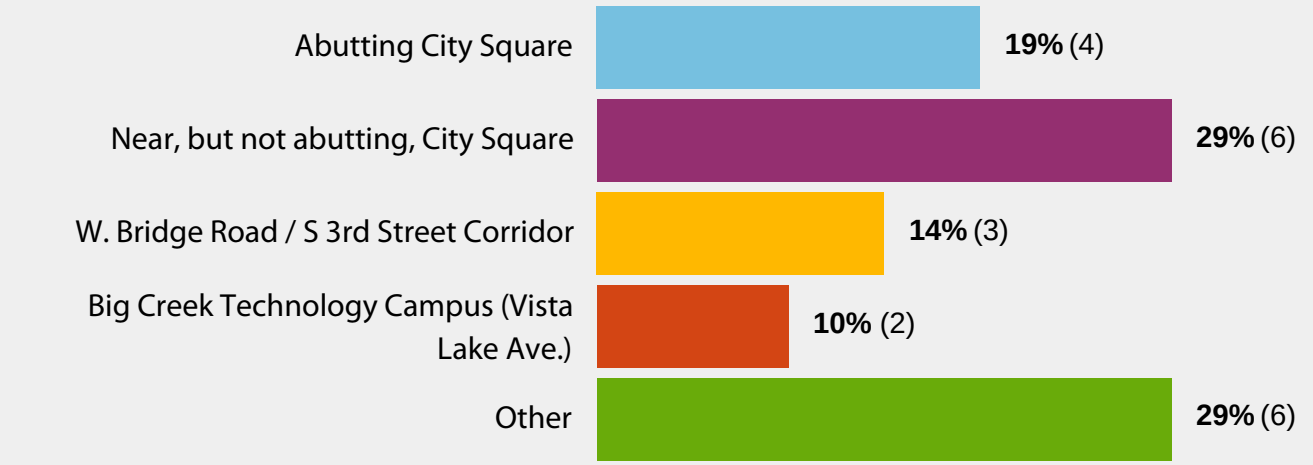


* 130 total responses, 33% of submissions

Polk City Business Owners' Survey

Final Results - 21 responses

In what part of Polk City is your business located?

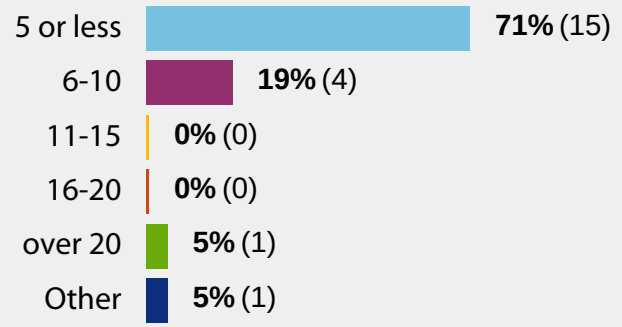


* 21 total responses, 100% of submissions

What type of businesses is it?

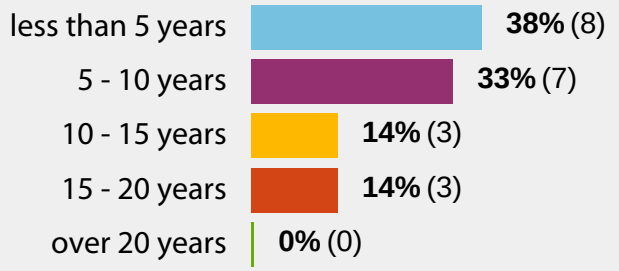
* 21 total responses, 100% of submissions

How many people work at your business (including yourself)?



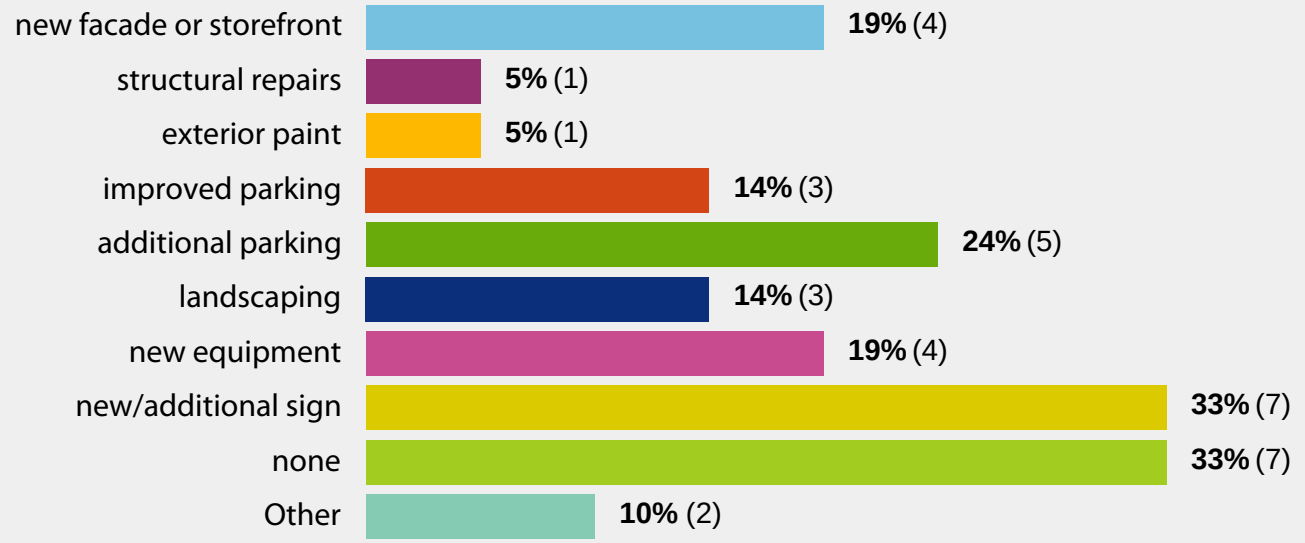
* 21 total responses, 100% of submissions

How long has your business been in Polk City?



* 21 total responses, 100% of submissions

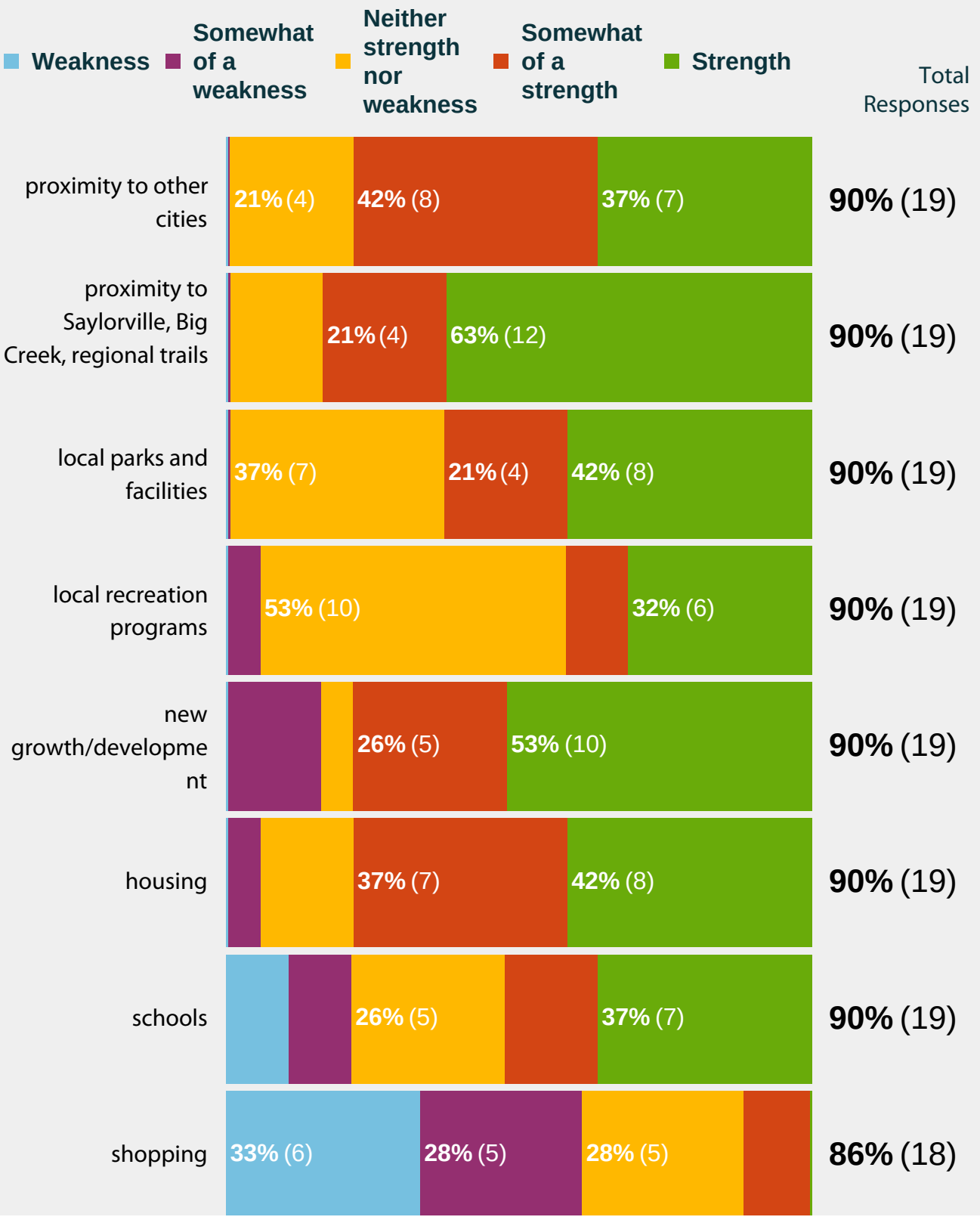
What type of physical improvements would help your business? (check all that apply)

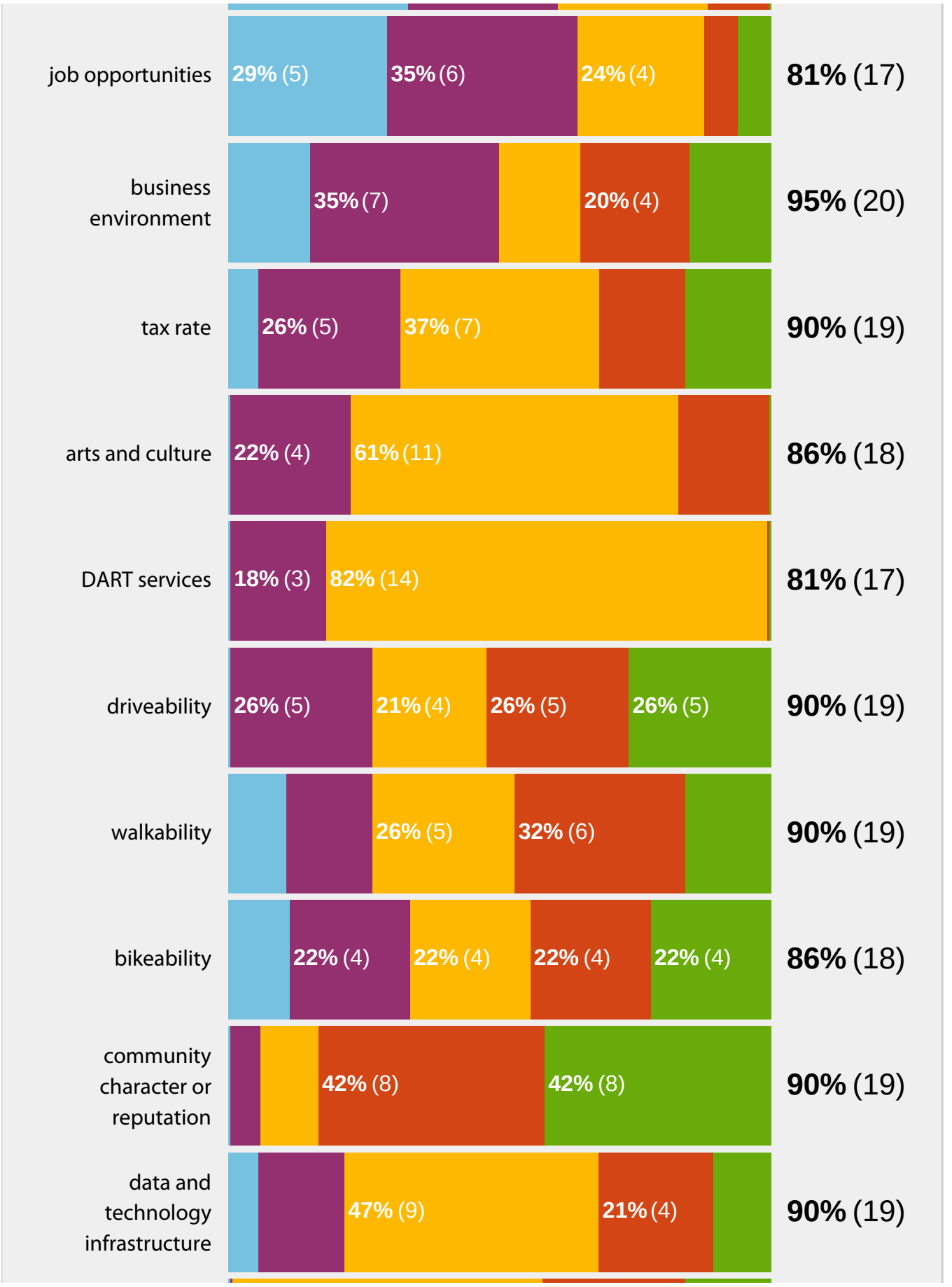


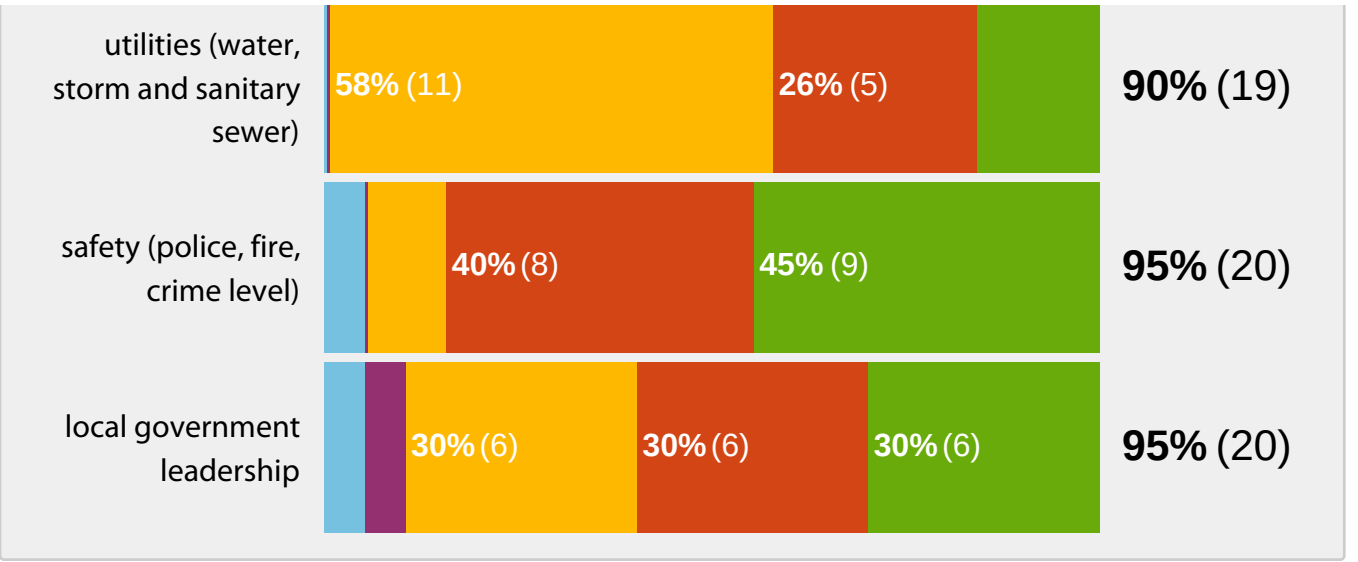
2 additional choices not shown

* 21 total responses, 100% of submissions

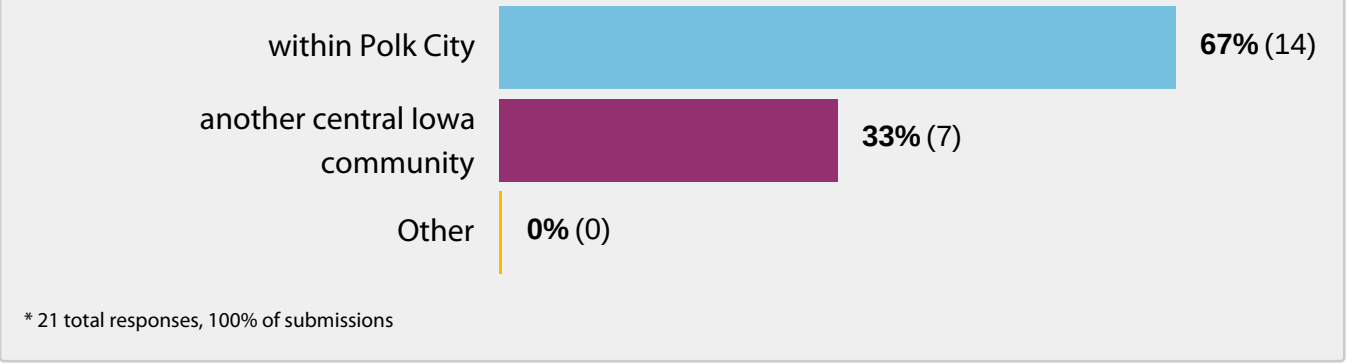
What are the strengths and weaknesses of Polk City overall? (If a particular item is not applicable to you, you may choose to skip that item.)




job opportunities
29% (5)
35% (6)
24% (4)
81% (17)
business environment
35% (7)
20% (4)
95% (20)
tax rate
26% (5)
37% (7)
90% (19)
arts and culture
22% (4)
61% (11)
86% (18)
DART services
18% (3)
82% (14)
81% (17)
driveability
26% (5)
21% (4)
26% (5)
26% (5)
90% (19)
walkability
26% (5)
32% (6)
90% (19)
bikeability
22% (4)
22% (4)
22% (4)
22% (4)
86% (18)
community character or reputation
42% (8)
42% (8)
90% (19)
data and technology infrastructure
47% (9)
21% (4)
90% (19)

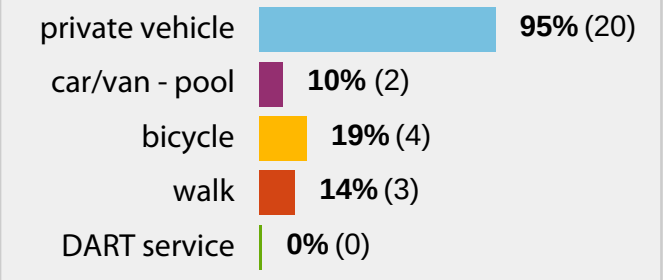


Where do you live?



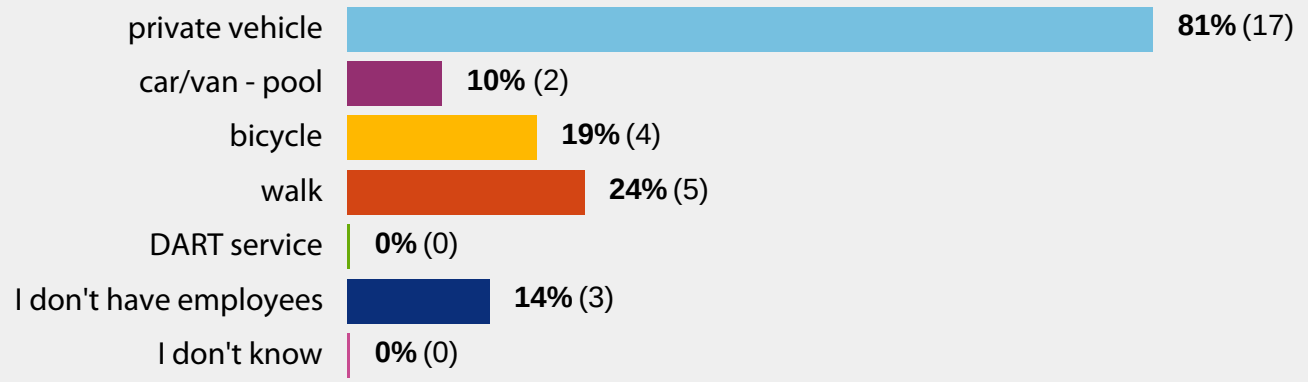
* 21 total responses, 100% of submissions

What modes of transportation do you regularly use? (check all that apply)



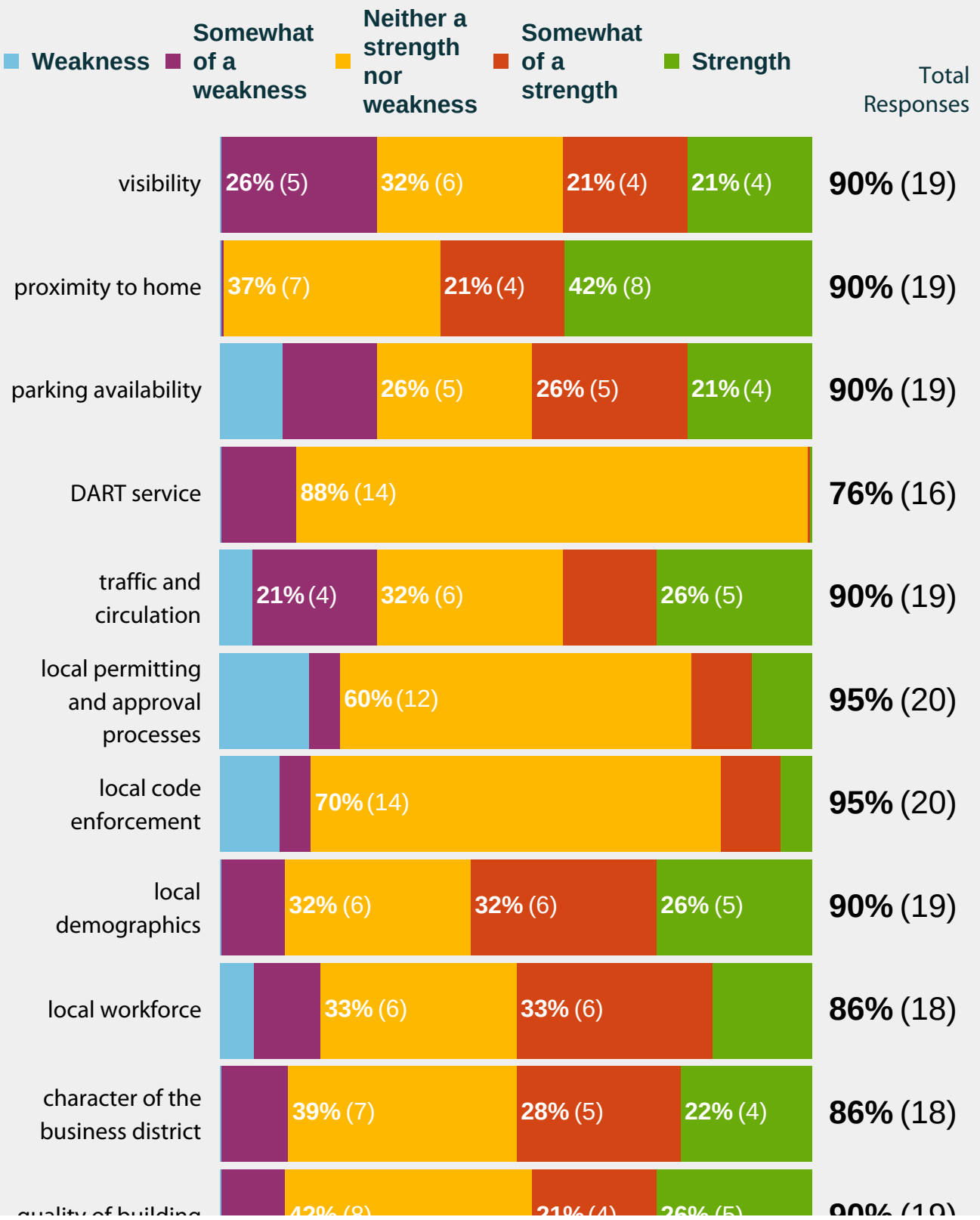
* 21 total responses, 100% of submissions

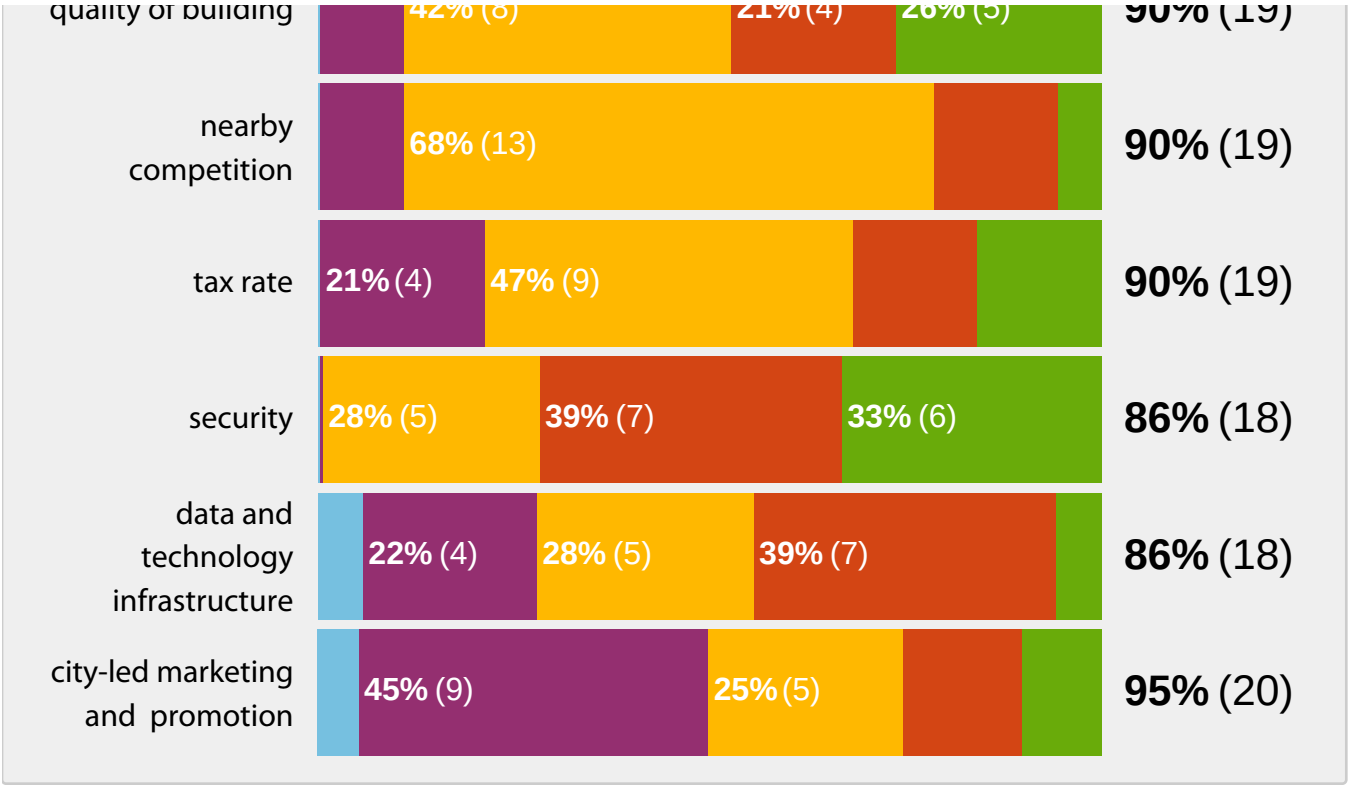
What modes of transportation do your employees regularly use? (check all that apply)



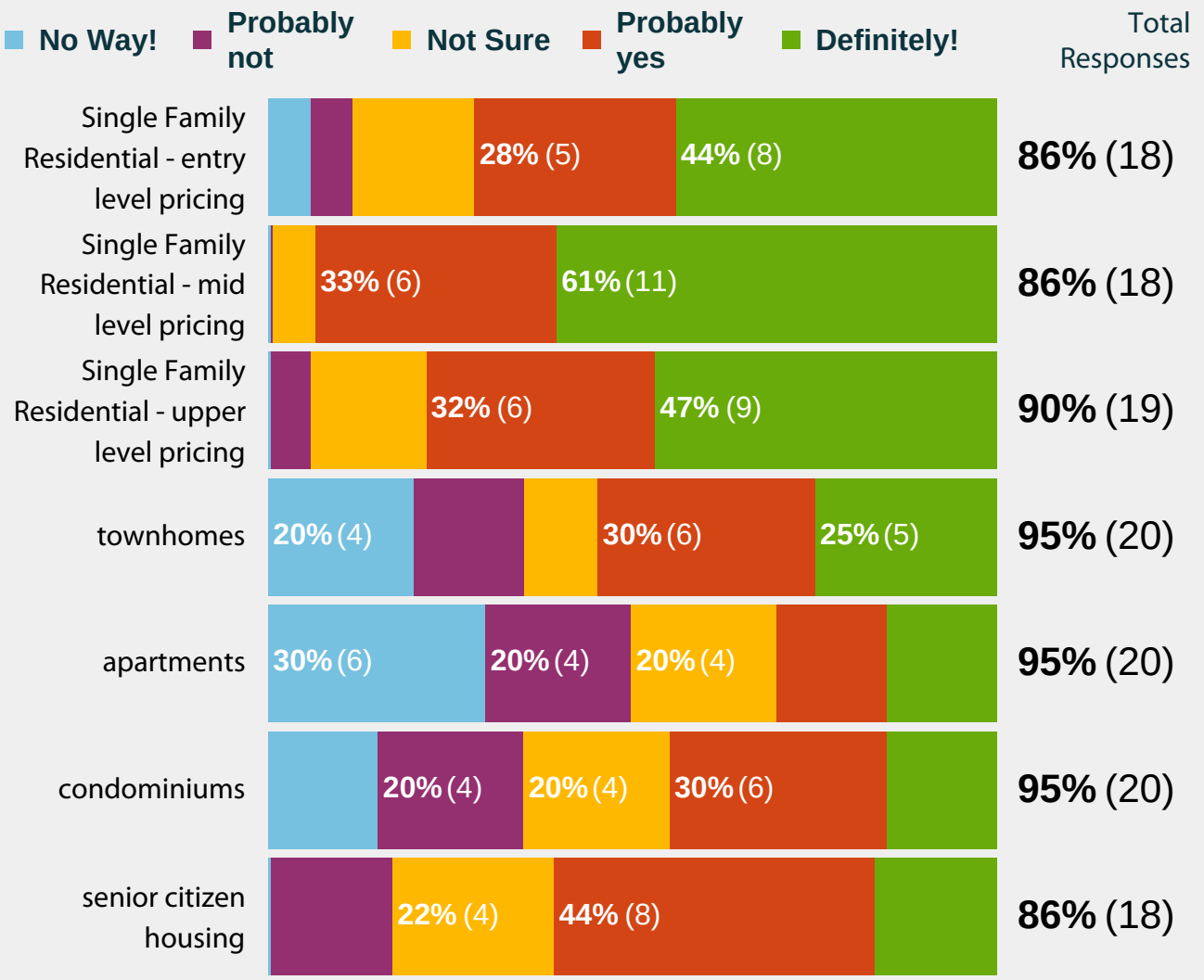
* 21 total responses, 100% of submissions

What are the strengths and weaknesses of how each of the following affects your business in Polk City? (If a particular item is not applicable to your business, you may choose to skip that item.)

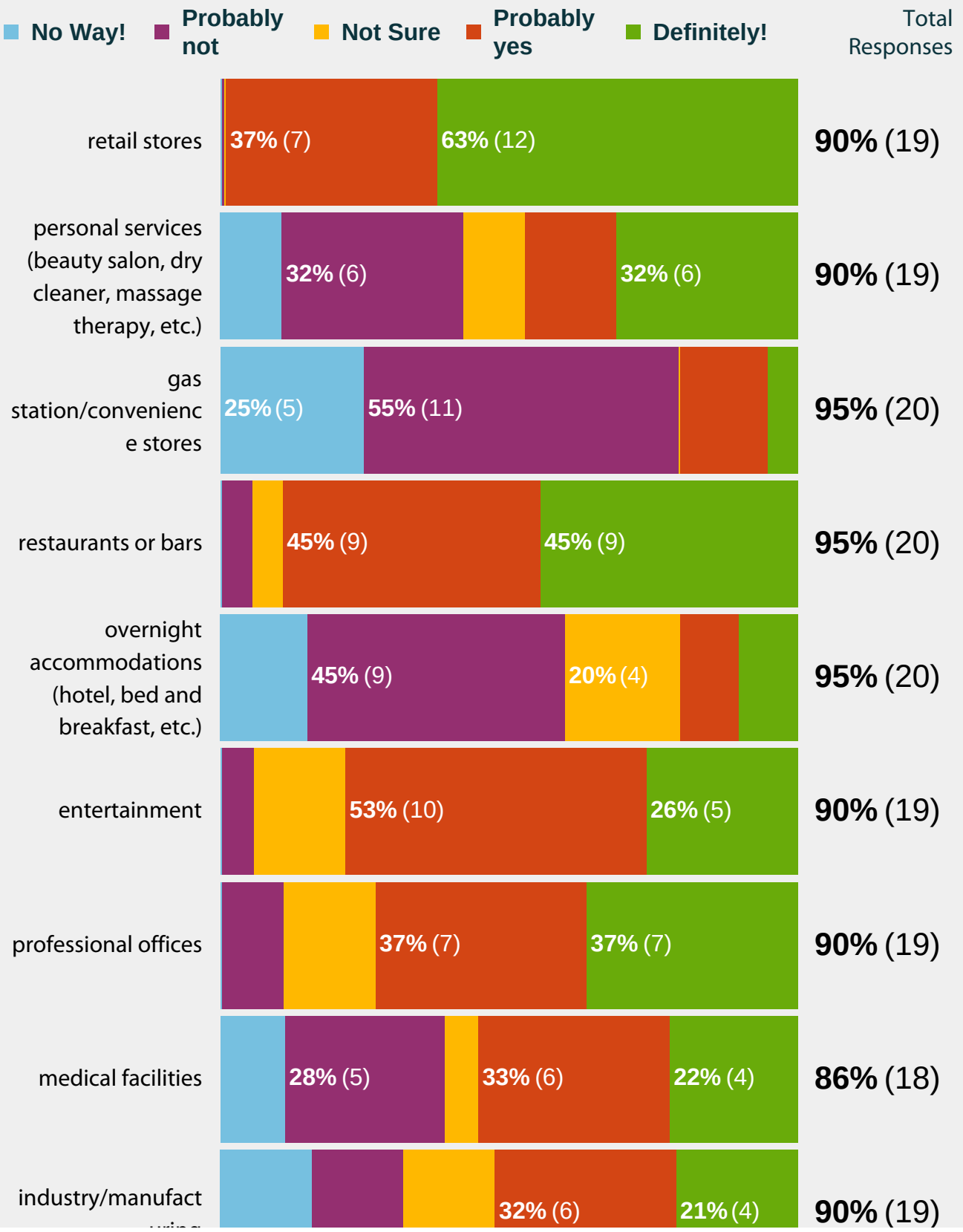


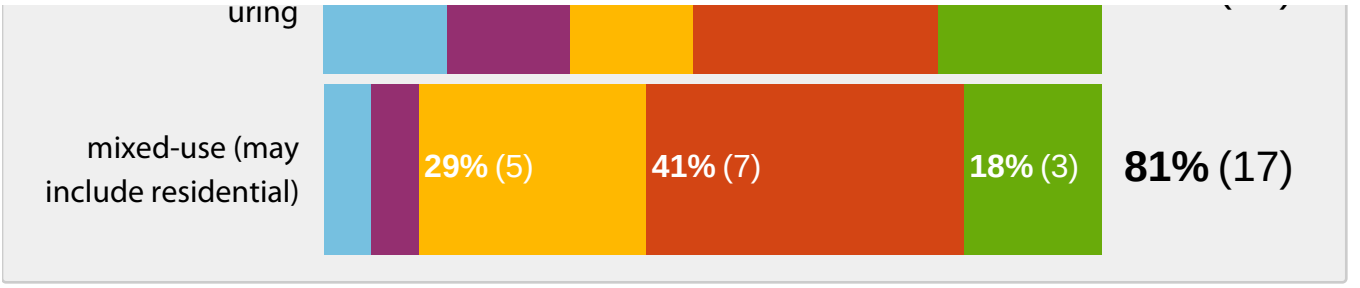

quality of building
42% (8)
21% (4)
26% (5)
90% (19)
nearby competition
68% (13)
90% (19)
tax rate
21% (4)
47% (9)
90% (19)
security
28% (5)
39% (7)
33% (6)
86% (18)
data and technology infrastructure
22% (4)
28% (5)
39% (7)
86% (18)
city-led marketing and promotion
45% (9)
25% (5)
95% (20)

Would you like to see more of this type of residential development in Polk City?

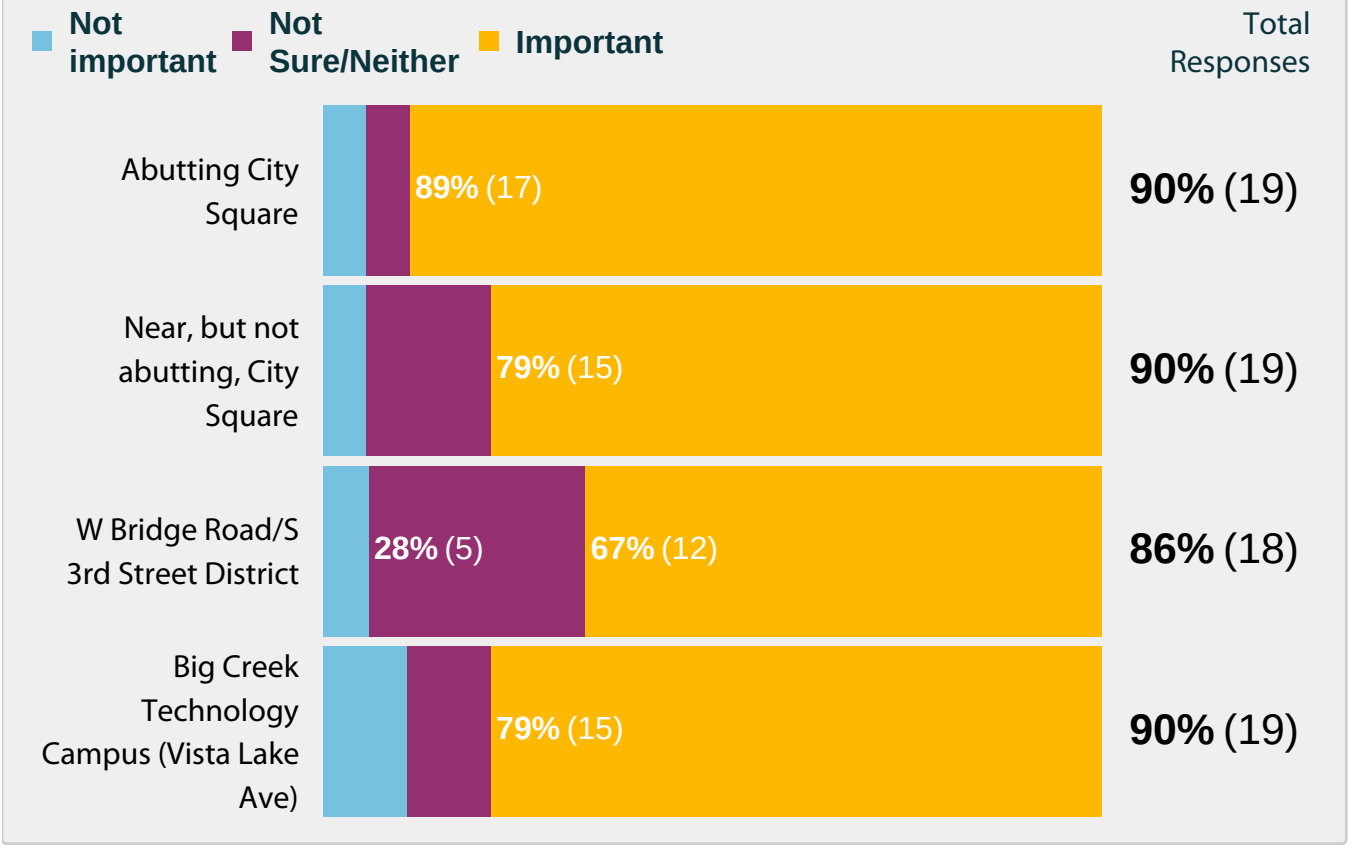


Would you like to see more of this type of non-residential development or services in Polk City?

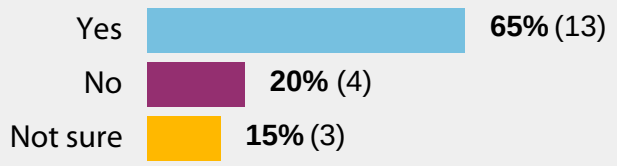




How important is it for Polk City to attract new businesses/uses to various portions of the City?

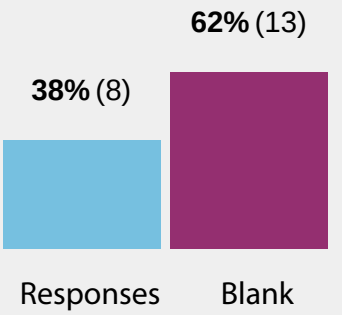


Would you support the use of tax incentives to retain existing businesses and attract new businesses to Polk City?



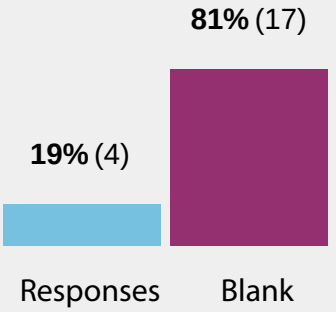
* 20 total responses, 95% of submissions

Would you like to comment on your answers for any of the previous questions?



* 8 total responses, 38% of submissions

Is there anything else we should know as we prepare the City's new Comprehensive Plan?



* 4 total responses, 19% of submissions

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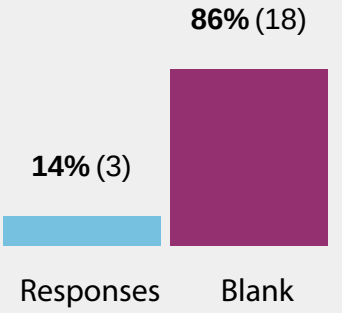

* 3 total responses, 14% of submissions