

4. Statewide network

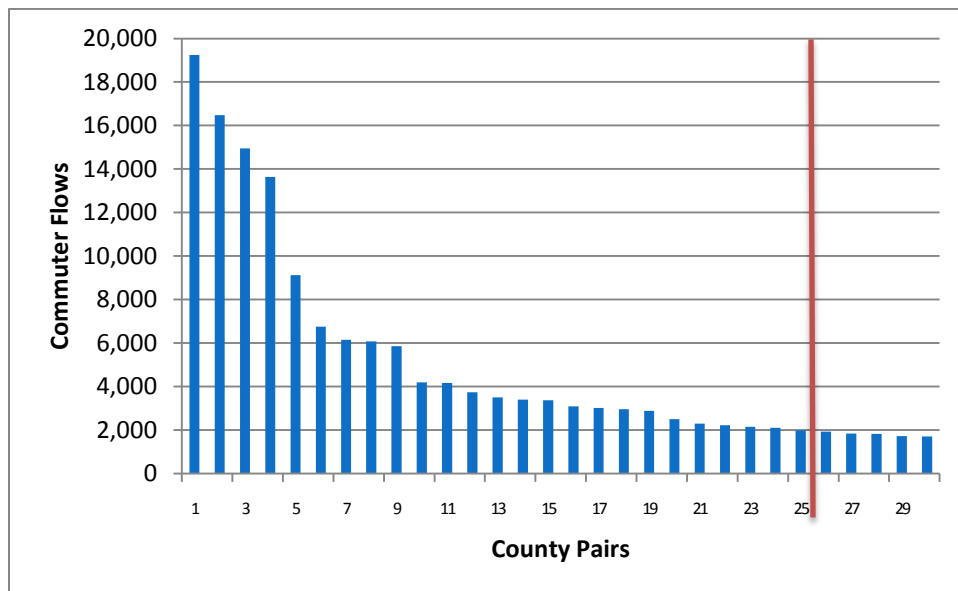
After the proposed structure of the analysis had been conceived, it was recognized that this analysis could not realistically be applied to every county pair contained in the ACS dataset. This was neither feasible nor logical and would need to be addressed before proceeding further.

4.1 Drawing the line

In order to constrain the analysis in terms of the number of candidate park and ride locations that would be presented, a determination had to be made regarding the cutoff point, or where to “draw the line.” To do so, both a reasonable number of locations and a logical cutoff in terms of residence-to-workplace commuter flows had to be defined. In considering these two points, a logical cutoff presented itself at the top 25 county pairs.

Analyzing 25 county pairs was certainly feasible, and drawing the line at this point allowed the analysis to include all county pairs that have commuter flows of at least 2,000 traveling between them. Beyond this point, the commuter flows level out between 1,000 and 1,500 for the next 25 or so county pairs. This cutoff point is presented visually in Figure 4.1.

Figure 4.1: County-to-county commuter flow chart



Source: U.S. Census Bureau, 2006-2010 American Community Survey's five-year estimates

4.2 Top county pairs

The 25 county pairs identified in Table 4.1 are those counties that had the highest residence-to-workplace commuter flows traveling between them according to the 2006-2010 ACS data. As noted in Chapter 3, this list aligned very closely with a similar ranking using 2000 census data. The county pairs in Table 4.1 are listed alphabetically by residence county.

Table 4.1: Top 25 county-to-county commuting pairs

Residence county	Workplace county
Benton	Linn
Boone	Story
Bremer	Black Hawk
Buchanan	Black Hawk
Cedar	Johnson
Clinton	Scott
Dallas	Polk
Jackson	Dubuque
Jasper	Polk
Johnson	Linn
Jones	Linn
Linn	Johnson
Madison	Polk
Mahaska	Marion
Marion	Polk
Plymouth	Woodbury
Polk	Dallas
Polk	Story
Pottawattamie	Douglas (Neb.)
Scott	Rock Island (Ill.)

Story	Polk
Warren	Polk
Washington	Johnson
Woodbury	Dakota (Neb.)
Woodbury	Union (S.D.)

Source: U.S. Census Bureau, 2006-2010 American Community Survey’s five-year estimates

4.3 Initial statewide network

After identifying the top county pairs, the origin, destination, and primary commuter route were then identified using the process explained in Chapter 3. From there, the analysis shifted to identifying possible candidate locations for park and ride facilities. As mentioned previously, these candidate locations were, for the most part, identified along the primary commuter routes near the most significant confluence of traffic within the county of residence. To summarize the analysis that was presented in Chapter 3, it essentially seeks to answer the following three questions in identifying possible candidate locations.

1. Which counties have the greatest interaction in terms of commuting activity?
2. What are the most heavily traveled commuter routes between these counties?
3. What locations along these routes would serve the most commuters as they exit their places of residence?

As was mentioned earlier in Chapter 3, candidate locations identified through the analysis were further vetted through an input process that included outreach to Iowa DOT district transportation planners, metropolitan and regional planning agencies, and transit agencies. Through this input process, locations were modified, added, or removed from the list. The changes that resulted from this process are summarized in Appendix 1 of this plan, and are reflected in Table 4.2.

Table 4.2: Statewide candidate locations

Residence county	Workplace county	Candidate location A	Candidate location B
Benton	Linn	U.S. 30/U.S. 218 (Vinton)	
Boone	Story	U.S. 30/S Story St (Boone)	

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Bremer	Black Hawk	U.S. 218/South corporate limits (Waverly)	
Buchanan	Black Hawk	U.S. 20/Iowa 150 (Independence)	
Cedar	Johnson	I-80/Iowa 38 (Tipton)	
Clinton	Scott	U.S. 30/S 6 th Ave (De Witt)	
Dallas	Polk	I-35/I-80 (West Des Moines)	U.S. 6/East corporate limits (Waukee)
Jackson/ Delaware	Dubuque	U.S. 61/Iowa 64/West Platt St (Maquoketa)	U.S. 20/Iowa 136/9 th St SE (Dyersville)
Jasper	Polk	I-80/Iowa 14 (Newton)	
Johnson	Linn	I-380/Co Rd F28 (North Liberty)	I-80/1 st Ave (Coralville)
Jones	Linn	U.S. 151/Iowa 64/ E 3 rd St (Anamosa)	
Linn	Johnson	I-380/Wright Brothers Blvd (Cedar Rapids)	I-380/Iowa 100 (Cedar Rapids)
Madison	Polk	I-80/U.S. 169 (De Soto)	
Mahaska	Marion	Iowa 92/Iowa 163 (Oskaloosa)	
Marion	Polk	Iowa 14/Iowa 163 (Monroe)	Iowa 5/Iowa 92/Co Rd S45 (Pleasantville)
Monona	Woodbury/ Pottawattamie	I-29/Iowa 175 (Onawa)	
Plymouth	Woodbury	U.S. 75/Business U.S. 75 (Le Mars)	
Polk	Dallas	I-235/U.S. 6 (Des Moines)	I-35/I-80 (West Des Moines)
Polk	Story	I-35/NE 36 th St (Ankeny)	I-35/Corporate Woods Dr (Ankeny)
Pottawattamie	Douglas (Neb.)	I-29/U.S. 275/Iowa 92 (Council Bluffs)	I-29/I-680 (Crescent)
Scott	Rock Island (Ill.)	U.S. 61/E Kimberly Rd (Davenport)	U.S. 61/Iowa 22 (Davenport)
Story	Polk	U.S. 30/Dayton Ave (Ames)	

Warren	Polk	U.S. 69/North corporate limits (Indianola)	
Washington	Johnson	U.S. 218/Iowa 22 (Riverside)	
Woodbury	Dakota (Neb.)	I-29/U.S. 20 (Sioux City)	
Woodbury	Union (S.D.)	I-29/Riverside Blvd (Sioux City)	

Source: Iowa DOT

Note: The above represent general candidate locations. Specific sites have not been identified.

It is worth noting that the candidate locations identified in Table 4.2 could present site challenges for a variety of reasons. For example, a candidate location may have significant access or right of way limitations. The intent is to simply identify those general locations that appear to be ideal candidates based on the factors considered in the analysis. Future implementation would involve a more detailed analysis to identify a specific site within that general location that is best-suited for park and ride lot development.



State-owned park and ride location at U.S. 75 and Iowa 10 in Sioux County