Nebraska Department of Roads

Statewide Mobility Management Project: Intercity Bus Concept Plan

Technical Memorandum

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PROPOSED STRATEGY

The strategy presented here calls for the Nebraska Department of Roads (NDOR) to fully utilize its available Federal Transit Administration (FTA) Section 5311(f) allocation for a program that includes:

- NDOR designation of a statewide network defined in terms of routes, frequencies, schedules and connections based on a goal reflective of Nebraska's Expressway System concept in the highway network. The Expressway System is defined as a series of four-lane routes connecting cities of 15,000 in population to an interstate. The concept applied to transit reflects having an intercity connection from every town of over 5,000 that would provide access to Omaha, Lincoln, or Denver with no more than one transfer. Frequencies would be based on demand, with a minimum of once per week service.

- Use of RFPs and contracts to obtain qualified firms or agencies to operate these services specified routes/services and issue multiple RFPs to allow for regional bidders.

- Use of in-kind match to the extent feasible, recognizing that NDOR will likely need to use the $520,000 allocated by the state for intercity bus funding to match the operating deficit for the defined network of specific routes.

- In addition, providing for a discretionary grant program for rural intercity bus feeders (local match and/or use of other state funds, agency funding) focused on public and private non-profit transit operators linking to the defined statewide network.

- Capital funding for vehicles required to operate the defined network. Given likely funding available after operating needs have been met, this part of the program will be limited, and probably only smaller buses are affordable.

Immediate tasks to move in this direction involve some additional planning:

1) Service planning to develop timetables for specified services to provide more usable schedules and ensure connectivity; preparation for RFPs.
2) Consultation meeting with existing intercity providers to discuss proposed routes and schedules, service duplication and connectivity.

3) A feasibility study to focus on Lincoln-Omaha commuter bus development (13 years since previous study), investigate possibility of building on NE-Ride, update demand and costs, park and ride needs, and present potential funding models.

This vision of a statewide intercity network fits within an overall strategy of developing regional mobility managers, who could develop the regional feeder connections and connect users with this intercity network. Regional rural transit providers would be able to connect with this network (most likely on an advance-reservation basis) to allow passengers/clients to use the intercity services to reach larger population centers.

The following sections address the development of a proposed network, issues affecting that network, and funding.

BACKGROUND- NDOR AND SECTION 5311(F)

The Nebraska Department of Roads (NDOR) Rail and Public Transportation Division is the designated recipient for Federal Transit Administration Section 5311 Formula Grants for Rural Areas funding, including Section 5311(f) which is a subsection devoted to rural intercity bus service. Each state is required to spend 15% of its overall Section 5311 allocation on rural intercity bus services, unless it conducts a consultation process that finds no unmet rural intercity needs. Under the Section 5311 program, federal funds can be used to pay up to 50% of the net operating deficit, with the other 50% funded by local cash match, or up to 80% federal funding for capital. Particularly for operations, private firms generally are unable to provide the local cash match, as that would mean an on-going operating loss, and for that reason FTA permits the use of the value of unsubsidized connecting services to be used as match.

The Section 5311(f) program (formerly known as Section 18i) was created in 1991, and NDOR conducted a study in 1993[1] that identified unmet intercity needs. NDOR subsequently used Section 5311(f) funding with state match to provide support for rural services in several parts of the state, providing grants to individual operators. For FY 2016, the 15% share amounted to $1,160,733. For FY 2014, NDOR Section 5311(f) grants totaled $121,901, matched by $95,179 in state funds. For that reason the size of the program in Nebraska has been limited because state funding for match was limited to $95,179. However, for Fiscal Year 2016, $520,000 has been allocated to NDOR for intercity bus, which could be used as local match to draw down an equal amount of federal funding, potentially allowing a substantial increase in the program.

[1] Frederic D. Fravel, Beth Hamby, Ecosometrics, Inc.; Isaacs & Associates, MacDorman & Associates, Nebraska Intercity Bus Study/Plan Development, Final Report. June 1993.

EXISTING SERVICE-SUBSIDIZED AND UNSUBSIDIZED

Figure 1-1 presents a map of the current intercity bus services in Nebraska. These services are described in greater detail in Appendix A. Several operations might be characterized as regional services, or airport limousine type services. Unsubsidized services are provided by private carriers with no public funding of any type, in response to the demands of the market. The private carriers are:

- Express Arrow (formerly known as Black Hills Stage Lines) -Denver to Omaha daytime service, one round-trip per day,
- Burlington Trailways -Denver to Omaha overnight, one round-trip per day,
- Burlington Trailways -Omaha to Chicago, four round-trips per day,
- Jefferson Lines -Sioux Falls, South Dakota to Kansas City, Missouri (stops in Omaha), two round-trips per day,
- Navigator Airport Express -Kearney to Omaha (Eppley Airport) via Lincoln, one round trip per day, six days per week,
- Denver Coach Shuttle -Scottsbluff, Gering, Mitchell, Morrill and Kimball to Denver International Airport, Denver medical centers, and Denver bus and rail stations; operates daily demand response (one day advance reservation required).

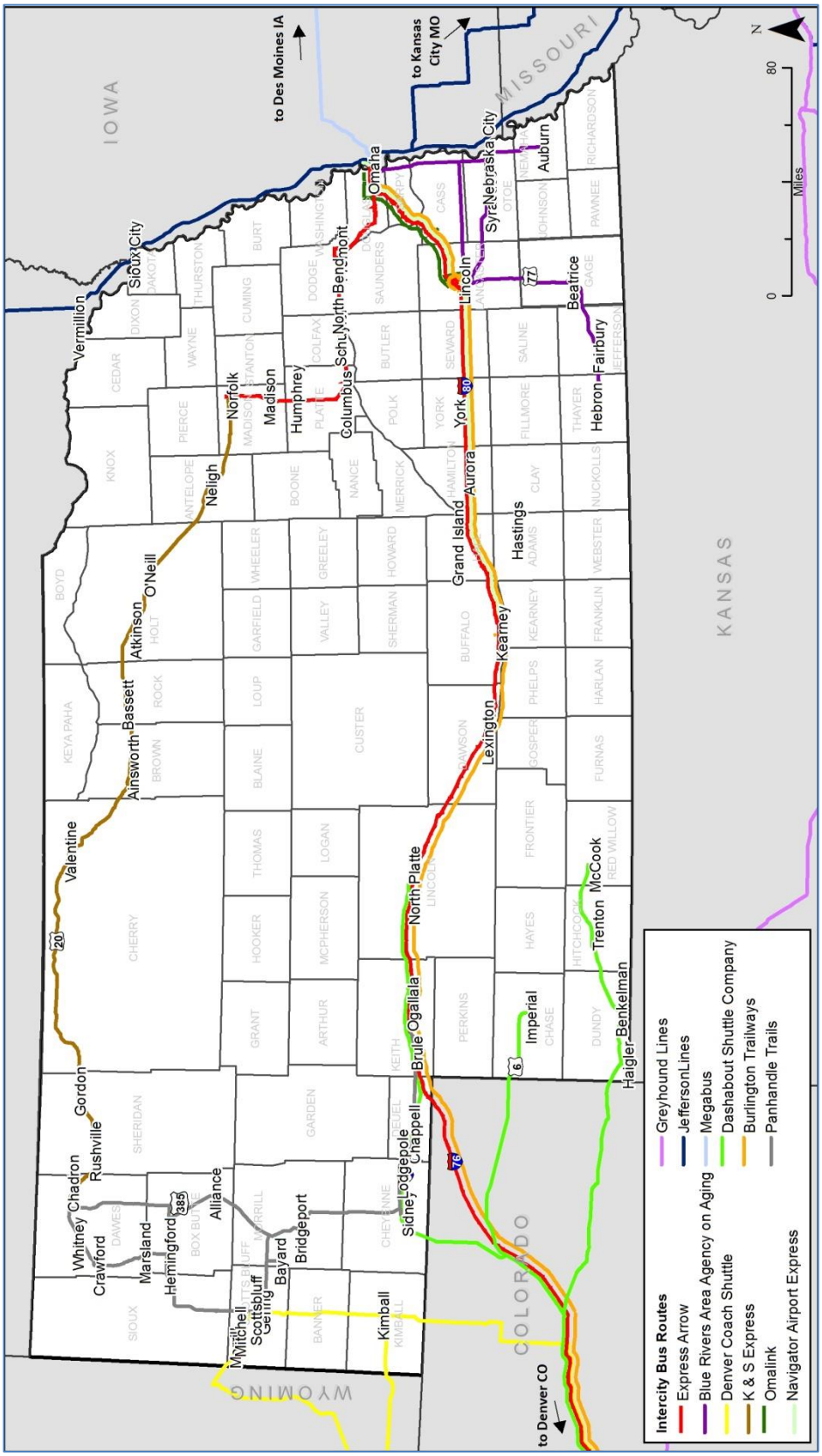
In addition to these services, NDOR is using Section 5311(f) and state funding to support additional services:

- Express Arrow-Norfolk to Omaha via Columbus, weekdays,
- K & S Expressway -Norfolk to Chadron, one day per week,
- Panhandle Trails - four routes in western Nebraska between Chadron, Alliance, Scottsbluff, and Ogallala, generally one day per week on each route,

Until recently NDOR also funded two other providers using Section 5311(f) intercity funding. Blue Rivers Area Agency on Aging provided service on routes from Hebron to Lincoln, Auburn to Lincoln, and Auburn to Omaha, generally three days per week on each route. These services are still in operation, but Blue Rivers is presently participating in the 5311 program and no longer receives 5311(f) funds. In addition, in the past NDOR provided Section 5311(f) intercity funding to the Dashabout Shuttle Roadrunner service based in McCook. Dashabout operated three route-deviation services. Two operated as feeders, one from North Platte to Sidney and one from McCook to Haigler, and the third route operating from Imperial to Denver International Airport, Denver medical centers and other Denver terminals. Dashabout Shuttle has had a hiatus in service. It is not clear whether or when full operations in Nebraska will resume.

Together these networks appear to provide a high level of coverage to the state's population, but a more rigorous analysis has been conducted to further analyze possible unmet needs.

Figure 1-1: Nebraska Intercity Bus Routes (including Dashabout Shuttle and Blue Rivers AAA)



COVERAGE AND UNMET NEEDS

An analysis of unmet needs based on demographic data is presented in Appendix B, and summarized here. Census Block Groups with a relatively high density of populations with high potential transit needs were identified, and their locations evaluated to determine if areas with a high need are more than 10 miles but less than 25 miles from an existing intercity bus stop, or more than 25 miles from an existing stop. Population factors analyzed included age (both older adults age 60 and above, and young adults age 18 to 24), households with no automobile available, and populations with incomes below poverty level. Thirty Census Designated Places with a relative high transit need were identified as being more than 25 miles from the nearest intercity bus stop; Only one, Wayne, has a population over 5,000, and a second, Broken Bow, has a population over 2,500.

A second analysis identified the location of colleges and vocational schools, military bases, hospitals and medical centers, correctional facilities and major airports in relation to the intercity bus network. Three educational institutions are more than 25 miles from an intercity bus stop: Wayne State College in Wayne, Nebraska College of Technical Agriculture in Curtis, and Nebraska Indian Community College in Macy. There are six other educational institutions that are more than ten miles, but less than 25 miles from an intercity bus stop. Among medical facilities with more than 100 beds, none are more than 25 miles from an intercity bus stop. Phelps Memorial Health Center in Holdrege is between 10 and 25 miles from an intercity bus stop. One correctional facility, Tecumseh State Correctional Institution, is more than ten miles, but less than 25 miles from an intercity bus stop. All airports with commercial air service are within ten miles of an intercity bus stop.

Nebraska is relatively unique in the distribution of its population, with much of the population concentrated in a few cities, and many small towns with low population distributed across the state. Typically intercity or regional bus services that are operated on a scheduled route will only be feasible if stops have a sufficient population. All of Nebraska's Census Designated Places and Urbanized Areas with a population above 5,000 have intercity bus service, except the eight listed that have a population over 5,000 and are not located within an Urbanized Area:

- Blair (Population 7,990)
- Crete (Population 7,055)
- Gretna (Population 5,416)
- Hastings (Population 25,030)
- Holdrege (Population 5,506)
- McCook (Population 7.580)
- Seward (Population 7,050)
- Wayne (Population 5,578)

Hastings, Holdrege and McCook are served twice a day by Amtrak's California Zephyr intercity rail passenger service, but not by intercity bus. In that sense they could be seen as having intercity access, though the Amtrak service serves those points in the middle of the night.

Previous Studies

Two recent studies addressed needs for transit between cities. The Nebraska Transit Corridors Study[2] examined travel patterns between Nebraska cities, developed ridership forecasts for rail and bus intercity and commuter services in three corridors deemed most likely to support such services: Lincoln-Omaha, Fremont-Omaha, and Blair-Omaha. The study focused on work trips. Operating and capital cost estimates were developed for a range of rail and bus alternatives for a number of corridors in the eastern half of the state, including a number of intercity bus corridors. The scenario involving a commuter bus service between Lincoln and Omaha with half-hour service in the peak, and 14 weekday trips, showed the highest benefit-cost ratio. The scenario that included the same level of service between Lincoln and Omaha, with additional service from Fremont to Omaha and Blair to Omaha followed in terms of productivity potential. The study did not make specific recommendations. The estimated 2010 subsidy requirement for Omaha-Lincoln commuter bus service was $198,000 to $270,000 per year, plus capital (vehicles and fare collection equipment) of just over $3,000,000. It should be noted that Section 5311(f) funding cannot be used to support commuter bus services.

As part of its consultation process, NDOR conducted the Assessment of Intercity Bus Services in Nebraska in July 2014. This study included an inventory of existing services, and a substantial outreach effort including public meetings at locations around the state. At the meetings a number of potential routes were identified, many already have service. Many service suggestions at the regional meetings focused on local or regional service, but need for service north-south in the western part of the state with service to Cheyenne and/or Denver, and from Scottsbluff to Lincoln and Omaha was identified.

CONCEPTUAL INTERCITY BUS NETWORK

Statewide Rural Network

The proposed statewide rural intercity bus network is presented in Table 1-1. Demand for each route was estimated based on characteristics of current service (for existing service) and likely service (for proposed services), using Transit Cooperative Research Program (TCRP) Report 147 Toolkit for Estimating Demand for Rural Intercity Bus Services. Coverage is based on the

[2] Wilbur Smith Associates and HWS Consulting Group, Nebraska Transit Corridors Study, Commuter Rail and Express Bus Options Evaluation, Final Report, prepared for the Nebraska Transit and Rail Advisory Committee, assisted by the Nebraska Department of Roads, December 2003.

Table 1-1: Proposed Statewide Rural Intercity Bus Network

Route	Frequency (Days per year)	Demand[2] (Boardings per year)	Fare per Mile[3]	Average Trip Length[4] (miles)	Rev/Pass	Revenue	Cost per Mile[5]	Annual Operating Cost	Farebox Recovery	Potential Net Operating Deficit[6] (annual)	Subsidy per Boarding
Unsubsidized Routes[1]											
Omaha Airport-Kearney via Lincoln	312	10,500									
Omaha-Denver via Ogallala	365	43,950									
Scottsbluff-Cheyenne	365	4,300									
Scottsbluff-Cheyenne via Gering	365	3,650									
Scottsbluff-Denver via Gering	365	3,050									
Routes Requiring Subsidy											
Norfolk-Omaha	255	7,300	$0.20	103	$20.64	$150,700	$3.70	$243,423	62%	$92,723	$12.70
Norfolk-Chadron[7]	104	400	$0.12	258	$31.01	$12,400	$2.00	$134,368	9%	$121,968	$304.92
Hebron-Lincoln	156	300	$0.12	79	$9.50	$2,900	$2.00	$61,776	5%	$58,876	$196.25
Auburn-Lincoln via Nebraska City	52	900	$0.12	56	$6.72	$6,000	$2.00	$14,560	41%	$8,560	$9.51
Auburn-Omaha via Nebraska City	104	400	$0.12	66	$7.97	$3,200	$2.00	$34,528	9%	$31,328	$78.32
Wayne-Omaha via Sioux City	255	8,600	$0.12	113	$13.54	$116,400	$3.70	$266,067	44%	$149,667	$17.40
Scottsbluff-Omaha via Lincoln	255	6,200	$0.12	360	$43.20	$267,800	$3.70	$849,150	32%	$581,350	$93.77
McCook-Grand Island via Hastings	255	3,700	$0.12	118	$14.11	$52,200	$2.00	$149,940	35%	$97,740	$26.42
Total		**27,800**				**$611,600**		**$1,753,812**	**35%**	**$1,142,212**	**$41.09**

Notes:

1) Costs and revenues not shown for unsubsidized routes, assumed to be providing adequate revenue to sustain operations.

2) Demand estimated using TCRP-147 Rural Intercity Demand Model, figure shown is average of trip rate and regression estimates.

3) Fare per mile estimated from published fares, or assumed at $0.12 per mile which is the low end for intercity fares.

4) Not all passengers will travel from the end of the route to the destination. Average trip length assumed to be 80% of overall route length.

5) $3.70 per mile cost assumed for operation of intercity coach, $2.00 per mile for body-on-chassis small vehicle.

6) Net operating deficit is estimated cost minus estimated fares, with no adjustments for federal or state subsidies or other revenues.

7) Chadron-Norfolk service does not meet population or possible performance thresholds at two round-trips per week, included anyway as a legacy and for regional balance.

8) Hebron-Lincoln, Auburn-Lincoln, and Auburn-Omaha all provided by one operator, can be considered as one package.

policy goal of providing an intercity connection to every town over 5,000 that is not located within an Urbanized Area, and offering a trip to Omaha, Lincoln or Denver with no more than one transfer. The frequency of the proposed services varies depending on the estimated demand, with a minimum frequency of one trip per week, in an effort to keep the projected subsidy cost per trip at an acceptable level (bearing in mind that some routes are very long). The proposed operating cost per mile for each route is an estimate based on data for existing or similar services, either in Nebraska or nearby states. The fares, expressed in cents per mile, are based on advertised fares for existing services, and comparable fares were applied to proposed services.

As can be seen the network is largely the existing network, with the addition of a new weekday route linking Scottsbluff with Lincoln and Omaha, via I-80, a new weekday service linking Wayne with South Sioux City and then to Omaha via Blair, and a route linking McCook, Hastings and Grand Island (where it can connect with the new Scottsbluff-Omaha route). More detailed planning of routing, schedules and connectivity will be needed to finalize the proposed network, including input from the public, local transit providers and potential operators.

Performance Measures

NDOR should establish some basic parameters for intercity services under this program to ensure that services are cost-effective, and that significantly under-utilized buses are rarely seen. Suggested measures include:

- Passenger boardings per vehicle trip (for long intercity runs boardings per mile or per hour, typically used for local transit, are not useful because there are few boardings, but many passenger-miles).
- Farebox recovery -Reflects user willingness to share in the costs.
- Cost per mile -Reflects provider efficiency.
- Subsidy per passenger-trip -Overall measure reflecting demand, revenue, and costs.

Table 1-1 presents estimated values for the performance of each of the services. Based on demand, the most problematic route is Chadron-Norfolk, because the length of the route results in relatively high costs (even with the low frequency), and the low population results in limited ridership. For such a service an additional standard may be a minimum service standard of one trip per week, no matter the cost per trip. This table also includes estimated ridership and cost for the Blue Rivers AAA routes formerly funded under Section 5311(f), now operated with Section 5311 funding. If included as intercity routes the productivity and subsidy per passenger may be a concern, but taken as a group are passable. NDOR may set particular levels as performance targets after considering the need to address regional differences.

Statewide Branding

This vision of a statewide network could benefit from the application of a single brand, with a central information source. This can be seen in Washington State, with its Travel Washington brand for its Section 5311(f) services, in Utah's Elevated Transit, in Ohio's GoBus network, and in Colorado's Bustang brand for commuter (and soon rural regional) services. For branding to be fully effective, common identification of vehicles is needed. In many states, vehicle capital is provided by the state, and the vehicles keep the brand identification even if contractors change. An option could be wrapping the buses of the contractor to reflect the brand, if they are willing to dedicate particular vehicles to state-funded services.

Potential for In-Kind Match

Many states have taken advantage of a unique aspect of the Section 5311(f) program that allows rural intercity bus projects to be redefined to include both a route segment requiring operating subsidy, and a connecting unsubsidized segment. The value of the fully-allocated operating cost of the unsubsidized segment is counted as the required operating match. By carefully defining the unsubsidized segment it is possible to use federal funding to pay the entire net operating deficit without the requirement of the 50% local cash match generally required for Section 5311 operating projects. Greyhound Lines has been very supportive of this concept, and has provided the required letter valuing their connecting service in many states. In some states regional carriers (such as Jefferson Lines) have used their profitable routes to provide the in-kind match for Section 5311(f) funded services, and in that sense Express Arrow or Burlington Trailways could do the same thing.

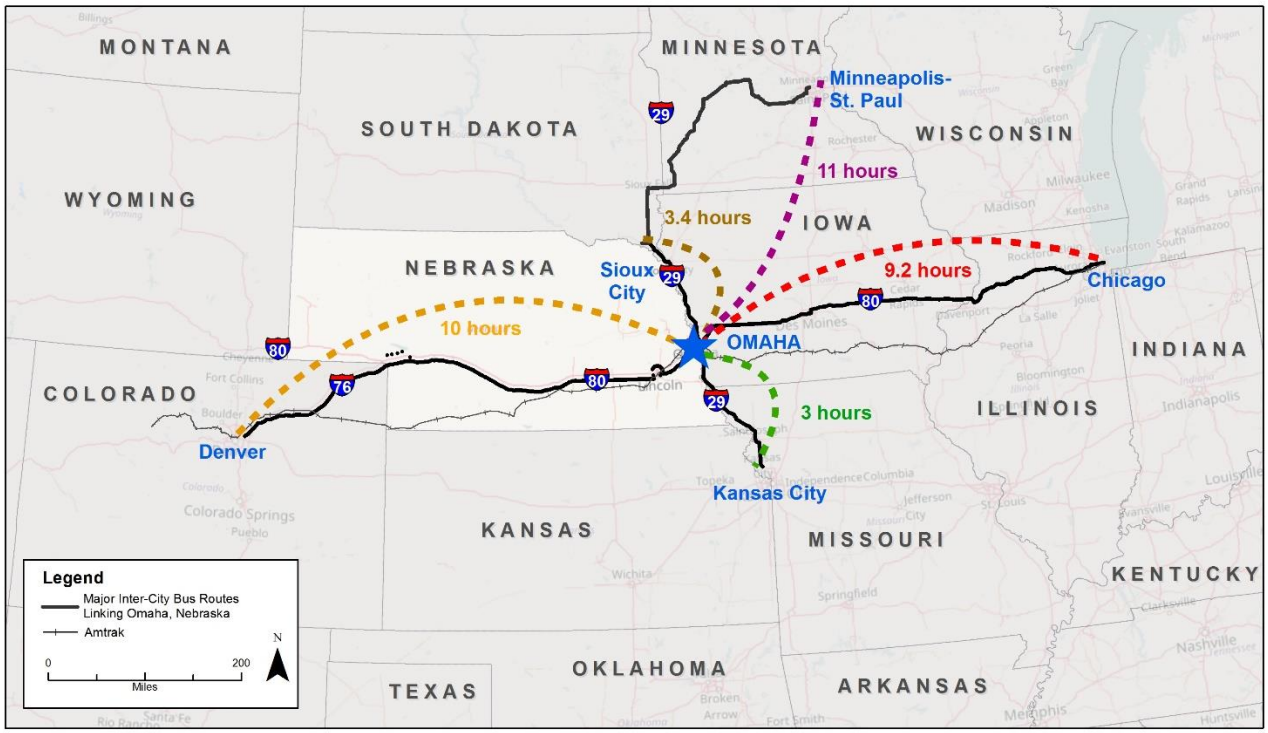
The potential application of in-kind match in Nebraska is very limited. Omaha is the connecting hub for intercity services in the state, and a compilation of arrival and departure times of intercity bus services in Omaha (Table 1-2) reveals that the departures and arrivals of unsubsidized services (Burlington Trailways to/from Denver and Chicago, Express Arrow to/from Denver[3]) are clustered around 6 a.m., 8 a.m. and 8-9 p.m., basically because of the travel time to Denver and Chicago. Figure 1-2 demonstrates the bus travel times between Omaha and major destination cities. Because of the 9-10 hour schedules the bus companies try to schedule their services to leave in the morning and run all day, or operate overnight. In order to connect with these schedules subsidized routes connecting with these routes would need to leave origins such as Norfolk or Hebron or Auburn (which are all 2½ to three hours from Omaha) at 4 to 5 a.m., and return trips in the evening would have to leave Omaha at 9:30 p.m. and arrive at midnight or after.

For example, if Express Arrow were to combine the Omaha-Denver route (as the unsubsidized segment) with its Omaha-Norfolk subsidized service, to connect in Omaha the Norfolk bus would need to leave Norfolk at approximately 5:15 a.m. to make the connection to

[3] Currently the Colorado Department of Transportation subsidizes the Colorado portion of this service with Section 5311(f), but it has announced its intention to end this funding.

the outbound Express Arrow bus to Denver leaving at 8:15 a.m. At the other end of the day the incoming bus from Denver arrives in Omaha at 8:45 p.m. Allowing connecting time of thirty minutes, the bus from Omaha to Norfolk would not arrive back there until 11:30 p.m. These times are likely to be unattractive to persons other than those making intercity connections, such as persons making medical or personal business trips. Additional input from the public and bus operators will be needed to see if there are potentially enough riders willing to rise that early or return home that late.

Figure 1-2: Bus travel times from Omaha to major metropolitan destination cities



These same factors mean that developing a usable statewide intercity network may require funding services that do not make timely connections to very many national network services. The FTA circular states that "Connection to the national network of intercity bus service is an important goal of Section 5311(f) and services funded must make meaningful connections **wherever feasible."**[4] It may be that in Nebraska the combination of the state's location in the national network, distribution of population, and schedules of the national network render meaningful connections (in terms of timely schedules) infeasible.

An early task in the development of a statewide network is the development of a statewide timetable, in consultation with current or likely providers, which would clarify opportunities

[4] U.S. Department of Transportation, Federal Transit Administration, Formula Grants for Rural Areas: Program Guidance and Application Instructions, FTA Circular 9040.1G, 11/24/2014, Chapter VIII, Intercity Bus, 7. Eligible Services and Service Areas, p VIII-6.

for feasible meaningful connections. There are no FTA definitions of a meaningful connection, but if feasible connections in a Nebraska context are not possible and FTA disallows the use of Section 5311(f), an alternative strategy would be for the state to cite the study and the statewide schedule, request a partial certification of no unmet need, and shift the funding into the regular Section 5311 program for use on these same long-distance services. In the past some states have used the certification process even though they were funding intercity services as a means of better managing the flow of funds, but it is not clear how FTA's state management review process would view such a strategy.

Role of Existing Unsubsidized Service

The existing unsubsidized bus services should be considered as essential parts of the state's network, and subsidy funding should not be used to operate services that compete with them, but rather in ways that reinforce these services or provide the opportunity to expand them with assistance. This policy perspective is important in developing service plans for two of the corridors listed. In order to provide an intercity connection from Scottsbluff to Lincoln and Omaha, a major portion of the route would need to operate on I-80 over the same route, and potentially with many of the same stops as the Navigator Airport Express, Burlington Trailways, and Express Arrow -all of which operate without subsidy. In consultation with these firms, it is possible to develop a new service (which they could bid on) that would operate to offer an additional frequency or it could be designed to connect with existing services in North Platte or Kearney.

The other corridor shown as part of the state network for funding is the Scottsbluff-Denver corridor which is currently served by Denver Coach Shuttle, again without subsidy. The ridership and revenue estimates developed for this study suggest that a subsidy would be required to offer daily service. If that firm is able to find ridership and keep costs low enough so as to not require it, NDOR should not seek to develop competing services but make sure that other public transit feeds it (as in the case of Panhandle Trails). It may be that NDOR could support this service by providing vehicle capital in the future, without having to provide annual operating assistance, but NDOR should be prepared to provide operating assistance if needed to maintain this connection.

Omaha-Lincoln Commuter Service

Without a doubt the largest market for longer-distance bus service in Nebraska would be bi-directional commuter service between Lincoln and Omaha. The Nebraska Transit Corridors Study estimated annual ridership of 56,000 to 81,000 boardings per year for a service with fourteen weekday one-way trips in the peak hours. Both Lincoln and Omaha are Urbanized Areas under the FTA transit programs, and both are direct recipients of FTA funding. However, neither has deemed the need for commuter service to be great enough to warrant use of their federal allocations for this purpose, and the rural Section 5311(f) funding that is administered by NDOR is explicitly not to be used for commuter services. There is a non-

Table 1-2: Omaha Arrivals and Departures

Carrier	Day	Route No.	Omaha Intercity Bus Terminal		Eppley Airport		Amtrak Station		Crossroads Mall		Origin or Destination City
			Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	
JL	Daily	706		12:01 a.m.							Kansas City, MO
BTW	Daily	1201	1:20 a.m.								Chicago, IL
OmaL	Daily	-			4:00 a.m.	4:45 a.m.					Lincoln, NE
Amtrak	Daily	6					4:59 a.m.	5:14 a.m.			Chicago, IL
JL	Daily	705	5:45 a.m.								Kansas City, MO
OmaL	Daily	-			5:45 a.m.	6:30 a.m.					Lincoln, NE
BTW	Daily	1402	5:55 a.m.								Denver, CO
BTW	Daily	1206		6:15 a.m.							Chicago, IL
JL	Daily	705		6:15 a.m.							Sioux Falls, SD
BTW	Daily	1402		6:30 a.m.							Chicago, IL
OmaL	Daily	-			7:30 a.m.	8:15 a.m.					Lincoln, NE
BTW	Daily	1203	8:00 a.m.								Chicago, IL
EA	Daily	120		8:15 a.m.							Denver, CO
EA	M-F	41		8:45 a.m.							Norfolk, NE
OmaL	Daily	-			9:15 a.m.	10:00 a.m.					Lincoln, NE
BRT	T	East	10:30 a.m.								Auburn, NE
BRT	F	East	10:30 a.m.								Auburn, NE
BRT	F	East	10:30 a.m.								Auburn, NE
NAE						11:10 a.m.					Lincoln, NE
OmaL	Daily	-			11:00 a.m.	11:45 a.m.					Lincoln, NE
OmaL	Daily	-			12:45 p.m.	1:30 p.m.					Lincoln, NE
BTW	D	1204		12:45 p.m.							Chicago, IL
NAE	M-S	994			12:25 p.m.						Kearney, NE
OmaL	Daily	-			2:30 p.m.	3:15 p.m.					Lincoln, NE
EA	M-F	41	2:50 p.m.								Norfolk, NE
BRT	T	East		3:00 p.m.							Auburn, NE
BRT	F	East		3:00 p.m.							Auburn, NE

Carrier	Day	Route No.	Omaha Intercity Bus Terminal		Eppley Airport		Amtrak Station		Crossroads Mall		Origin or Destination City
			Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	
BRT	F	East		3:00 p.m.							Auburn, NE
JL	Daily	502	3:50 p.m.								Kansas City, MO
JL	Daily	502		4:05 p.m.							Sioux Falls, SD
OmaL	Daily	-			4:15 p.m.	5:00 p.m.					Lincoln, NE
JL	Daily	501		4:30 p.m.							Kansas City, MO
OmaL	Daily	-			6:00 p.m.	6:45 p.m.					Lincoln, NE
OmaL	Daily	-			7:45 p.m.	8:30 p.m.					Lincoln, NE
EA	Daily	120	8:15 p.m.								Denver, CO
BTW	Daily	1401	8:20 p.m.								Indianapolis, IN
BTW	Daily	1205	8:25 p.m.								Chicago, IL
BTW	Daily	1202		8:45 p.m.							Chicago, IL
BTW	Daily	1401		9:45 p.m.							Denver, CO
OmaL	Daily	-			9:30 p.m.	10:15p.m.					Lincoln, NE
Amtrak	Daily	5					10:55 p.m.	11:05 p.m.			McCook, NE
OmaL	Daily	-			11:15 p.m.	12:00 a.m.					Lincoln, NE
JL	Daily	706	11:35 p.m.								Sioux Falls, SD
Megabus	Daily	-							11:45 p.m.	12:00 p.m.	Chicago, IL

Notes:
JL = Jefferson Lines
BTW = Burlington Trailways
OmaL =OmaLink
BRT = Blue Rivers AAA Transportation
NAE = Navigator Express
EA = Express Arrow (formerly Black Hills Stage Lines)

urbanized space between the two Urbanized Areas that could potentially be eligible for Section 5311(f) service to places inside the Urbanized Areas, but given the level of resources available, the prohibition on commuter service with this funding source, and the fact that private carriers already provide six round trips per day (albeit at odd times for regional trips), and the needs elsewhere across the state, only a very limited service could be considered using rural funding (and it would require a stop or stops off of I-80 in the non-urbanized area).

The need for service between the cities has been recognized by one institution with activities in both cities. The University of Nebraska's College of Engineering NE-Ride shuttle service operates during the academic year between Othmer Hall in Lincoln and Peter Kiewit Institute in Omaha for the College of Engineering faculty, staff, and students. The shuttle service makes a stop at the University of Nebraska Medical Center in Omaha. Service basically operates from each end of the route on two-hour headways, using vans with Wi-Fi. An App has been developed for users to download. It provides real-time vehicle location and schedule information.

The NE-Ride service serves one potential market affiliated with the university but it is quite likely that there are others. Broader commute markets are served by similar services in other states. In Vermont the CCTA LINK express commuter bus services link Burlington and Montpelier, Vermont (the state capitol)—originally funded with CMAQ, now transitioned to ongoing state/local funding. In New Mexico the Department of Transportation funds and operates the Park and Ride commuter network which began with service between Albuquerque and Santa Fe, and is now ten routes. The NMDOT contracts with a private firm to operate the service. In Colorado the Department of Transportation has recently started Bustang commuter bus service on three extended routes serving Denver, using state funds and contracting with a private provider to operate the service.

A similar situation in North Carolina demonstrates how an academic shuttle can grow into a regional connection that meets its original purposes but also serves other riders. A bus shuttle, Robertson Express, was initiated between the campuses of Duke University and University of North Carolina at Chapel Hill. Initially funded by a foundation to support academic exchange, it was limited to students and faculty. Subsequently the operation of the buses shifted to the regional transit provider, GoTriangle, and the service now is open to the general public at standard fares, though Robertson Scholars and university-affiliated personnel with passes provided by the participating universities ride free. A long-term vision for Omaha-Lincoln might begin with the NE-Ride, potentially adding state and other funding to add capacity and open the doors.

Costs and Funding

As seen in Table 1-1, the estimated net operating cost of the entire proposed network is $1,070,000, not including Panhandle Trails, and assuming that the Amtrak intercity rail passenger services meet the intercity needs for McCook, Holdrege, Hastings and Crete. For the existing services these estimates reflect a higher net cost amount than experienced previously by NDOR because the previous invoice data compiled by NDOR has been adjusted by several operators to constrain the subsidy amounts (likely because of the state limit on local match of $95,179). The combined FTA Section 5311(f) allocation (estimated at $1,160,733 for FY 2016) and state intercity allocation of $520,000 is $1,680,733), which would appear to provide for adequate funding. The need for local match affects the funding strategy, because the proposed state funding will likely be needed for the 50% local cash match required to draw down the maximum federal share of 50% of the net operating deficit, because the ability to use the in-kind match provisions of Section 5311(f) is limited.

If state funding is used as operating match for FTA Section 5311(f) operating funding, it would allow drawdown of $520,000 in federal funds, potentially leaving $640,733 per year in FTA Section 5311(f) funding for other purposes. The state could use this funding as the basis for a discretionary grant program open to transit operators across the state to operate rural regional projects meeting FTA requirements as intercity. If all the state dollars for intercity are used on the defined network, these discretionary projects would require local cash match. Because this is likely to be limited, there may be additional remaining funds, which should be earmarked for capital needed to operate rural intercity services. This split approach, with a defined network contracted by the DOT and a discretionary grant program is used by the Oregon DOT as a means of addressing routes of state interest that fill gaps in the unsubsidized network, and more regional needs identified at the local level.

Intercity Grants versus Contracting for Service

NDOR has proposed shifting from providing Section 5311(f) funding as an annual grant to a contract arrangement based on an RFP. In such a scenario the state becomes the grant recipient, and the operators are third-party contractors. This has several advantages, and is recommended as a strategy going forward.

There are four main reasons to put it out as an RFP rather than a grant:

1) Under an RFP the contractor is a third-party contractor, rather than a grantee. This makes compliance issues more straightforward (for example the contractor's overall procurement policies do not need to be federally-compliant), although the contractor can still be required to have a Title VI policy, meet ADA, meet FTA drug and alcohol policy requirements and reporting.
2) The state can have separate contracts for different defined routes, and specify what it wants in more detail.

3) Contracts can have periods of performance, with periodic rebids to ensure that the operator has incentives to keep costs down and find ridership. Grants tend to go on in perpetuity.
4) The contract can be set up to have the basis of payment be an overall fully-allocated cost per mile (net of revenue). This rate can include profit and depreciation which are not easily included in a grant budget under FTA programs.

Washington State does its Travel Washington routes as contracts with an RFP, and Utah also does this for its S. 5311(f). Oregon contracts for particular routes it wants for its POINT network using an RFP, and uses 5311(f) (and other funding) for an intercity/regional discretionary grant program, so it allows for local transit initiatives. Colorado has used grants for its intercity program, but contracted for its Bustang commuter bus operations and is trying to restructure its intercity program to use RFPs as well to provide for incentives from potential competition.

Appendix A
Inventory of Existing Intercity Bus Services

Inventory of Existing Transportation Services

INTRODUCTION

This section presents an overview of Nebraska's existing intercity transportation services. The lion's share of the statewide service is concentrated in the southeast corridor of Nebraska, connecting Omaha with various cities throughout the state and adjacent states. To complement the intercity bus network, three providers operate airport shuttle bus service to the Omaha Eppley Airfield, Lincoln Airport, and Denver International Airport. Amtrak, Omaha Metro, and Star Tran connect with the intercity and airport shuttle buses in various cities throughout the state. Figure A-1 displays the intercity bus, airport shuttle, and connecting services. This inventory will be compared to the intercity transportation needs discussed in Appendix B to identify gaps and develop alternatives for improved and expanded service.

INTERCITY BUS SERVICES

Intercity bus service is provided by the following eight providers – Blue Rivers AAA, Burlington Trailways, Dashabout Shuttle, Express Arrow, Jefferson Lines, K&S Express, Megabus, and Panhandle Trails.

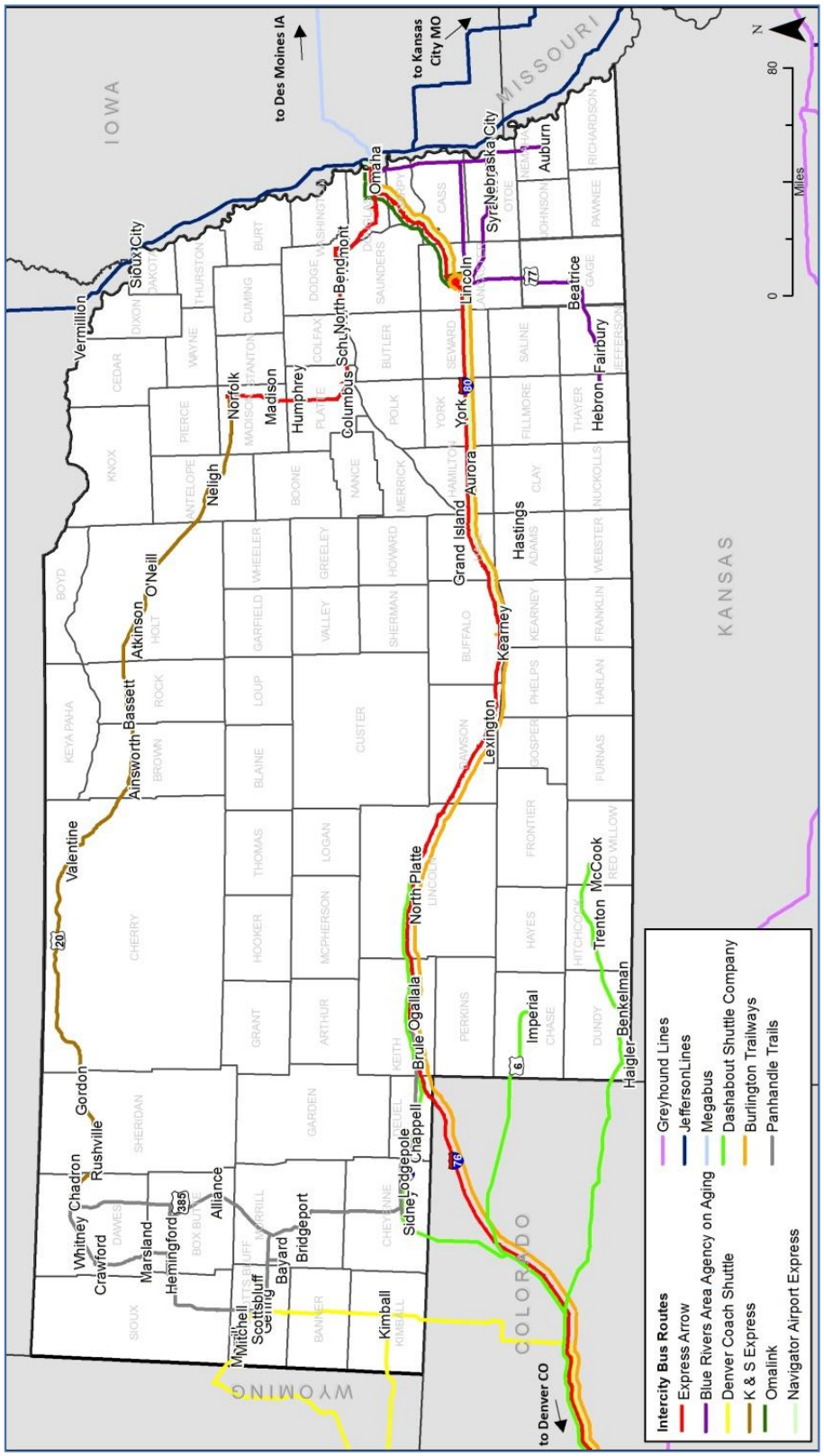
Blue Rivers Area Agency on Aging (AAA)

Blue Rivers Area Agency on Aging receives Section 5311(f) funding to operate in five counties within southeast Nebraska. Service is demand response, portal-to-portal, and requires a 24-hour advance reservation. The two intercity bus routes are the Western Route and Eastern Route.

Western Route

The Western Route operates in Gage, Jefferson, and Thayer Counties. There is one roundtrip operated on Monday, Wednesday, and Thursday from Hebron to Lincoln, with stops in Fairbury and Beatrice. The total one-way, 99-mile trip is approximately 3 hours.

Figure A-1: Nebraska Existing Intercity Bus Network



Eastern Route

The Eastern Route operates in Nemaha and Otoe Counties. There is one roundtrip to Omaha and Lincoln on their respective operational days. The bus originates in Auburn, providing service to Omaha on Tuesday and Friday, and to Lincoln on Wednesday. There are scheduled stops in Nebraska City and Syracuse. The total one-way, 64-mile trip to Omaha is two hours and 30 minutes, and the total one-way, 53-mile trip to Lincoln is two hours.

Burlington Trailways (BTW)

Burlington Trailways is a privately owned intercity bus provider that operates five routes in Nebraska. All routes serve the Omaha Interline Bus Terminal, connecting passengers with numerous Nebraska cities and communities in adjacent states.

Omaha-Chicago

There are three daily route variations between the two cities. Iowa City, Des Moines, and Davenport are the only two cities served by all three routes.

Route 1201

Route 1201 departs Chicago at 3:10 p.m., with stops in Naperville, Augustana College, and Davenport, Illinois; and Iowa City, Grinnell, and Des Moines, Iowa before the route terminating in Omaha at 1:20 a.m.

Route 1203

Route 1203 departs Chicago at 10:40 p.m. and serves Ottawa, La Salle and Davenport, Illinois; and Walcott Junction, Iowa City, and Des Moines, Iowa, and terminates in Omaha at 8:20 a.m. The return trip departs Omaha at 12:45 p.m.

Route 1205

Route 1205 departs Chicago at 11:00 a.m. with stops in La Salle and Davenport, Illinois; and Iowa City and Des Moines, Iowa, and terminates in Omaha at 8:25 p.m.

Indianapolis-Des Moines-Omaha

Indianapolis-Des Moines-Omaha is served by Route 1401. The route originates in Indianapolis, Indiana, with stops in seven Illinois cities. In the adjacent state of Iowa, the route serves the following cities: Burlington, Mount Pleasant, Fairfield, Ottumwa, Oskaloosa, Monroe, Des Moines, and Atlantic City, before terminating in Omaha. The route has the longest intercity bus travel time of 14 hours.

Omaha-Denver

There is one daily roundtrip between Omaha and Denver. Route 1402 services six cities in Nebraska: Lincoln, Aurora, Grand Island, Kearney, Lexington, and North Platte. There are two stops in Colorado, and the route terminating service at the Denver Bus Station. The average fare for the trip is $92.

Dashabout Shuttle

Dashabout Shuttle operates three routes in Nebraska, with continuing service to Colorado.

North Platte and Sidney

The North Platte and Sidney route has flag stops in Ogallala, Big Springs, and Chappell.

McCook and Haigler

The McCook and Haigler route has flag stops in Trenton and Benkelman.

Imperial and Denver

The two routes meet at the Atwood, Colorado interchange along I-76 and then continue to Ft. Collins, Greeley, Boulder, and Denver, Colorado. Passenger stops can be made at Peetz, Sterling, Brush, Ft. Morgan, Wray, Yuma, and Akron, Colorado.

Express Arrow (formerly Black Hill Stage Lines)

Express Arrow (formerly Black Hill Stage Lines) is a subsidiary of Arrow Stage Lines and operates two routes in Nebraska, with one of the routes continuing to Denver.

Omaha-Norfolk

The Omaha-Norfolk route operates on weekdays. There is one roundtrip that originates at Omaha Interline Bus Terminal, with scheduled stops in Columbus and Fremont, terminating at the Norfolk Arrow Stage Lines. There are on-call stops in Madison, Humphrey, Schuyler, North Bend, and Omaha Eppley Airport. The total one-way, 110 mile trip is approximately 3 hours, with an average fare of $41.

Omaha-Denver

The Omaha-Denver route operates daily trips, with scheduled stops to Lincoln, Grand Island, Kearney, Lexington, North Platte, and Ogallalla. There are two stops in Colorado, with the route terminating at the Denver Bus Station. The total one-way, 537 mile trip is approximately 11 hours, with an average fare of $95.

Jefferson Lines

Jefferson Lines is privately operated bus company that operates two daily routes between Sioux Falls, South Dakota and Kansas City, Missouri, with a stop at the Omaha Interline Bus Terminal. At the Sioux Falls Jefferson Lines Depot, passengers can transfer to the following cities: Minneapolis, Fargo, and Rapid City, and Albert Lea. In Kansas City, passengers can transfer to Springfield, Texarkana, and Wichita Falls. While the two routes originate at the Sioux Falls Jefferson Lines Depot and terminate in Kansas, their exact routes vary.

Route 501

Route 501 departs Sioux Falls at 12:30 p.m. making two stops before stopping in Omaha. The route continues to Kansas City, making four stops.

Route 706

Route 706 departs Sioux Falls at 8:00 p.m., following the same route as Route 501 to Omaha. After departing Omaha, the route only stops in St. Joseph, Missouri and continues to Kansas City. Due to the minimal number of stops, Route 706 is approximately one hour faster between Omaha and Kanas City.

Ken and Sherry Thurlow Express (K&S Express)

The Ken and Sherry Thurlow Express operate scheduled bus service between Norfolk and Chadron along Highway 275 and Highway 20. The Norfolk to Chadron schedule runs west on Tuesday and east on Wednesday and runs Wednesday morning by appointment.

Megabus

Megabus operates one daily roundtrip between Omaha and Chicago, IL. The route originates at Omaha's Crosslands Mall, approximately five miles west of downtown Omaha. The Megabus stop connects with one Omaha Metro route that provides service to the Omaha Interline Bus Terminal. The trip departs the mall at noon, and the inbound bus arrives at 11:45 p.m.

Panhandle Trails

Panhandle Trails operates within eight western Nebraska counties. Service originates at the Alliance Panhandle Trails Depot, serving the following seven cities: Scottsbluff, Hemingford, Chadron, Crawford, Bridgeport, Sydney, and Ogallala. The agency operates four routes.

Route 100

Route 100 operates on Mondays, with one roundtrip between Alliance and Scottsbluff Monument Mall. The route serves Western Nebraska Regional Airport, Regional West Medical Center, and Walmart.

Route 200

Route 200 operates two roundtrips on Tuesdays. The route originates in Alliance, serving WESTCO Main Station, Maverick Station, Western Nebraska Regional Airport, Regional West Medical Center, Maverik Station, and terminates at Walmart in Scottsbluff. The first trip serves all stops, while the second trip only serves the Medical Center.

Route 300

Route 300 operates one roundtrip on Wednesdays between Alliance and Scottsbluff. The route makes three stops in Alliance, connecting to Hemingford (one stop), Chardon (four stops), Crawford (one stop), and Scottsbluff (two stops), and terminates at Western Nebraska Regional Airport.

Route 400

Route 400 provides service between Alliance and Ogallala on Thursdays. There is one roundtrip that serves Bridgeport (one stop) and Sydney (three stops), and terminates at Conoco Travel Station in Ogallala.

AIRPORT SHUTTLE BUSES

Airport shuttle service is provided by three companies: Denver Coach Shuttle, Navigator Airport Express, and OmaLink.

Denver Coach Shuttle

Denver Coach Shuttle provides daily demand response van service between Denver and western Nebraska. Within Nebraska, service operates in Scottsbluff, Gering, Mitchell, Morrill,

and Kimball, with one stop in Torrington, Wyoming. Passengers are required to reserve vans one-day in advance. Scottsbluff and Gering residents have the option to request home pickups. Vans transport passengers to numerous locations around the Denver metropolitan area, including Denver International Airport and surrounding hotels, University of Colorado Medical Center and Children's Hospital, Denver Bus Center, Denver Union Station, and Fort Collins Airport.

Navigator Airport Express

Navigator Airport Express provides service between Omaha Eppley Airport and Kearney. Service operates Monday through Saturday, making stops in Grand Island-Hastings, York, Lincoln, and Omaha.

OmaLink

OmaLink operates bus between Omaha Eppley Airport and Lincoln. There are 24 daily roundtrips, with two stops in Lincoln – (1) Super Save off Route 2, southeast of downtown, and (2) University of Nebraska – Lincoln Student Center. Passengers can request pick up at another location within the city of Lincoln. The average fare is $39, with a total one-way trip time of one hour and 45 minutes.

CONNECTING TRANSPORTATION SERVICES

Amtrak

Amtrak's California Zephyr route provides service to five cities in Nebraska: Omaha, Lincoln, Hastings, Holdrege, and McCook. Omaha Amtrak Station is located one-mile from Interline Bus Terminal, providing connections to the following intercity bus routes: Blue Rivers AAA, Burlington Trailways, Express Arrow, and Jefferson Lines. There are two daily trips between Omaha and McCook, with an average travel time of 4 hours and 30 minutes. The Lincoln Amtrak Station provides a connection to Blue Rivers AAA intercity bus passengers.

Omaha Metro

Omaha Metro is the largest fixed route transit provider in Nebraska. There are five bus routes that serve Omaha Interline Bus Terminal, providing a direct connection to Burlington Trailways, Express Arrow, and Jefferson Lines intercity bus routes.

Star Tran

Star Tran operates a fixed route bus service within Lincoln. All routes serve downtown Lincoln and the University of Lincoln, providing an easy transfer to the Blue Rivers AAA intercity bus.

PRIMARY TRANSPORTATION STATIONS

Omaha serves as the state's primary origin, transfer, and terminus city. There are four transportation stations located in the city, allowing passengers to connect to additional services. Table A-1 displays carrier, frequency, route number, and arrival and departure times for transportation hubs with routes to Amaha.

Omaha Interline Bus Terminal

Omaha Interline Bus Terminal, the state's primary intercity bus station is located in downtown Omaha. The terminal serves as the interline bus station, where the majority of intercity trips originate and terminate. Four intercity bus providers – Blue Rivers AAA, Burlington Trailways, Express Arrow, and Jefferson Lines - travel through the station. All carriers, except for Blue Rivers AAA, operate daily trips through the terminal.

There are 13 daily arrivals and departures at the terminal. There are four time periods when buses cluster at the terminal. Between 5:45 a.m. and 5:55 a.m. two buses arrive from Kansas City and Denver, respectively. During the 6 a.m. hour, two buses depart for Chicago and one departs for Sioux City. Table A-1 exhibits the four transportation hubs in Nebraska.

Omaha Eppley Airfield

Omaha Eppley Airfield is served by seven major airline carriers and general aviation aircraft. As previously discussed, Navigator Express and OmaLink provide service to the Airport.

Crossroads Mall

Crossroads Mall is served by one intercity bus carrier. Megabus operates one daily roundtrip between the mall and Chicago. The mall is located approximately five miles from Omaha the Interline Bus Terminal. Omaha Metro also serves the mall, providing connections to the Omaha Interline Bus Terminal.

Omaha Amtrak Station

Omaha Amtrak Station, located in downtown southeast Omaha is served by Amtrak's daily California Zyndlier route. Located less than one mile from Omaha Interline Bus Terminal, passengers transferring between the two locations have the option to walk, take a taxi, or take Omaha Metro.

Table A-1: Omaha Arrivals and Departures

Carrier	Day	Route No.	Omaha Intercity Bus Terminal		Eppley Airport		Amtrak Station		Crossroads Mall		Origin or Destination City
			Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	
JL	Daily	706		12:01 a.m.							Kansas City, MO
BTW	Daily	1201	1:20 a.m.								Chicago, IL
OmaL	Daily	-			4:00 a.m.	4:45 a.m.					Lincoln, NE
Amtrak	Daily	6					4:59 a.m.	5:14 a.m.			Chicago, IL
JL	Daily	705	5:45 a.m.								Kansas City, MO
OmaL	Daily	-			5:45 a.m.	6:30 a.m.					Lincoln, NE
BTW	Daily	1402	5:55 a.m.								Denver, CO
BTW	Daily	1206		6:15 a.m.							Chicago, IL
JL	Daily	705		6:15 a.m.							Sioux Falls, SD
BTW	Daily	1402		6:30 a.m.							Chicago, IL
OmaL	Daily	-			7:30 a.m.	8:15 a.m.					Lincoln, NE
BTW	Daily	1203	8:00 a.m.								Chicago, IL
ES	Daily	120		8:15 a.m.							Denver, CO
ES	M-F	41		8:45 a.m.							Norfolk, NE
OmaL	Daily	-			9:15 a.m.	10:00 a.m.					Lincoln, NE
BRT	T	East	10:30 a.m.								Auburn, NE
BRT	F	East	10:30 a.m.								Auburn, NE
BRT	F	East	10:30 a.m.								Auburn, NE
NAE						11:10 a.m.					Lincoln, NE
OmaL	Daily	-			11:00 a.m.	11:45 a.m.					Lincoln, NE
OmaL	Daily	-			12:45 p.m.	1:30 p.m.					Lincoln, NE
BTW	D	1204		12:45 p.m.							Chicago, IL
NAE	M-S	994			12:25 p.m.						Kearney, NE
OmaL	Daily	-			2:30 p.m.	3:15 p.m.					Lincoln, NE
ES	M-F	41	2:50 p.m.								Norfolk, NE

Carrier	Day	Route No.	Omaha Intercity Bus Terminal		Eppley Airport		Amtrak Station		Crossroads Mall		Origin or Destination City
			Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	
BRT	T	East		3:00 p.m.							Auburn, NE
BRT	F	East		3:00 p.m.							Auburn, NE
BRT	F	East		3:00 p.m.							Auburn, NE
JL	Daily	502	3:50 p.m.								Kansas City, MO
JL	Daily	502		4:05 p.m.							Sioux Falls, SD
OmaL	Daily	-			4:15 p.m.	5:00 p.m.					Lincoln, NE
JL	Daily	501		4:30 p.m.							Kansas City, MO
OmaL	Daily	-			6:00 p.m.	6:45 p.m.					Lincoln, NE
OmaL	Daily	-			7:45 p.m.	8:30 p.m.					Lincoln, NE
ES	Daily	120	8:15 p.m.								Denver, CO
BTW	Daily	1401	8:20 p.m.								Indianapolis, IN
BTW	Daily	1205	8:25 p.m.								Chicago, IL
BTW	Daily	1202		8:45 p.m.							Chicago, IL
BTW	Daily	1401		9:45 p.m.							Denver, CO
OmaL	Daily	-			9:30 p.m.	10:15p.m.					Lincoln, NE
Amtrak	Daily	5					10:55 p.m.	11:05 p.m.			McCook, NE
OmaL	Daily	-			11:15 p.m.	12:00 a.m.					Lincoln, NE
JL	Daily	706	11:35 p.m.								Sioux Falls, SD
Megabus	Daily	-							11:45 p.m.	12:00 p.m.	Chicago, IL

Notes:
JL = Jefferson Lines
BTW = Burlington Trailways
OmaL =OmaLink
BRT = Blue Rivers AAA Transportation
NAE = Navigator Express
EA = Express Arrow (formerly Black Hills Stage Lines)

SUMMARY OF NEBRASKA'S EXISTING SERVICES

Table A-2 provides a summary of Nebraska's intercity bus services, airport shuttle bus, and connecting transportation services. Notable mentions are:

- The existing intercity bus network connects rural communities to Omaha and Lincoln in the eastern corridor. In these two cities, passengers are able to connect to additional transportation modes or complete medical, educational or recreational activities, and return to their rural community in the same day.

- In Omaha, there are intercity bus connections available to major cities in neighboring states and include the following cities: Denver, Chicago, Kansas City, and Sioux City.

- In the western part of the state, Panhandle Trails provides limited circular service within the Alliance-Scottsbluff region.

- Airport shuttle service supplements the intercity bus network. In the western part of the state, Denver Coach Shuttle provides daily service to Denver International Airport. Navigator Airport Express and OmaLink provide service to Omaha Eppley Airport from rural communities throughout the eastern part of the state.

- Omaha Metro and Star Tran are the two fixed route services that provide connections to intercity bus passengers in Omaha and Lincoln, respectively.

Table A-2: Summary of Nebraska's Existing Transportation Services

Service Provider	Route	Number of Cities Served	Days of Operation	Number of Trips		One-way Route Miles	Travel Time	Average 1-way Fare	Subsidized
Intercity Bus									
Blue Rivers AAA	Hebron-Lincoln	4	Mon, Wed, Thurs	Outbound: Inbound:	1 1	99	2:45	$5	Yes
	Auburn-Omaha Auburn-Lincoln	4	Tue, Fri Wed	Outbound: Inbound:	1 1	64 53	2:30 2:00	$11	
Burlington Trailways	Omaha-Ogallala	7	Daily	Outbound: Inbound:	1 2	329	6:20	$84	No
Dashabout Shuttle	N. Platte-Sidney-*Denver*	5	Daily	Outbound: Inbound:	1 1	123	1:54	$39.30	Yes
	McCook-Haigler-*Denver*	4	Daily	Outbound: Inbound:	1 1	75	1:17	-	
	Imperial-*Denver*	13	Daily	Outbound: Inbound:	1 1	-	-	-	
Express Arrow	Omaha-Norfolk	8	Mon-Fri	Outbound: Inbound:	1 1	110	2:45	$42	Yes
	Omaha-*Denver*	7	Daily	Outbound: Inbound:	1 1	537	9:55	$95	
Jefferson Lines	Omaha-Sioux City	2	Daily	Outbound: Inbound:	2 2	97	1:35	$45	
K&S Express	Norfolk-Chadron	2	Tue, Wed	Outbound: Inbound:	1 1				Yes
Megabus	Omaha-Chicago	5	Daily	Outbound: Inbound:	1 1	471	9:45	$49	
Panhandle Trails	Alliance-Scottsbluff-Alliance	2	Mon	Outbound: Inbound:	1 1	54	1:30	$7.50	Yes
	Alliance-Scottsbluff-Alliance	2	Tues	Outbound: Inbound:	2 2	58	2:00	$22.50	
	Alliance-Scottsbluff	5	Wed	Outbound: Inbound:	1 1	152	5:10	$30	
	Alliance-Alliance	4	Thurs	Outbound:	1	147	4:10	$30	

Service Provider	Route	Number of Cities Served	Days of Operation	Number of Trips		One-way Route Miles	Travel Time	Average 1-way Fare	Subsidized
				Inbound:	1				
Airport Service									
Denver Coach Shuttle	Scottsbluff-Denver	5	Daily	Outbound: Inbound:	1 1	NA	NA	NA	Yes
Navigator Airport Express	Omaha-Kearney	5	Daily, except Sundays	Outbound: Inbound:	2 2	182	3:35	$66	No
OmaLink	Omaha-Lincoln	2	Daily	 Outbound: Inbound:	1 2 1 2	54	1:20	$39	No
Connecting Transportation Services									
Amtrak	Omaha-McCook	5	Daily	Outbound: Inbound:	1 1	285	4:38	$59	
Omaha Metro	Omaha	1	Daily	-		-	-	-	Yes
Star Tran	Lincoln	1	Daily	-		-	-	-	Yes

Appendix B
Needs Assessment

Needs Assessment

INTRODUCTION

To identify areas that are relatively high in transit need, this demographics analysis focused on the transit-dependent population with characteristics similar to existing intercity bus riders. To provide a more comprehensive account of the impacts of existing services, the population data assessment must be evaluated together with the existing intercity bus service. To determine whether high need areas or key destinations are served by the current network and schedule, route information from the provider inventory and 2014 American Community Survey data were mapped using ESRI ArcGIS tools.

METHODOLOGY

This analysis uses data from the American Community Survey's most recent 5-year estimates (2010-2014). This data is aggregated at the Census block group level. To determine overall transit need, all block groups were first ranked by each demographic variable. Respective ranks were then summarized by block group. Block groups were ranked twice to create two measures of transit need based on:

- Population that is potentially transit-dependent, and
- Percentage of population that is potentially transit-dependent.

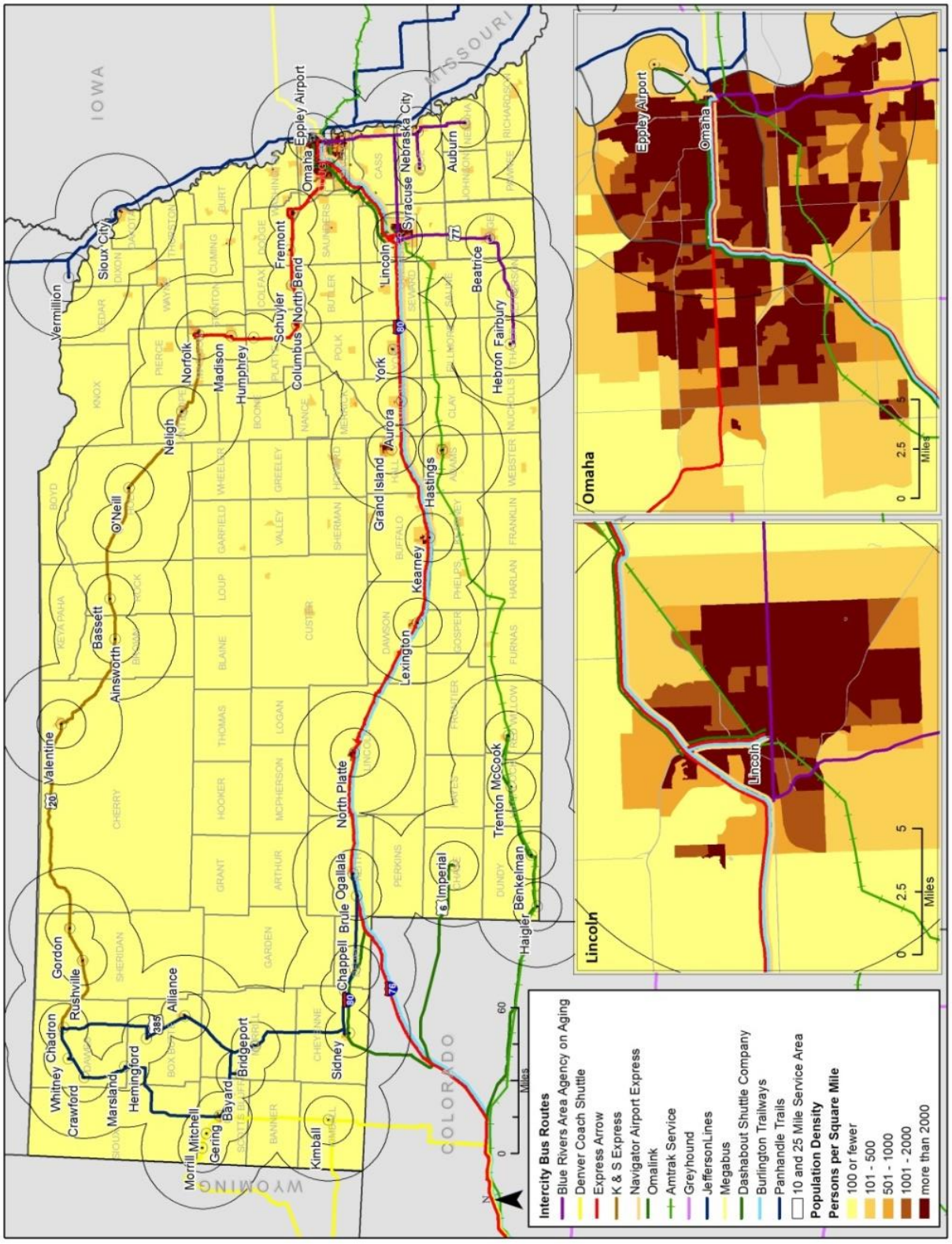
Each of the two measures was classified, based on natural breaks, into three categories representing low, medium, and high relative need.

POPULATION PROFILES

Population Density

Figure B-1 shows population per square mile in each block group. Population density is strongly clustered in urban areas, most of which are within the intercity bus service area. There are a number of exceptions, which mostly correlate to the demographic hotspots identified above.

Figure B-1: Nebraska Intercity Bus Routes and Population



The following analysis provides a review of relative transit needs in Nebraska in terms of population segments that indicate a potential need for intercity bus transportation. Potentially transit-dependent population segments are those segments of the population that because of demographic characteristics such as age, income, or automobile availability, may require transit service to meet mobility needs. These segments of the population are defined using 2010-2014 5-year estimates from the American Community Survey as:

1. Young Adults (persons ages 18 to 24): Enlisted military personnel and college students typically fall into this age range. These persons often do not have access to an automobile and are stationed far from home.

2. Older Adults (persons age 60 and above): Advancing age can mean diminished ability or desire to drive (particularly on a long trip) and a need for access to medical facilities on a regular basis.

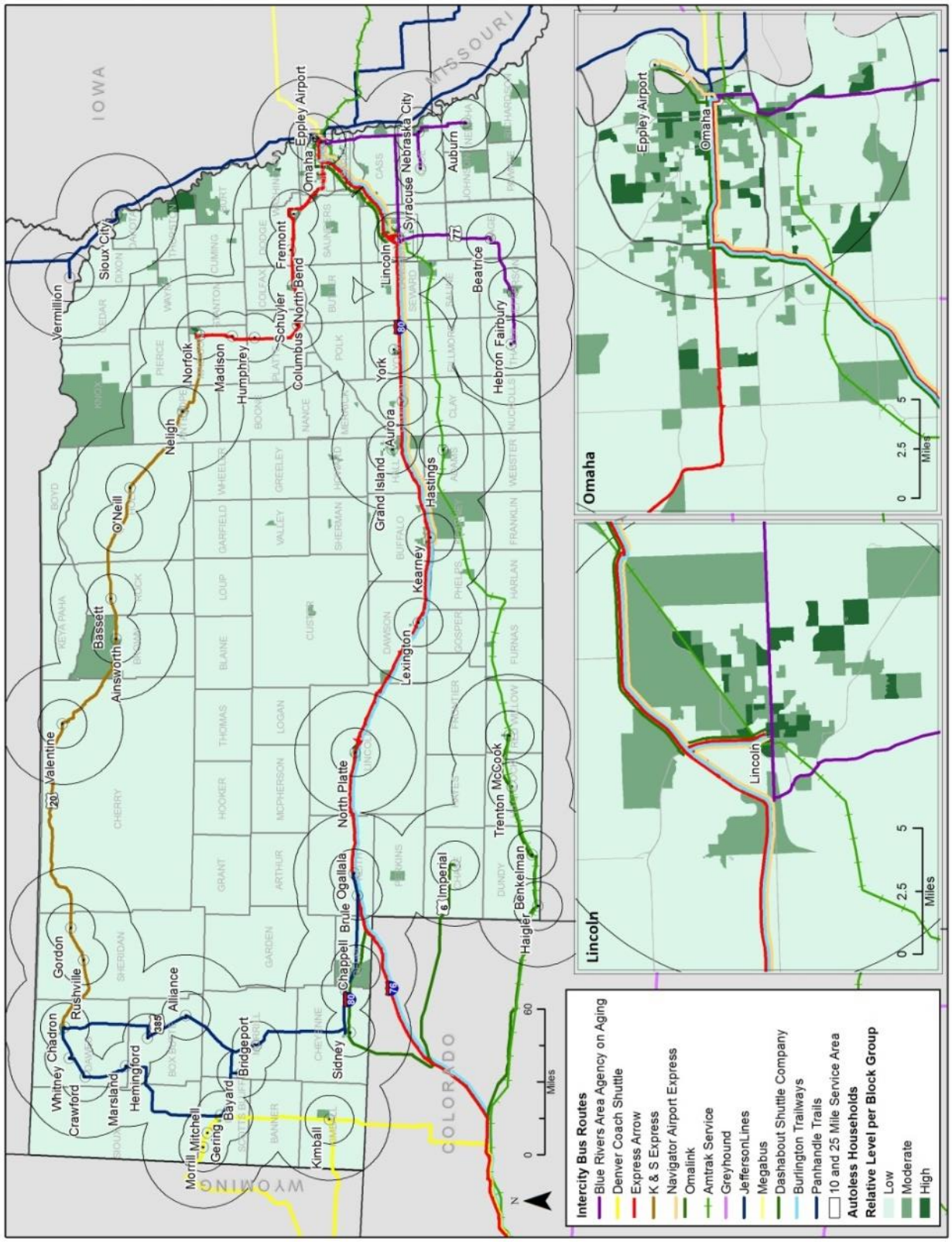
3. Persons living below the poverty level: Persons that typically do not have the economic means to own or operate a vehicle, or may have a vehicle perceived as incapable of making a long trip.

4. Households with no automobile available: Persons without access to a car must rely on alternative transportation services.

Households with No Automobile

Figure B-2 shows the relative levels of households in Nebraska that do not have access to personal vehicles. There are a number of block groups more than 25 miles from intercity bus service that show moderate levels of autoless households, including Broken Bow in Custer County, Loup City in Sherman County, and Ord in Valley County, and Santee Reservation in Knox County, much of northern Burt County, the City of Wayne in Wayne County, and Wakefield in Dixon County. There is only one block group that is both more than 25 miles from intercity bus service and has a high level of autoless households, and that is in Thurston County, in the eastern portion of the Omaha Reservation.

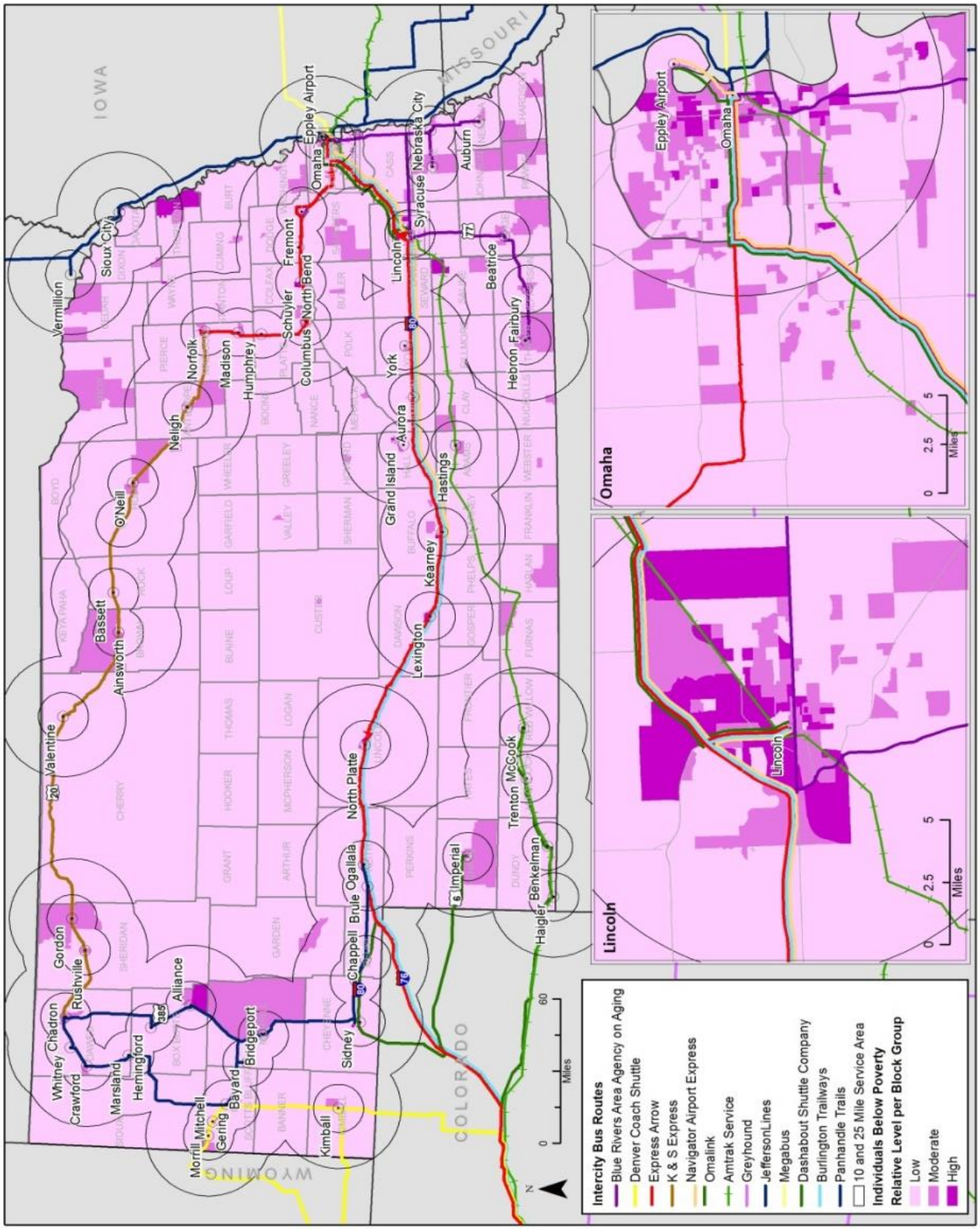
Figure B-2: Distribution of Households with No Automobiles and Intercity Bus Service



Population Living Below Poverty Level

Figure B-3 shows the relative populations of individuals living below poverty level. Several places outside the 25-mile intercity bus service area highlighted in the autoless household's analysis also have moderate levels of below poverty population, including Broken Bow, Ord, Wakefield, and Santee. Southern Harlan County, Red Cloud in Webster County, and Superior in Nuckolls County also have moderate below-poverty populations. Wayne has a high below-poverty population, as does the eastern Omaha Reservation.

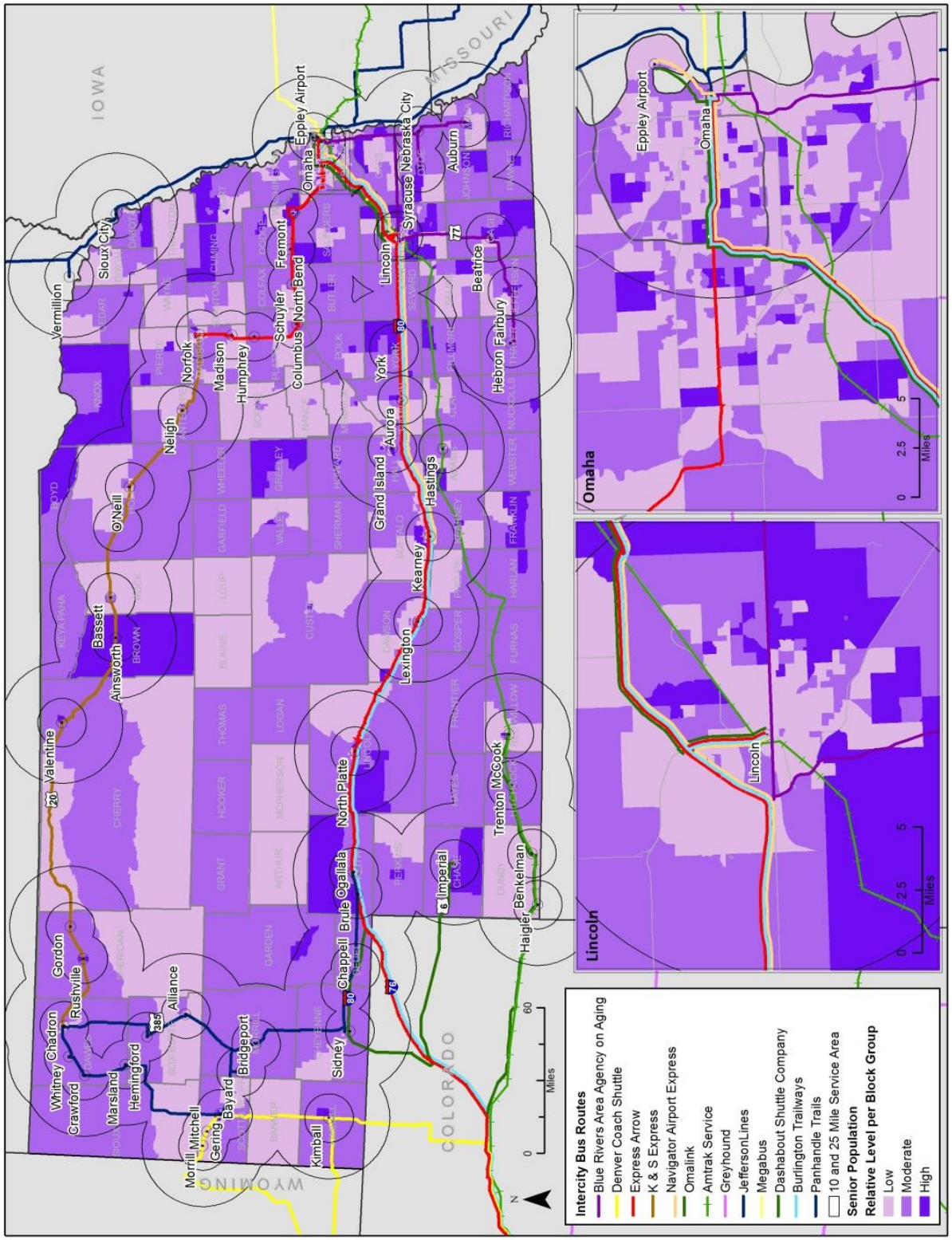
Figure B-3: Distribution of Population Living Below Poverty Level and Intercity Bus Service



Senior Adult Population

Figure B-4 shows relative populations of adults age 60 and above. This demographic segment is more rural than others, with far more moderate and high population block groups more than 25 miles from intercity bus service.

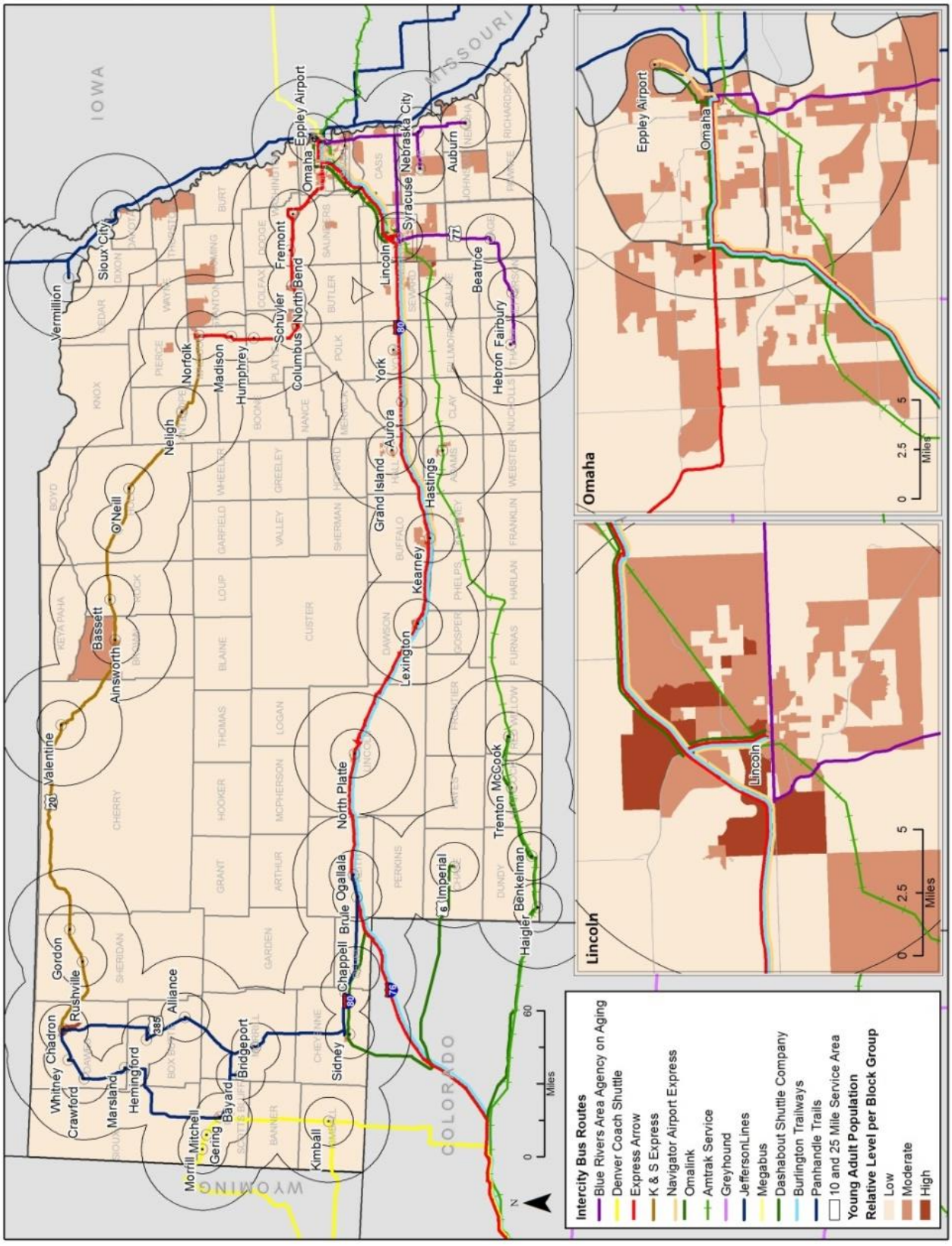
Figure B-4: Distribution of Senior Adult Population (Ages 60 and Above) and Intercity Bus Service



Young Adult Population

Figure B-5 shows relative populations of adults ages 18-24. More so than the other demographic segments, young adults are strongly clustered. Lincoln, home to University of Nebraska, has the most block groups with high young adult populations. Outside of the intercity bus service area, Omaha Reservation, Wayne, and northwestern Cuming County have moderate young adult populations.

Figure B-5: Distribution of Young Adult Population and Intercity Bus Service



DESTINATIONS AND FACILITIES

The analysis of population density, location, and needs factors addresses the potential origin areas for intercity trips, but another consideration in terms of both potential market and policy is whether or not the current routes serve the places that are likely to be attractors of intercity bus ridership, or could potentially have a need for such service. These include colleges and universities, major military bases, hospitals and major medical facilities, correctional facilities, recreation areas, and major intermodal connections at airports. The potential attractors of intercity bus ridership were addressed by identifying facilities of each type in Nebraska and then determining whether they are served by the existing network. In this review, intercity bus service is considered accessible if the destination is located in a city that is an existing stop. Intercity bus routes probably do not directly serve all identified destinations. An additional connection by local transit service or automobile is probably necessary to reach the specific destination. For outlying destinations, the distance from existing intercity bus service is noted. Local transit systems could potentially provide feeder services to connect destinations that lie between 10 and 25 miles from intercity bus stops to the existing network.

Colleges and Vocational Schools

A major segment of the intercity bus market is the young adult population, persons ages 18 to 24. To some extent the ability of college students to use intercity bus services to make trips to and from home is a function of the location of their homes and the degree to which bus service comes close to home. As a result, we have identified and mapped locations of all colleges and technical/vocational schools and universities in Nebraska and compared this to the stops that are currently served by the intercity bus network.

Table B-1 list the colleges and universities and Figure B-6 presents the location of these facilities in relation to the existing intercity bus network and the 10 mile- and 25 mile- service areas.

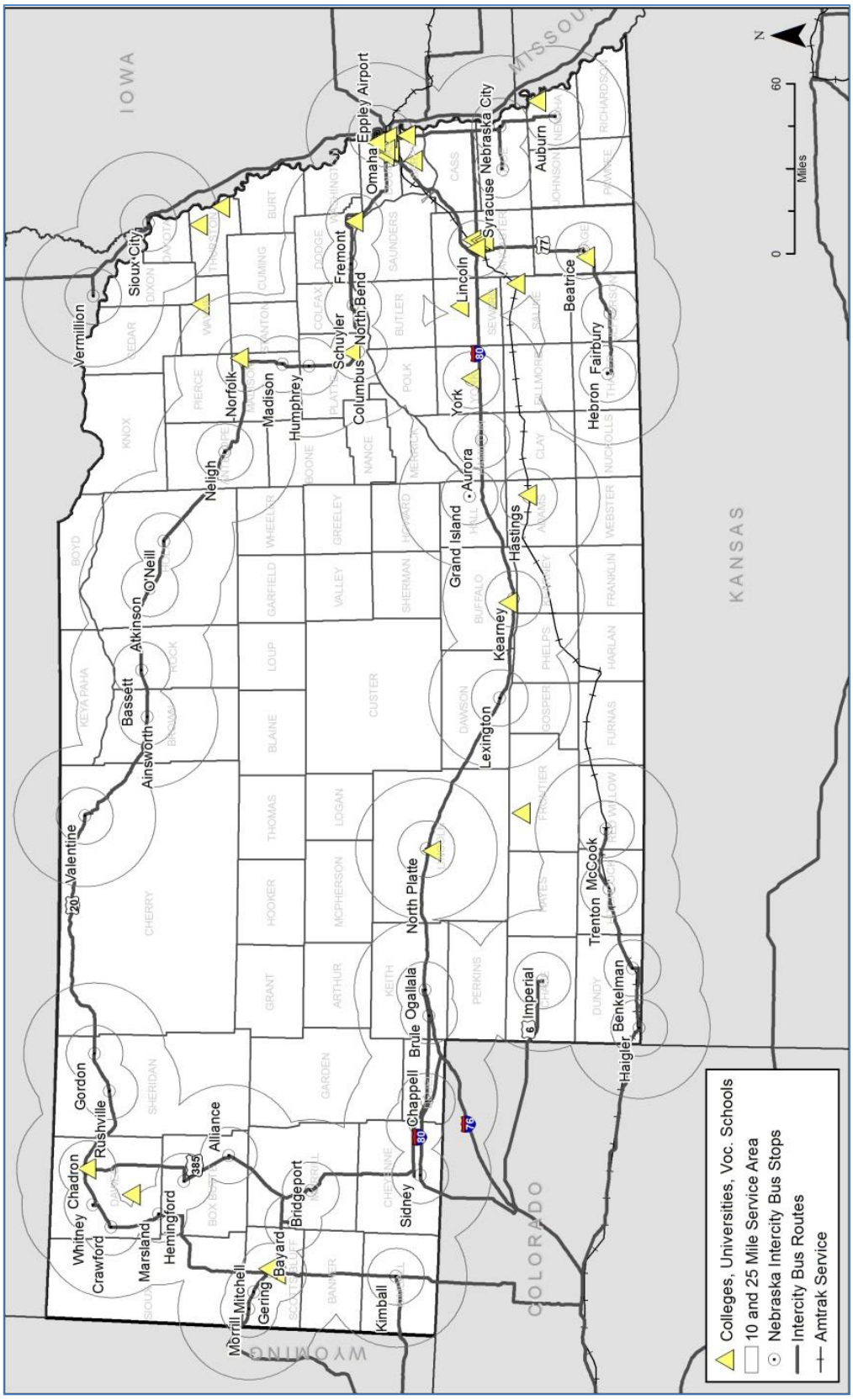
Most higher education facilities in Nebraska are located within the 25-mile service area of intercity bus service. There are four exceptions: Wayne State College in Wayne, Nebraska College of Technical Agriculture in Curtis, and Nebraska Indian Community College in Macy.

The following schools are located between 10 and 25 miles from intercity bus service: Butler Professional Farrier School in Crawford, Concordia University in Seward, Doane University in Crete, Hastings College in Hastings, Southeast Community College in Milford, and Little Priest Tribal College in Winnebago.

Table B-1: Nebraska Colleges and Universities

School Name	Location
Bellevue University	Bellevue
Bryan College of Health Sciences	Lincoln
Butler Professional Farrier School	Crawford
Central Community College	Columbus
Chadron State College	Chadron
Clarkson College	Omaha
College of Saint Mary	Omaha
Concordia University	Seward
Creighton University	Omaha
Doane University	Crete
Grace University	Omaha
Hastings College	Hastings
Little Priest Tribal College	Winnebago
Metropolitan Community College	Omaha
Midland University	Fremont
Mid-Plains Community College	North Platte
Nebraska Christian College	Papillion
Nebraska College of Technical Agriculture	Curtis
Nebraska Indian Community College	Macy
Nebraska Methodist College	Omaha
Nebraska Wesleyan University	Lincoln
Northeast Community College	Norfolk
Peru State College	Peru
Southeast Community College - Beatrice	Beatrice
Southeast Community College - Milford	Milford
Summit Christian College	Gering
Union College	Lincoln
University of Nebraska Lincoln	Lincoln
University of Nebraska Omaha	Omaha
University of Nebraska at Kearney	Kearney
Wayne State College	Wayne
Western Nebraska Community College	Scottsbluff
York College	York

Figure B-6: Nebraska Higher Education Locations and Intercity Bus Service



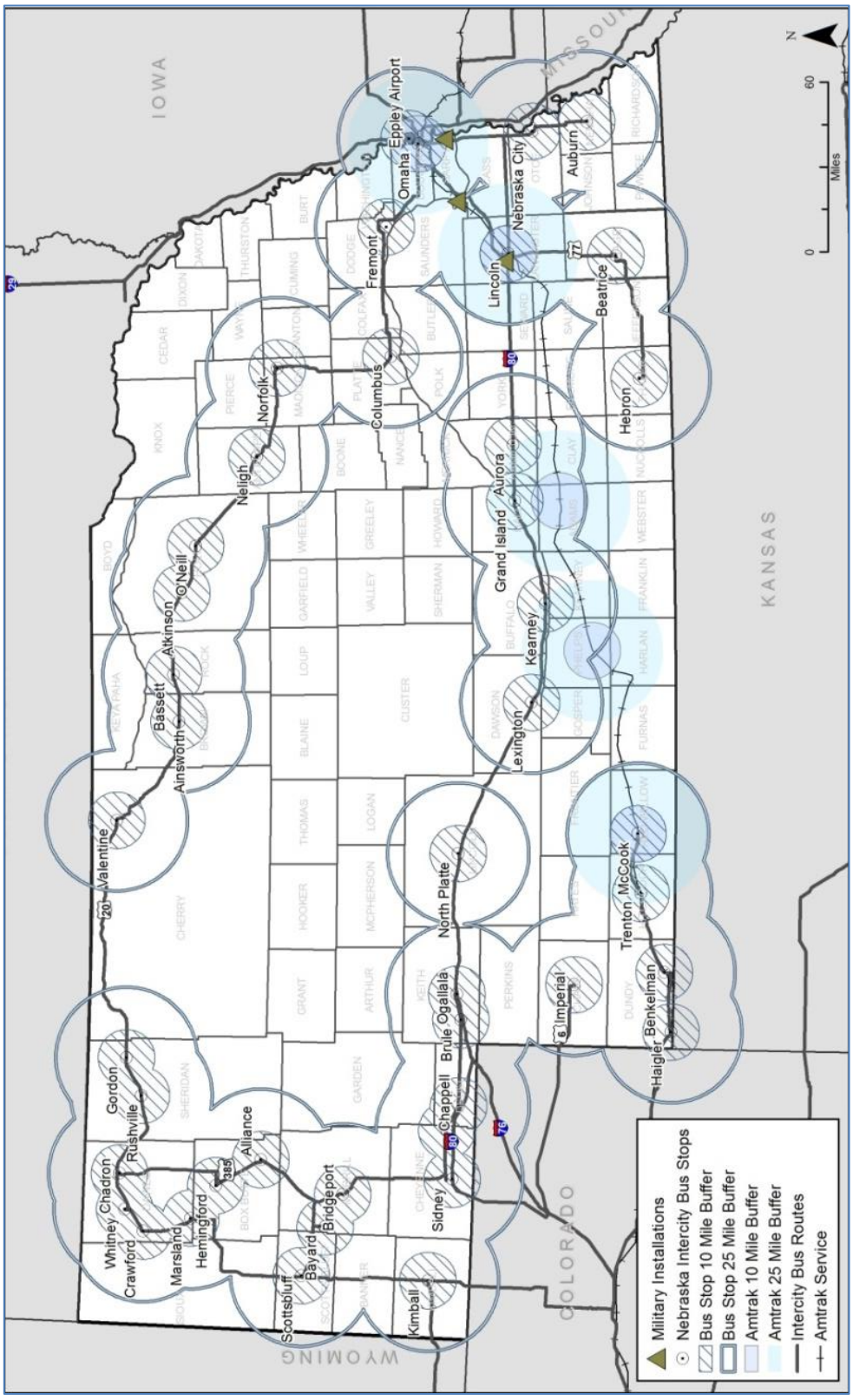
Military Bases

There are only three active military installations in the state, and all three are located in the Omaha-Lincoln corridor. Table B-2 list the military bases and Figure B-7 shows the locations of these facilities in relation to existing intercity and regional bus service with 10- and 25-mile service areas.

Table B-2: Nebraska Active Military Bases

Military Base	Location
Camp Ashland	Ashland
Lincoln Air National Guard Base	Lincoln
Offutt Air Force Base	South of Omaha

Figure B-7: Military Active Bases Locations and Intercity Bus Service



Hospitals and Medical Centers

Although medical trips make up a small percentage of intercity bus trips, the ability to make trips from rural areas and small towns to major medical facilities is often a policy consideration for maintaining bus services. It may be less of a consideration for patient transportation than for family and friends to visit, simply because most intercity services are not frequent enough to permit same-day outpatient visits.

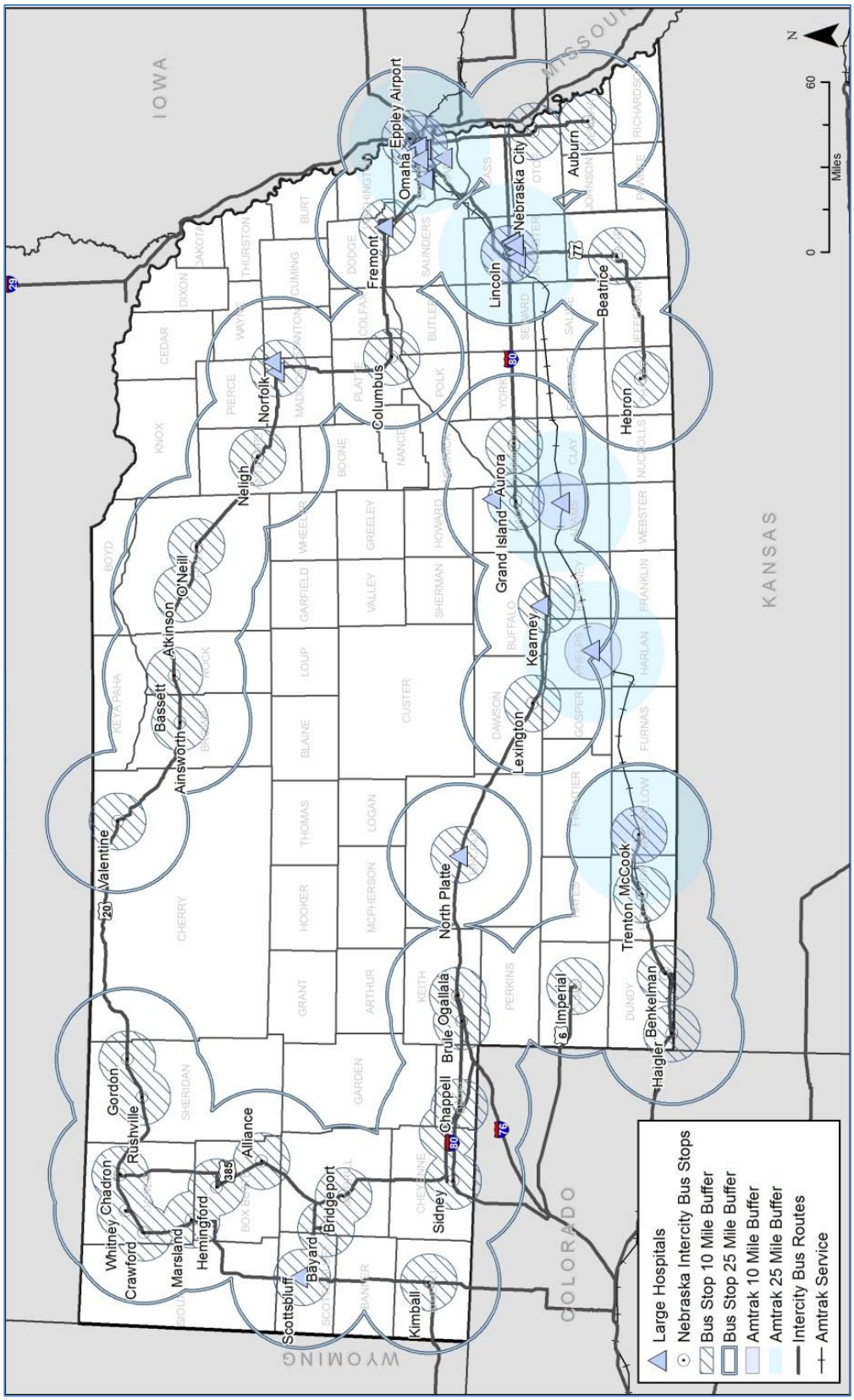
Table B-3 lists the medical centers and Figure B-8 displays the facilities along with the intercity bus network. These large medical facilities are more likely to generate intercity trips than small clinics and medical centers.

All of the large hospitals in Nebraska are located within the 25-mile service area of intercity bus service. One large hospital, Phelps Memorial Health Center in Holdrege, is between ten and 25 miles of intercity bus service.

Table B-3: Nebraska Hospitals and Medical Centers

Name	Location
Bryan Medical Center East	Lincoln
Bryan Medical Center West	Lincoln
CHI Health Good Samaritan	Kearney
CHI Health Immanuel	Omaha
CHI Health Lakeside	Omaha
CHI Health Midlands	Papillion
CHI Health St Elizabeth	Lincoln
Creighton University Medical Center	Omaha
Faith Regional Health Services	Norfolk
Fremont Health Medical Center	Fremont
Grand Island VA Med	Grand Island
Great Plains Health	North Platte
Lincoln Regional Center	Lincoln
Lincoln VA	Lincoln
Madonna Rehabilitation Hospital	Lincoln
Mary Lanning Memorial Hospital	Hastings
Methodist Hospital	Omaha
Norfolk Regional Center	Norfolk
Omaha VA	Omaha
Phelps Memorial Health Center	Holdrege
Regional West Medical Center	Scottsbluff
University of Nebraska Medical Center	Omaha

Figure B-8: Nebraska Hospitals and Medical Centers and Intercity Bus Service



Correctional Facilities

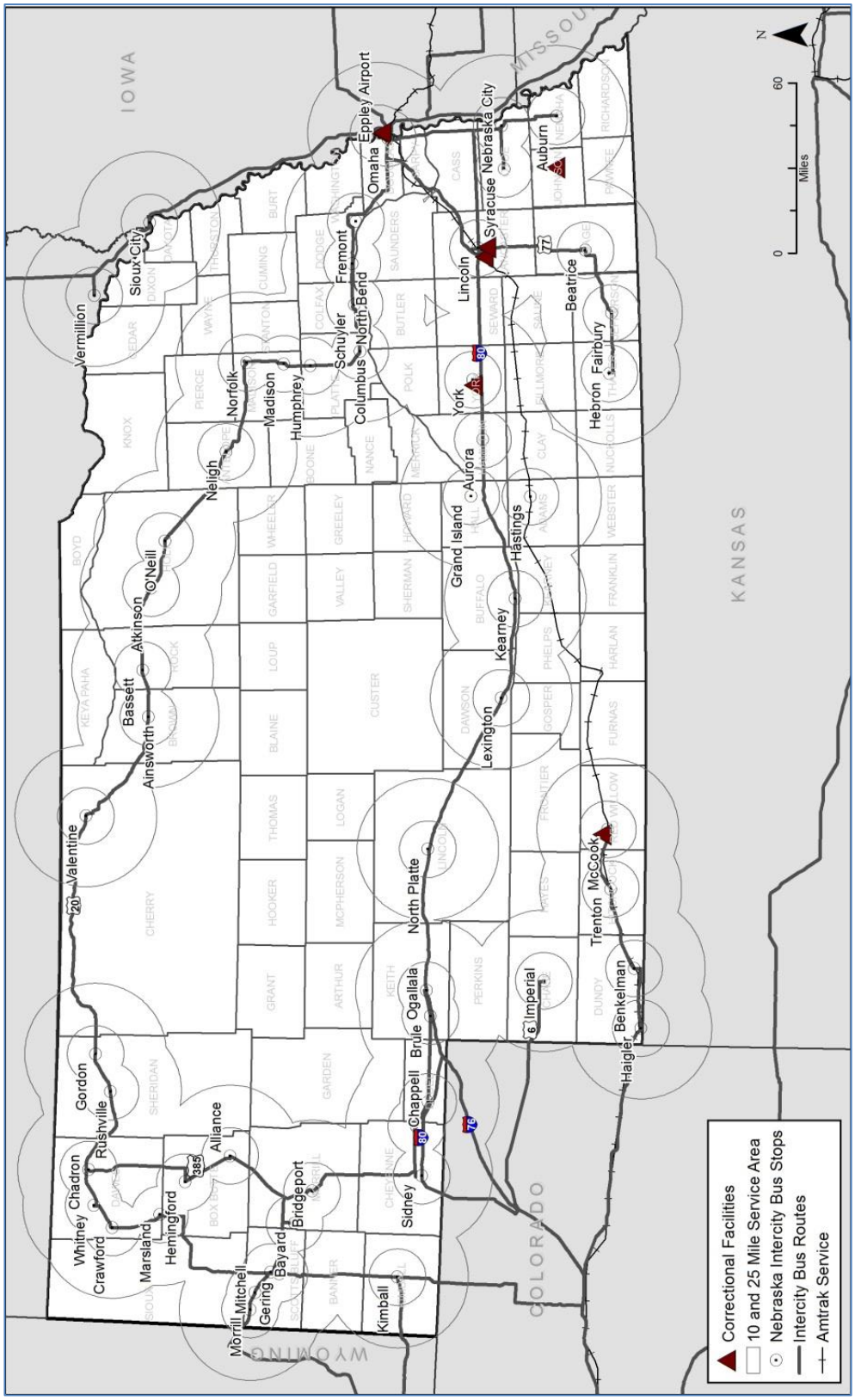
Demand for correctional facility trips results in a small percentage of intercity bus trips, but the ability to make trips from rural areas and small towns to correctional facilities may be crucial to families, released inmates, and employees. Table B-4 list the correctional facilities and Figure B-9 presents a map of correctional facilities in Nebraska.

Only one of Nebraska's correctional facilities is more than ten miles from intercity bus service; the Tecumseh State Correctional Institution, north of the City of Tecumseh in Johnson County, is between ten and 25 miles of intercity service.

Table B-4: Nebraska Correctional Facilities

Correctional Facility	Location
Lincoln Correctional Center	Lincoln
Nebraska Correctional Youth	Omaha
Nebraska Correctional Center for Women	York
Nebraska State Penitentiary	Lincoln
Omaha Correctional Center	Omaha
Tecumseh State Correctional Institution	Tecumseh
Work Ethic Camp	McCook

Figure B-9: Nebraska Correctional Facilities and Intercity Bus Service



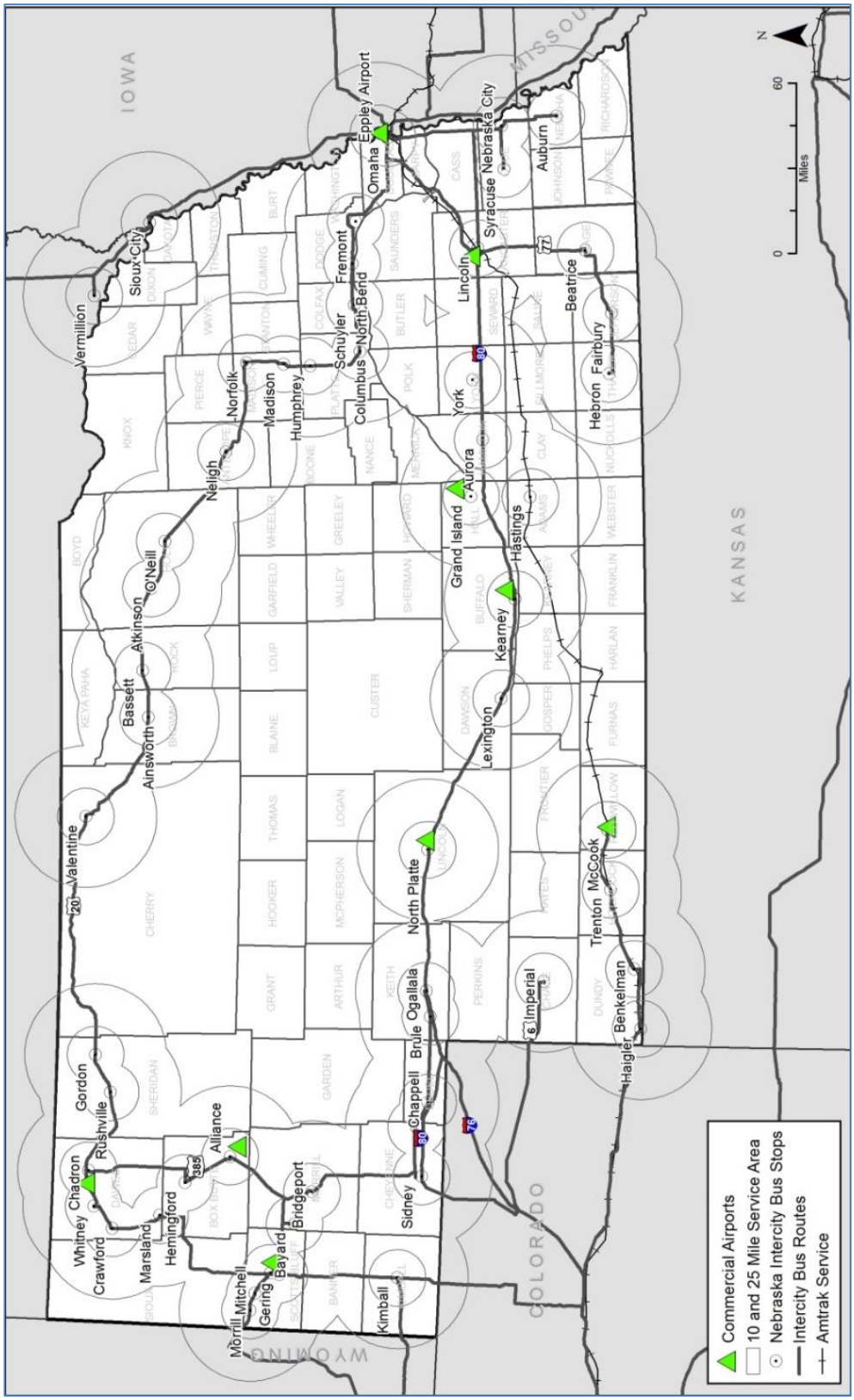
Major Airports

People connecting from rural towns to commercial airports are a potential market for intercity bus services. Table B-5 list the major airports and Figure B-10 identifies the nine commercial airports in Nebraska. All commercial airports in Nebraska are located within ten miles of intercity bus service.

Table B-5: Major Airports in Nebraska

Airport Name	Location
Alliance Municipal Airport	Alliance
Central Nebraska Regional	Grand Island
Chadron Municipal Airport	Chadron
Eppley Airfield	Omaha
Kearney Regional Airport	Kearney
Lincoln Airport	Lincoln
McCook Regional Airport	McCook
North Platte Regional	North Platte
Western Nebraska Regional Airport	Scottsbluff

Figure B-10: Nebraska Commercial Airports and Intercity Bus Service



Gaps in Service

Error! Reference source not found. lists the high need transit places, and Figure B-11 and Figure B-12 show the combined transit needs of Nebraska block groups in relation to intercity bus service. Figure B-11 shows the relative levels of transit-dependent populations, and Figure B-12 shows the relative percentages. Both maps also display the 10-mile and 25-mile service area around each existing intercity bus stop. Bus stops in Sioux City, Iowa and Vermillion, South Dakota were also included in the analysis as the service areas of these stops extend a substantial distance into Nebraska.

In Nebraska, the service area of the intercity bus network is a reflection of the distribution of people in the state. Omaha, Lincoln, and cities all along Interstate 80 have high levels of service because of their relatively high populations. The central interior of the state, including the Sand Hills, is the most notable geographic gap in service due to its large size. There are also gaps along the southern border with Kansas and in the northeast along the borders with South Dakota and Iowa. With a few notable exceptions--such as the city of Wayne, home to Wayne State College--Nebraska's intercity bus network serves most major destinations and centers of population.

Table B-6: High Need Transit Locations

Name	Census 2010 Population
Wayne	5,660
Broken Bow	3,559
Ord	2,112
Tekamah	1,736
Ravenna	1,360
Burwell	1,210
Alma	1,133
Loup City	1,029
Bloomfield	1,028
Red Cloud	1,020
Pender	1,002
Franklin	1,000
Curtis	939
Lyons	851
Oxford	779
Crofton	726
Bancroft	495

Name	Census 2010 Population
Decatur	481
Greeley Center	466
Orleans	386
Niobrara	370
Merna	363
Santee	346
Scotia	318
Edison	133
Naponee	106
Center	94
Riverton	89
Moorefield	32
Lindy	13

Figure B-11: Transit Need Level by Block Group and Intercity Bus Service

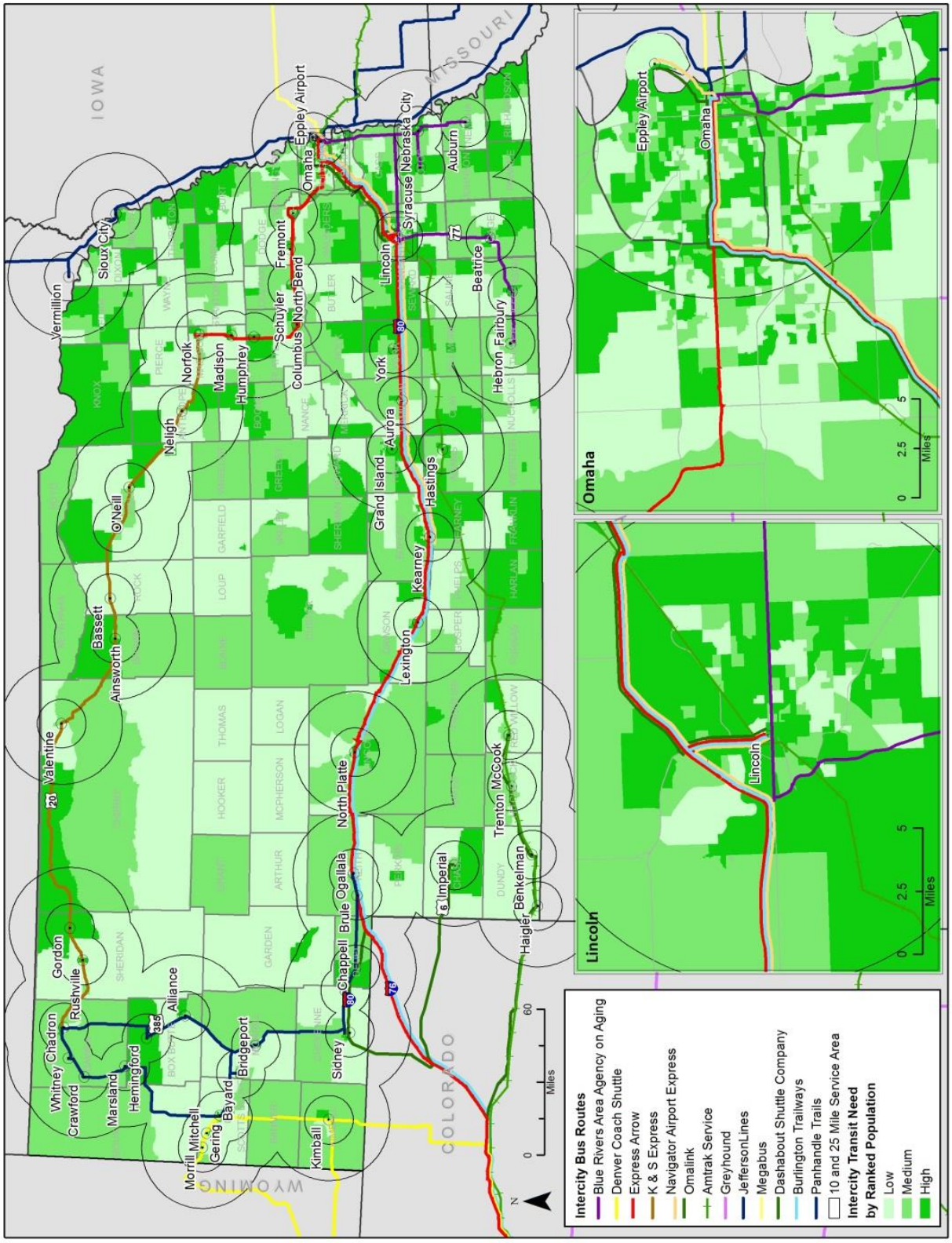


Figure B-12: Transit Need Percentage by Block Group and Intercity Bus Service