

EXHIBIT B-1
MAP OF DAIRY PROCESSING FACILITIES
WITHIN APPROXIMATELY 175 MILES OF NORTHERN KENTUCKY
(Including Facilities Closed Since 1985)

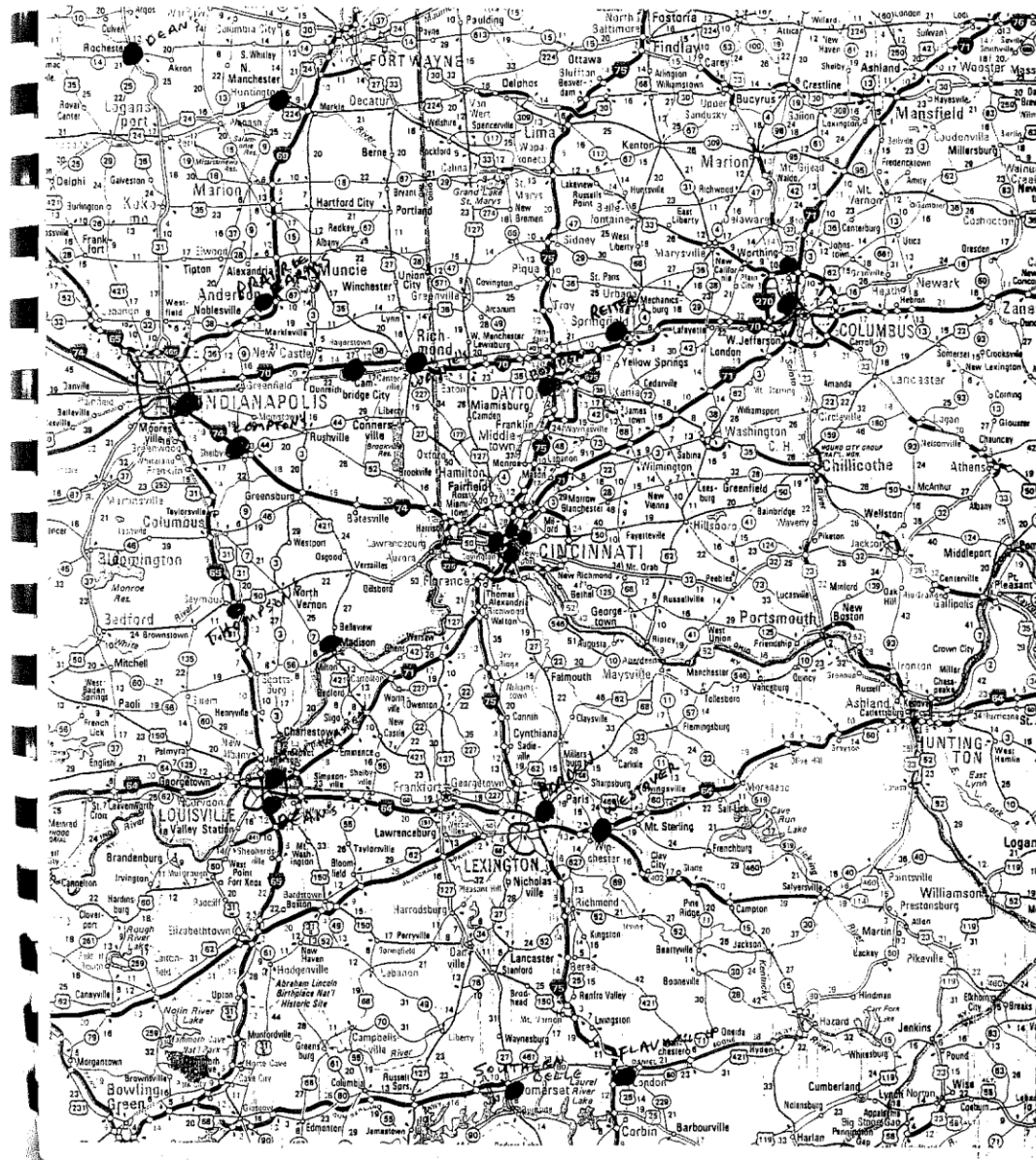


EXHIBIT 4-A

**1983: Analysis of Bids in Hamilton, Clermont,
Butler, Boone, Campbell & Kenton Counties**

Date	District	1983			1982			Incumbent	Previous Year	
		Trauth	LFW Meyer	Coors	Trauth	LFC Meyer	Coors		LFW	LFC
20-Apr	Clermont Co. Co-Op OH	.1215			.1247			Meyer	.1398	
2-Jun	Newport KY	.1395	.1215					Trauth	.1395	
9-Jun	Norwood OH	.1215	[<.1215]		.1275					
14-Jun	Lockland OH	.117	.135		.119	.14		Trauth	.135	.143
15-Jun	Butler Co. Co-Op OH	.113	.111	.1199	.115	.117	.1239			
20-Jun	Campbell Co. KY	.1309	.126					Trauth	.1545	0.1545
7-Jul	Sycamore OH	.107	.1125	.143	.107	.115	.143	Meyer	.1277	0.1327
11-Jul	Clermont Co. Co-Op OH	.1105	.1049		.1125	.1049				
14-Jul	Covington KY	.1094	.1094		.1094	.1094		Meyer	.1405	0.1405
15-Jul	Walton-Verona KY	.1165			.1205			Trauth	.141	
20-Jul	Madeira OH	.1164	[<.1164]		.1164			Meyer		
20-Jul	Bellevue KY	.1113	.1135					Meyer	.1397	
20-Jul	Dayton KY	.107			.107					
22-Jul	Great Oaks Voc. OH	.108	.1074		.1105	.1074		Meyer	.137	.14
25-Jul	Greenhills/Forest Pk. OH	.1023	.1026	.129	.1023	.1026	.1335	Meyer	.1277	0.1327
27-Jul	Middletown OH	.1019	.1011		.1019	.1011		Trauth	.124	.129
29-Jul	St. Bernard/Elmwood OH	.1031	.1041	.1145	.1031	.1041	.118	Meyer	.1397	0.1447
1-Aug	Fort Thomas KY	.101	.1011		.101	.1011		Meyer		0.1497
2-Aug	Forest Hills OH	.1033	.0987	.116	.1033	.0987	.118	Meyer	.116	.118
2-Aug	Milford OH	.1023	.0998		.1023	.0998		Meyer	.14	.145
2-Aug	Princeton OH	.1001	.0998	.1175	.1001	.0998	.1225	Trauth	.11	.115
5-Aug	Boone Co. KY	.1199	.1074		.1199	.1074		Royal Crest	.1285	0.1285
8-Aug	Beechwood KY	.1064	.1103		.1064	.1103		Meyer	.1515	
8-Aug	Kenton Co. KY	.1074	.1026	.134	.1074	.1026	.134	Royal Crest	.118	0.1185
9-Aug	Wyoming OH	.1019	.1104	.116	.1019	.1104	.118	Meyer	.1397	0.1447
11-Aug	Erlanger/Elsmere KY	.0999	.0987					Meyer	.11	
13-Aug	Northwest Local OH	.1009			.1009			Meyer		
15-Aug	Deer Park OH	.108	.0999		.108	.0999		ARA		
15-Aug	Mt. Healthy OH	.1017	.0969	.1155	.1017	.0969	.118	Meyer	.135	.14
15-Aug	Fairfield City OH	.101	.098	.115	.101	.098	.115	Trauth	.112	.115
17-Aug	Oak Hills OH	.098	.0969	.1065						
17-Aug	Southwest OH	.1033	.1011	.1065	.1033	.1011	.107	Meyer	.122	.126
18-Aug	Finnycetown OH	.1031	[<.1031]		.1031			Meyer		
19-Aug	Loveland OH	.1037	.1011	.1065	.1037	.1011	.107	Meyer	.1398	0.1498
12-Sep	Newport KY	.1215	.1445					Trauth		
13-Sep	Ludlow KY		.1095			.1095		Meyer		
none	Cincinnati OH - renewal									

EXHIBIT 4-B

1984: Analysis of Bids in Hamilton, Clermont,
Butler, Boone, Campbell & Kenton Counties

Date	District	LFW			LFC			Incumbent	Previous Year	
		Trauth	Meyer	Coors	Trauth	Meyer	Coors		LFW	LFC
9-Apr	Clermont Co. Co-Op OH	.13	.1245		.14	.1315		Meyer	.1049	.1049
4-Jun	Norwood OH	.1295	.1245	.119	.1365	.1315	.123	Meyer		
20-Jun	Newport KY	.1225	.1305					Trauth	.1215	
22-Jun	Butler Co. Co-Op OH	.126	.117	.150	.132	.122	.1550	Meyer	.111	.117
28-Jun	Sycamore OH	.111	.124	.15	.121	.13	.15	Trauth	.107	.107
3-Jul	Lockland OH	.133	.135		.139	.14		Trauth	.117	.119
5-Jul	Great Oaks JVS OH	.126	.1235		.132	.1305		Meyer	.1074	.1074
13-Jul	Madeira OH	.133			.139			Meyer		
16-Jul	Campbell Co. KY	.1395	.141		.125	.126		Meyer	.126	
17-Jul	Kenton Co. KY	.1289	.1302		.1289	.1302		Meyer	.1026	.1026
18-Jul	Dayton KY	.135			.140					
26-Jul	Middletown OH	.1135	.12		.119	.125		Trauth	.1019	.1019
27-Jul	St. Bernard/Elmwood OH	.114	.135	.145	.121	.14	.15	Trauth	.1031	.1031
27-Jul	Boone Co. KY	.1395	.139		.1395	.139		Meyer	.1074	.1074
29-Jul	Bellevue KY	.1325	.1345					Trauth	.1113	
30-Jul	Norwood OH	.1245	.1175	.1134	.1315	.1225	.1225	Meyer		
1-Aug	Fort Thomas KY	.128	.1302		.138	.1352		Trauth	.101	.101
2-Aug	Northwest OH	.134	.1175	.1325	.1385	.1225	.135			
3-Aug	Princeton OH	.1333	.1175	.135	.1383	.1225	.145	Meyer	.0998	.0998
6-Aug	Forest Hills OH	.1262	.1175	.134	.1332	.1225	.1355	Meyer	.0987	.0987
6-Aug	Milford OH	.1265	.1175	.14	.1335	.1225	.145	Meyer	.0998	.0998
9-Aug	Greenhills/Forest Pk. OH	.1175	.1297	.133	.1225	.1347	.1345	Trauth	.1023	.1023
9-Aug	Oak Hills OH	.1317						Meyer	.0969	
10-Aug	Ludlow KY	.1475	.1462					Meyer	.1095	.1095
10-Aug	Walton/Verona	.132	.135					Trauth		
13-Aug	Mt. Healthy OH	.129	.1175	.144	.134	.1225	.154	Meyer	.0969	.0969
13-Aug	Erlanger/Elsmere KY	.135	.132					Meyer	.0987	
13-Aug	Beechwood KY	.139	.1405					Trauth	.1064	
15-Aug	Finneytown OH	.1225	[<.1225]		.1275					
15-Aug	Loveland OH	.1275	.1175	.145	.1345	.1225	.155	Meyer	.1011	.1011
15-Aug	Fairfield OH	.1225	.117	.116	.1275	.122	.121	Meyer	.98	.98
16-Aug	Wyoming OH	.133	.135	.145	.139	.142	.155	Trauth	.1019	.1019
16-Aug	Covington KY	.1325	.131		.1325	.131		Meyer	.1094	.1094
17-Aug	Southwest OH	.13	.1175	.1175	.14	.1225	.1225	Meyer	.1011	.1011
20-Aug	Deer Park OH	.13	.1245					Meyer	.0999	.0999
21-Aug	Silver Grove	.1375	.1355					Meyer		
none	Cincinnati OH - renewal							Meyer		

EXHIBIT 4-C

1985: Analysis of Bids in Hamilton, Clermont,
Butler, Boone, Campbell & Kenton Counties

Date	District	LFW			LFC			Incumbent	Previous Year	
		Trauth	Meyer	Coors	Trauth	Meyer	Coors		LFW	LFC
8-Apr	Clermont Co. Co-Op OH	.131	.1295		.135	.1345		Meyer	.1245	.1315
4-Jun	Newport KY	.129	.1305	.1315				Trauth	.1225	
4-Jun	Norwood OH	.1315	.1295	.1225	.1395	.1365	.1325	Coors	.1134	.1225
28-Jun	Lockland OH	.1340	.136	.135	.1390	.141	.14	Trauth	.133	.139
28-Jun	Great Oaks JVS OH	.131	.1285		.136	.1335		Meyer	.1235	.1305
1-Jul	Sycamore OH	.1275	.1295	.14	.1325	.1345	.145	Trauth	.111	.121
5-Jul	Campbell Co. KY	.1393	.1450					Trauth	.1395	.1250
15-Jul	Walton-Verona KY	.1335						Trauth	.1320	
17-Jul	Bellevue KY	.1350	.1370					Trauth	.1325	
17-Jul	Dayton KY	.1375	.1345		.1425	.1395				
19-Jul	Madeira OH	.1375			.1425			Meyer		
22-Jul	Kenton Co. KY	.1299	.1315		.1299	.1315		Trauth	.1289	.1289
25-Jul	St. Bernard OH	.135	.1375	.140	.140	.1425	.145	Trauth	.114	.121
25-Jul	Middletown OH	.124	.125		.129	.13		Trauth	.1135	.119
29-Jul	Boone Co. KY	.1430	.1410		.1430	.1410		Meyer	.1390	.1390
30-Jul	Wyoming OH	.1380	.139	.140	.1440	.147	.145	Trauth	.133	.139
31-Jul	Northwest OH	.1235	.1212	.131	.1285	.1262	.136	Meyer	.1175	.1225
1-Aug	Milford OH	.1315	.1295		.1365	.1345		Meyer	.1175	.1225
2-Aug	Fort Thomas KY	.1349	.1355		.1399	.1405		Trauth	.1280	.1380
5-Aug	Beechwood KY	.1440	.1455					Trauth	.1390	
5-Aug	Forest Hills OH	.1250	.1250	.131	.1300	.1300	.136	Meyer	.1162	.1212
5-Aug	Covington KY	.1370	.134		.1370	.134		Meyer	.1310	.1310
5-Aug	Princeton OH	.1345	.1225	.131	.1299	.1275	.136	Meyer	.1175	.1225
5-Aug	Deer Park OH	.1399			.1369			Meyer	.1245	.1315
5-Aug	Butler Co. Co-Op OH	.1245	.122	.131	.1295	.127	.136	Meyer	.117	.122
8-Aug	Silver Grove KY		.1380					Meyer	.1355	
8-Aug	Cincinnati OH	.124	.1197		.129	.1247		Meyer		
9-Aug	Loveland OH	.14	.1295	.1325	.145	.1345	.1425	Meyer	.1175	.1225
9-Aug	Ludlow KY	.15	.1480		.15	.1480		Meyer	.1462	.1462
13-Aug	Greenhills-Forest Park OH	.1223	.131	.132	.1273	.136	.137	Trauth	.1175	.1225
13-Aug	Fairfield OH	.14	.122	.131	.15	.127	.136	Meyer	.117	.122
14-Aug	Southwest OH	.14	.1325	.131	.15	.1425	.141	Coors	.1175	.1225
14-Aug	Erlanger-Elsmere KY	.136	.1345					Meyer	.1320	
19-Aug	Mt. Healthy OH	.1249	.1225	.14	.1299	.1275	.145	Meyer	.1185	.1235
20-Aug	Finneytown OH	.124	.1225	.1325	.129	.1275	.1375	Meyer		
?-Aug	Oak Hills OH									

EXHIBIT 4-F

1988: Analysis of Bids in Hamilton, Clermont,
Butler, Boone, Campbell & Kenton Counties

Date	District	LFW			LFC			Incumbent	Previous Year	
		Trauth	Meyer	Coors	Trauth	Meyer	Coors		LFW	LFC
11-Apr	Clermont Co. Co-Op OH	.1402	.1375	.16	.1449	.1425	.1725	Meyer	.1375	.1425
13-Jun	Milford Exempted OH	.1379	.1375	.1425	.1429	.1425	.1475	Meyer	.1375	.1425
14-Jun	Bellevue KY	.1475	.15					Trauth	.145	
21-Jun	Norwood OH	.1418	.1375	.1475	.1478	.1425	.1525	Meyer	.1375	.1425
1-Jul	Silver Grove KY	.1503	.145					Meyer	.145	
1-Jul	Great Oaks JVS OH	.1415	.1375		.1465	.1425		Meyer	.1355	.1405
8-Jul	Campbell Co. KY	.1525	.1575					Trauth	.1495	
8-Jul	Newport KY	.1405	.15	.1497				Trauth	.1375	
8-Jul	Madeira OH	.1475	.142	.1559	.1525	.147	.1625	Meyer	.14	.145
11-Jul	Boone Co. KY	.1476	.14		.1526	.145		Meyer	.1375	.1425
14-Jul	Erlanger/Elsmere KY	.1488	.143					Meyer	.1405	
14-Jul	Sycamore OH	.1455	.15	.1475	.1505	.16	.1626	Trauth	.1375	.1425
20-Jul	Walton/Verona KY	.145			.149			Trauth	.1435	.1485
28-Jul	Northwest OH	.1517	.1495	.147	.1617	.1595	.1565	Coors	.1385	.1485
28-Jul	Covington KY	.1535	.1458					Meyer	.1375	.1425
29-Jul	Kenton Co. KY	.1445	.1475		.1445	.1475		Trauth	.1405	.1405
1-Aug	Middletown OH	.1325	.1375		.1375	.1425		Trauth	.122	.129
2-Aug	Princeton OH	.145	.1375		.15	.1425		Meyer	.1325	.1375
2-Aug	Wyoming OH	.15	.1425		.155	.1475		Meyer	.14	.145
3-Aug	Loveland OH	.1478	.14	.16	.1528	.145	.17	Meyer	.1375	.1425
4-Aug	Fairfield City OH	.1425	.1375	.16	.1525	.1475	.1675	Meyer	.128	.133
4-Aug	Beechwood KY	.1555	.16		.1555	.16		Trauth	.1535	
4-Aug	Fort Thomas KY	.145	.1525		.149	.1575		Trauth	.1405	.1455
5-Aug	Cincinnati OH	.1372	.1294		.1422	.1344		Meyer		
5-Aug	Ludlow KY	.1575	.1483		.1575	.1483		Meyer	.153	.153
5-Aug	Dayton KY	.135	.143		.145	.148		Trauth	.128	.133
8-Aug	Deer Park OH	.145	.142	.1589	.15	.147	.1649	Meyer	.14	.145
8-Aug	Forest Hills OH	.1439	.1375	.1529	.1489	.1425	.1629	Meyer	.1335	.1385
8-Aug	Southwest OH	.1525		.151	.1625		.161	Coors	.14	.15
9-Aug	Butler Co. Co-Op OH	.143	.137		.153	.142		Meyer	.128	.133
11-Aug	Greenhills/Forest Park OH	.1375			.1475			Trauth	.1325	.1375
12-Aug	Dayton KY REBID	.13	.143		.14	.148				
12-Aug	Oak Hills OH	.1463	.1375	.147				Meyer	.1325	
15-Aug	Finnestown OH	.1506	.1425	.1559	.1551	.1475	.1659	Meyer	.1375	.1425
17-Aug	St. Bernard/Elmwood OH	.1475	.15	.152	.1525	.16	.162	Trauth	.1425	.1475
22-Aug	Mount Healthy OH	.1431	.1355	.1515	.1476	.1405	.1565	Meyer	.1315	.1365

EXHIBIT 4-G

1989: Analysis of Bids in Hamilton, Clermont,
Butler, Boone, Campbell & Kenton Counties

Date	District	1988			1989			Incumbent	Previous Year	
		Trauth	LFW Meyer	Coors	Trauth	LFC Meyer	Coors		LFW	LFC
10-Apr	Clermont Co. Co-Op OH	.115	.1338	.16	.12	.1388	.17	Meyer	.1375	.1425
8-Jun	Milford Exempted OH	.12	.1145		.125	.1194		Meyer	.1375	.1425
15-Jun	Boone Co. KY	.118	.13		.129	.135		Meyer	.14	.145
20-Jun	Bellevue KY	.133	.13					Trauth	.1475	
22-Jun	Norwood OH	.12	.117	.119	.125	.122	.1225	Meyer	.1375	.1425
3-Jul	Newport KY	.13	.13					Trauth	.1405	
7-Jul	Campbell Co. KY	.1345	.1288					Trauth	.1525	
7-Jul	Great Oaks JVS OH	.125	.126		.13	.1315		Trauth	.1415	.1465
12-Jul	Kenton Co. KY	.1185	.1319		.1185	.1319		Trauth	.1445	.1445
13-Jul	Erlanger/Elsmere KY	.1185	.1175					Meyer	.143	
14-Jul	Silver Grove KY	.1265	.122					Meyer	.145	
14-Jul	Butler Co. Co-Op OH	.115	.115	.15	.121	.120	.1650	Meyer	.137	.142
18-Jul	Sycamore OH	.1156	.115	.135	.1216	.12	.1375	Trauth	.1455	.1505
28-Jul	St. Bernard/Elmwood OH	.1165	.121	.1195	.1215	.1265	.13	Trauth	.1475	.1525
31-Jul	Middletown OH	.1184	.1175		.1234	.1225		Trauth	.1325	.1375
1-Aug	Forest Hills OH	.1184	.1165	.12	.1234	.1215	.125	Meyer	.1375	.1425
1-Aug	Madeira OH	.125	.1175	.13	.129	.1225	.14	Meyer		
3-Aug	Loveland OH	.121	.1175		.1265	.1225		Meyer	.14	.145
4-Aug	Ludlow KY	.129	.122		.129	.122		Meyer	.1483	.1483
7-Aug	Princeton OH	.1319	.1175	.125	.1319	.1225	.1275	Meyer	.1375	.1425
7-Aug	Covington KY	.129	.122		.129	.122		Meyer	.1458	.1458
7-Aug	Fort Thomas KY	.1175	.1195		.1225	.1245		Trauth	.145	.149
10-Aug	Fairfield City OH	.16	.117	.117	.165	.123	.122	Meyer	.1375	.1475
10-Aug	Beechwood KY	.128	.1275		.128	.1275		Trauth	.1555	.1555
10-Aug	Greenhills/Forest Pk. OH	.1175	.1175	.1165	.1225	.1225	.12	Trauth	.1375	.1475
10-Aug	Wyoming OH	.16	.1175		.17	.1225		Meyer	.1425	.1475
11-Aug	Oak Hills OH	.114	.1165	.125				Meyer	.1375	
11-Aug	Northwest OH	.1149	.1175	.114	.1199	.1225	.1185	Coors	.147	.152
14-Aug	Southwest OH	.1134		.13	.1174		.135	Coors	.151	.161
14-Aug	Dayton KY	.1134	.1175		.1194	.1225		Trauth	.13	.14
17-Aug	Walton/Verona KY	.145			.149			Trauth	.145	.149
17-Aug	Finneytown OH	.15	.1275	.1165	.16	.1375	.1275	Meyer	.1425	.1475
21-Aug	Mt. Healthy OH	.15	.1165	.1485	.16	.1215	.1575	Meyer	.1355	.1405
None	Cincinnati OH - renewal							Meyer	.1294	.1344
None	Deer Park OH - renewal							Meyer	.142	.147

The Analytical Approach

- (1) If Southern Belle and NDH/Flav-O-Rich reduced competition, would prices likely go up?
- (2) Does DFA's ownership of Southern Belle and NDH/Flav-O-Rich make it likely that competition will be reduced?

Merger Guidelines Framework

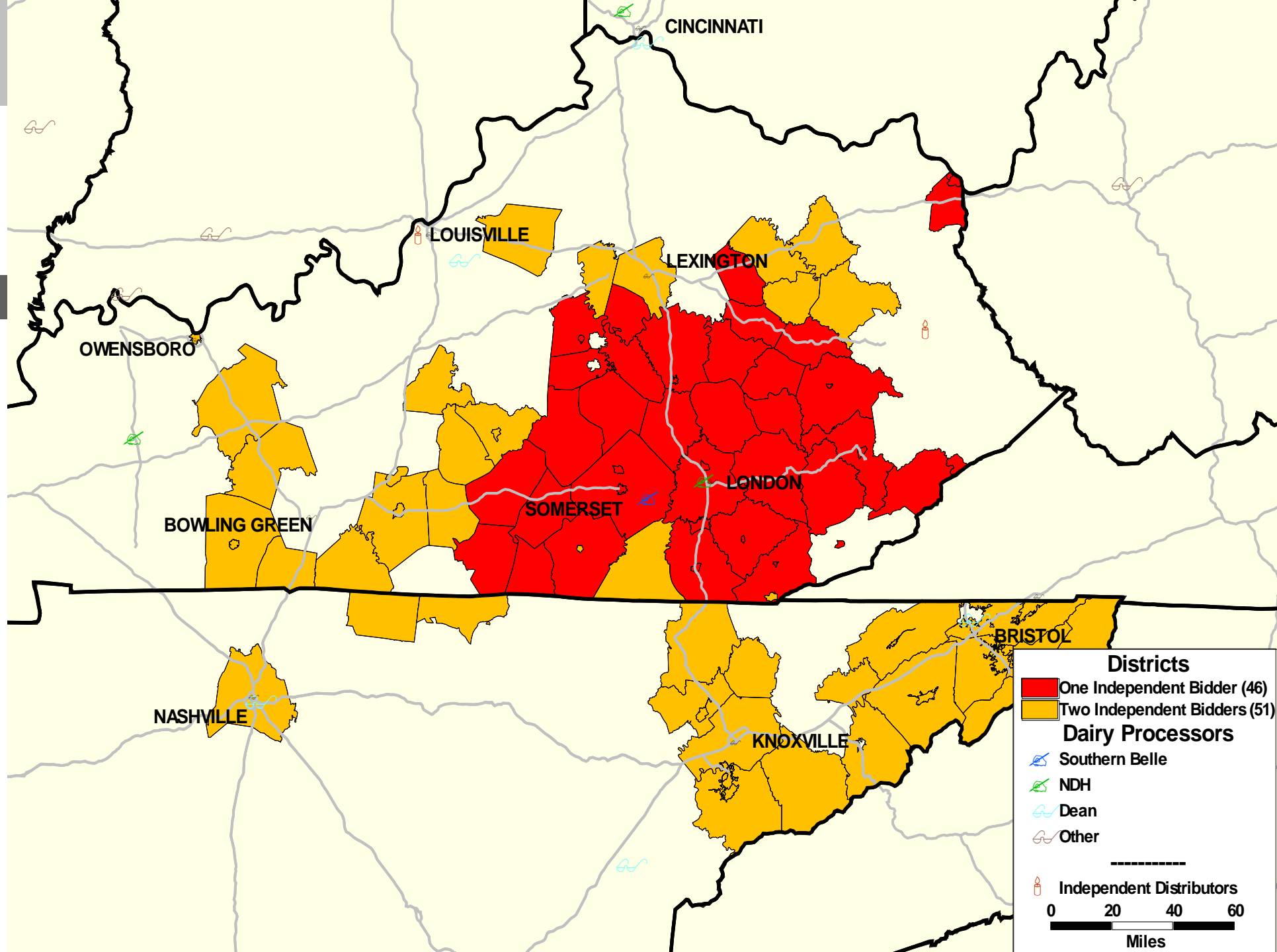
- Relevant Product Market
- Relevant Geographic Markets
- Market Participants and Increased Concentration
- Likely Adverse Competitive Effects
 - Unilateral
 - Coordinated
- Likelihood of Entry by Other Firms
- Efficiencies

The Relevant Markets

- Product market: School milk
 - Half pints of fresh milk
 - Delivered according to school delivery requirements
- Geographic market: Individual school districts or groups that conduct joint bids
 - Separate auctions with separate prices
 - No arbitrage

The Market Participants

- Bidders within the previous four years
 - 47 two-bidder districts
 - 51 three-bidder districts
- The importance of local commercial distribution
- Changes in ownership of processors and milk distributors



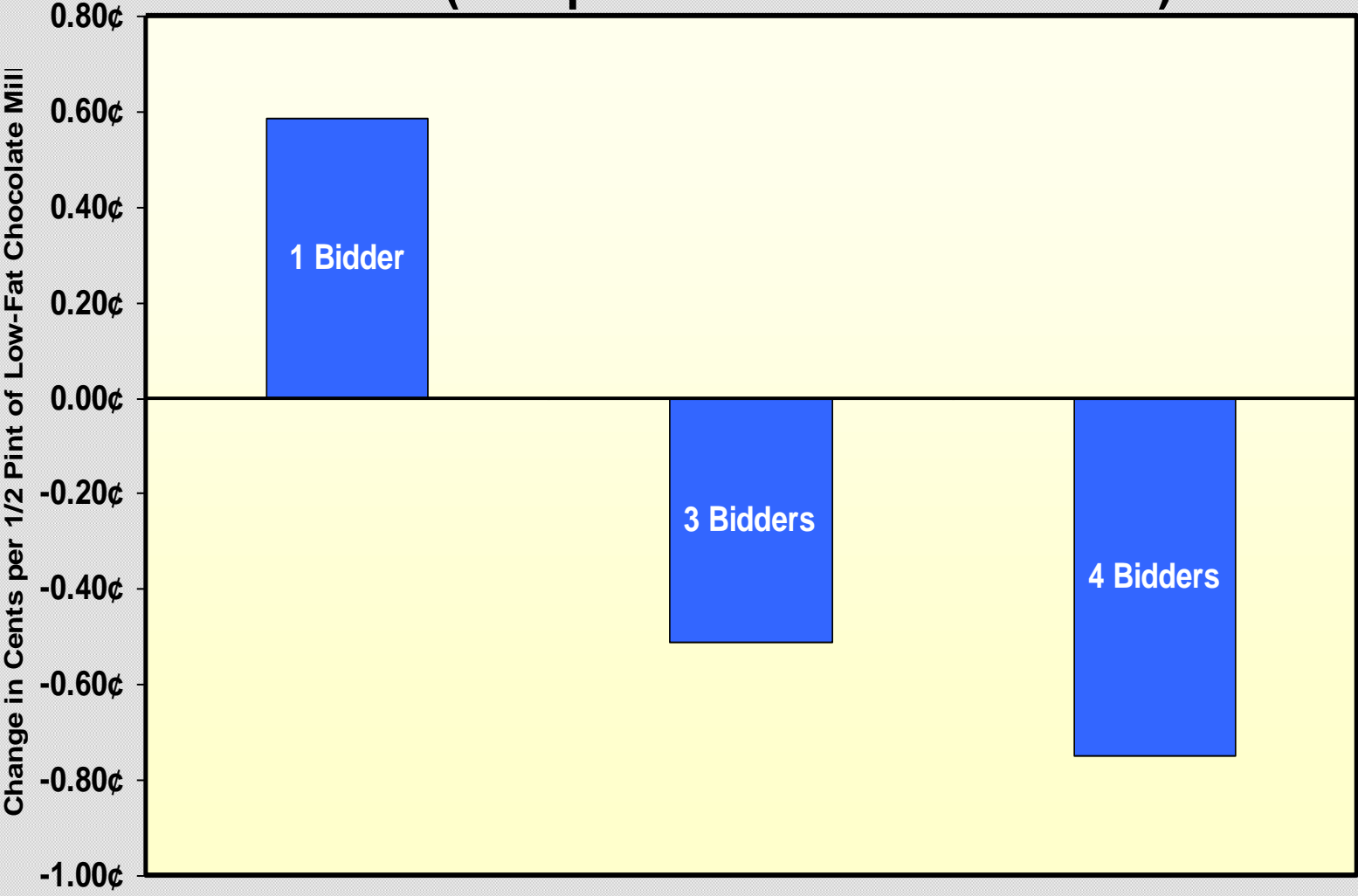
Statistical Evidence

- The statistical approach
- The bid data
- The results
 - Reducing bidders from two to one
 - Reducing bidders from three to two

Control Variables

- The bid year ('99 to '02)
- Fixed price bids
- Unknown whether bid is Fixed or Escalated
- Distance around a school district
- 1st closest – 3rd closest dairies
- Number of meals served in the school district
- Which coop (CKEC, KEDC, NETCO, Other) the district used if it did not independently solicit a bid

Estimated Effects of a Change in the Number of Bidders on Low-Fat Chocolate (Compared to 2-Bidder Markets)



■ The Effect of the Number of Bidders on the Low Bid

Bid rigging in the asphalt industry

- Monopoly cases of 1960s and 1970s
- 1980s: change in emphasis to price fixing
- Highway contractors: over 600 cases brought
- Lots of convictions, fines, and jail time
- 1990s and beyond: no overt collusion??
- New problem: single-bidder auctions!

Table 1: Summary Statistics of all projects in Kentucky – 2005 to 2007

	Number of Projects		Total Value of Projects (\$ in millions)		Over or Under Engineer's Estimate (%)	
	Asphalt Paving	All Other Projects*	Asphalt Paving	All Other Projects*	Asphalt Paving	All Other Projects*
Number of Bidders						
1	680	154	437.8	737.6	2.22	2.38
2	287	223	121.8	800.8	-13.53	-6.02
3	76	211	36.0	488.3	-16.73	-13.22
4	29	153	11.4	174.4	-15.35	-16.02
5	3	83	1.8	144.0	-14.15	-19.52
6		43		49.8		-17.22
7		23		44.0		-21.30
8		12		17.1		-16.07
9		7		4.6		-26.08
12		1		0.7		-11.05
Grand Total	1075	910	608.8	2,461.1	-3.84	-10.39

*These other projects include grade and drain, bridge, mowing, concrete, etc. Some of these projects have asphalt components as part of the project.

Table 2: Firm bidding and the value of winning contracts

Firms	Number of Plants	Asphalt Paving Projects Bid on		Asphalt Paving Contracts Won	
		Number of Bids	Firm only bidder on project (%)	Number of Projects Won	Contracted Value of Winning Projects (\$)
THE ALLEN COMPANY INC	3	54	50	49	15,308,473.15
ATS CONSTRUCTION	2	21	100	21	39,934,777.30
BARRETT PAVING MATERIALS INC	3	63	0	16	4,376,192.58
BLACKTOP INDUSTRIES & EQUIPMENT COMPANY	1	11	0	2	528,974.50
BLUEGRASS PAVING	1	31	0	8	2,227,065.31
COMMERCIAL PAVERS INC	3	53	0	24	18,353,377.60
EATON ASPHALT PAVING CO INC	5	99	3	43	12,210,883.50
ELMO GREER & SONS LLC	10	69	55	66	34,306,098.30
FLYNN BROTHERS CONTRACTING INC	2	31	0	6	2,987,221.00
GADDIE-SHAMROCK LLC	3	29	79	28	26,117,688.71
GLASS PAVING INC	2	20	70	16	10,558,645.85
H & G CONSTRUCTION COMPANY INC	1	77	0	14	6,106,025.76
H G MAYS CORPORATION	3	38	45	32	16,388,222.00
HINKLE CONTRACTING CORPORATION	11	107	92	103	51,571,836.47
JIM SMITH CONTRACTING COMPANY LLC	3	86	14	71	28,711,260.19
KAY & KAY CONTRACTING LLC	1	33	0	3	719,879.00
LEXINGTON QUARRY COMPANY	1	17	76	14	7,117,499.10
LINCOLN COUNTY READY MIX INC	1	28	0	5	2,226,384.48
MAGO CONSTRUCTION COMPANY LLC	12	102	46	88	38,670,973.43
MOUNTAIN ENTERPRISES INC	13	150	87	144	77,543,544.78
MURRAY PAVING	1	4	25	4	1,765,535.60
NALLY & GIBSON GEORGETOWN LLC D/B/A	1	11	100	11	4,804,703.60
NALLY & HAYDON SURFACING LLC	3	30	97	30	12,967,285.12
OHIO VALLEY ASPHALT LLC	3	33	39	27	7,344,865.32
QUALIFIED PAVING LLC	1	17	0	10	7,281,674.44
ROAD BUILDERS & PARKWAY CONSTRUCTION LLC	2	38	76	33	24,192,496.38
ROGERS GROUP INC	5	55	71	50	37,252,115.20
SCOTTY'S CONTRACTING AND STONE LLC	12	119	61	96	69,271,902.25
SHELBYVILLE ASPHALT COMPANY LLC	1	6	17	3	692,378.10
THE WALKER COMPANY OF KENTUCKY INC	2	22	86	21	7,110,045.55
YAGER MATERIALS LLC	1	28	68	21	24,133,747.90

Highway procurement auctions

- Types of contracts: new construction, bridges, asphalt resurfacing, trimming and mowing, etc.
- Funding often separated by county, so projects often delineated by county lines
- Monthly bid-letting, projects advertised well in advance, prequalification of bidders
- Sealed-bid auction, collusion checks ex post
- Qualified bidders are publicly revealed prior to the auction in Kentucky!

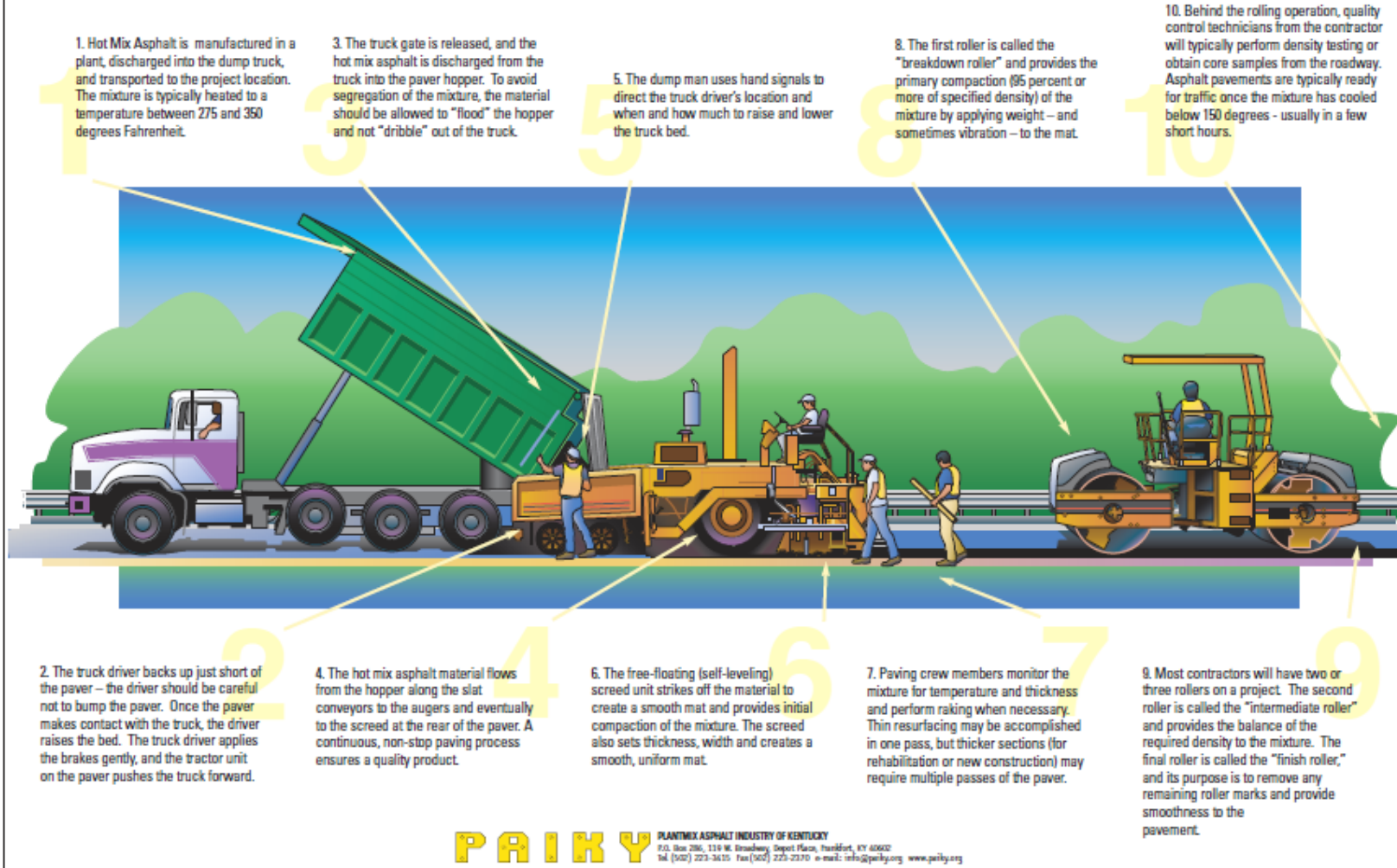
Asphalt Economics

- Sand and Gravel, asphalt cement, heat
- Asphalt is hot and heavy
- No firm in KY bid on a project farther than 60 miles from its plant
- Haul it, spread it, and compact it quickly, because it is a mess if it cools.

Appendix A-1: Diagram of Asphalt Paving

Did You Know?

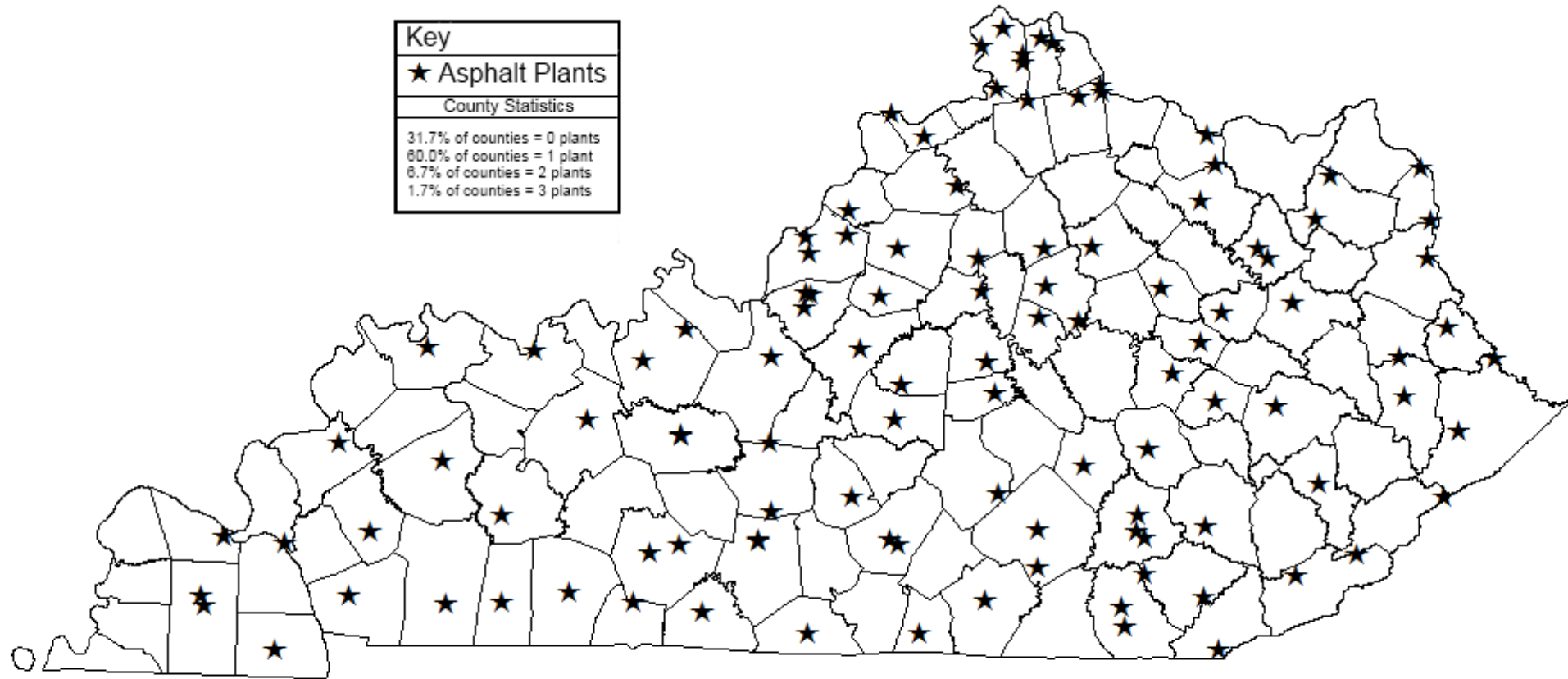
The Asphalt Paving Train



Coordination of bidding in a repeated game

- Competitive markets in Kentucky: Louisville area and northern Kentucky area
- Oligopoly markets: spatially separated firms when transportation costs are significant
- Natural monopoly markets: eastern Kentucky

Figure 1: Asphalt Plant Locations in Kentucky



Data

- Publicly available data from KYTC on all highway procurement auctions: 2005-07
- Location of project
- Location of asphalt plants
- Focus on asphalt jobs: clearly delineated geographic markets and hence lots of duopoly/oligopoly markets in KY

Figure 6: Service area – H&G Construction

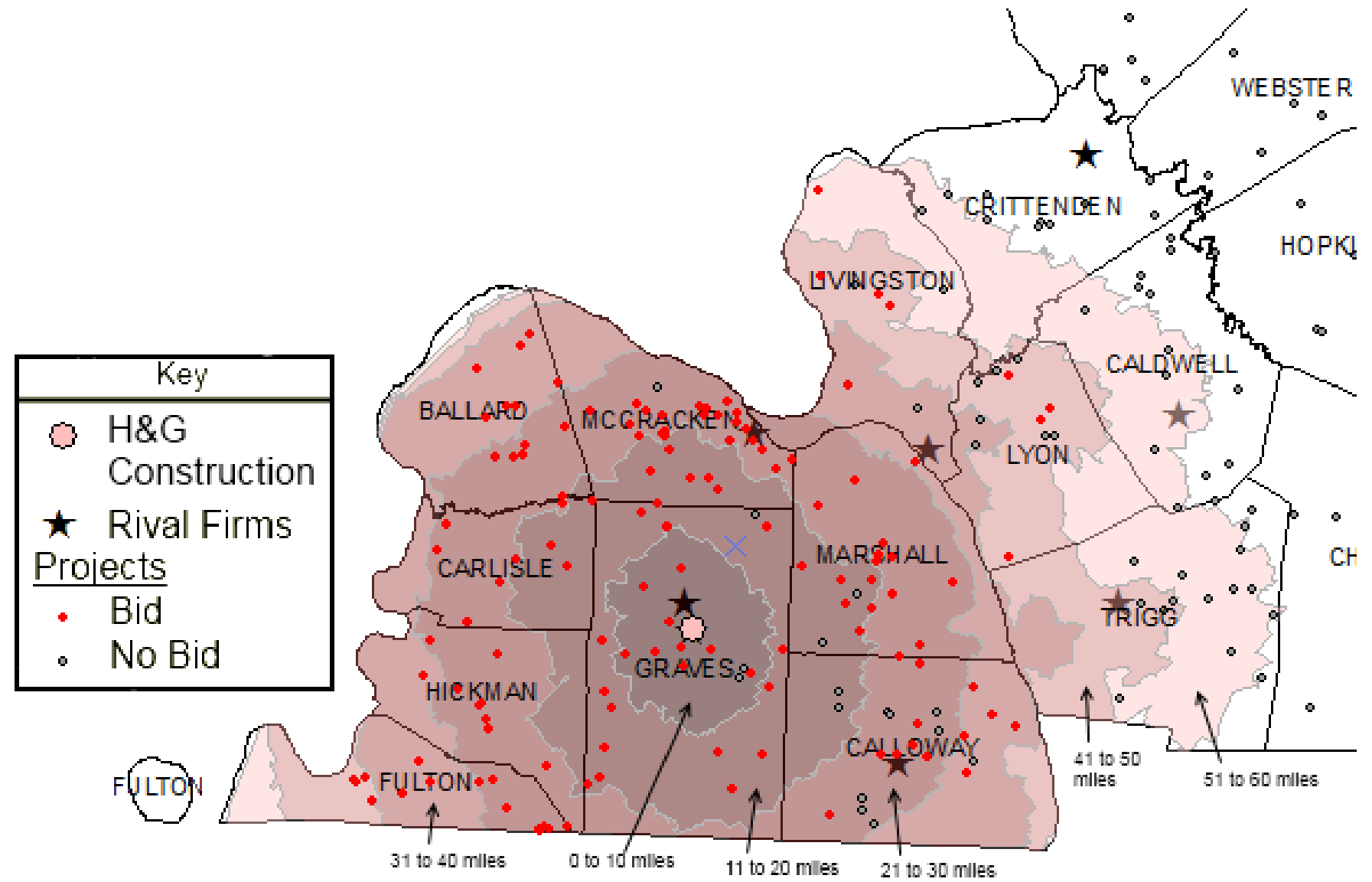


Figure 7: Bidding behavior of four firms in Central Kentucky

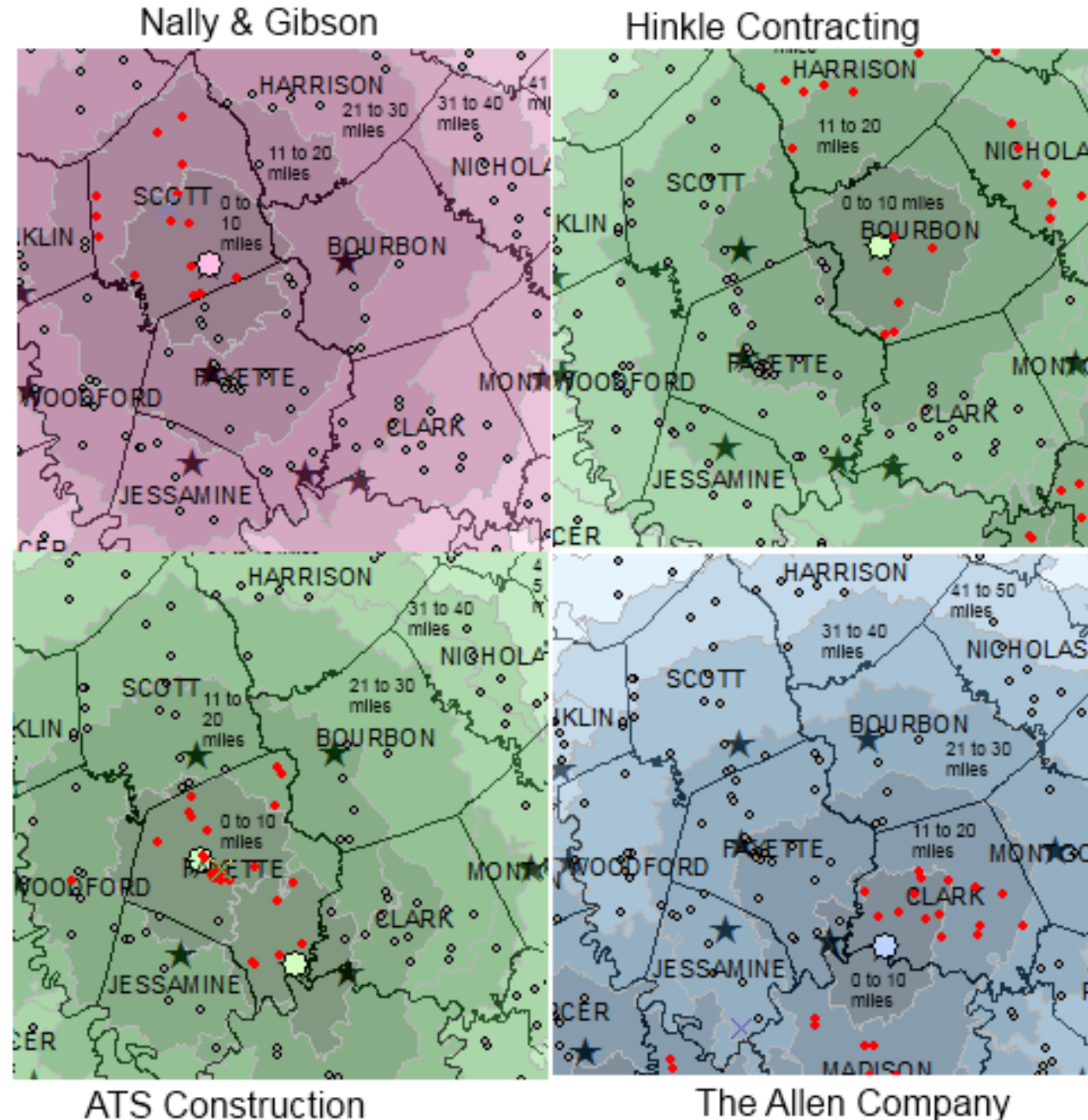


Figure 11: Eaton Asphalt Paving Service Area

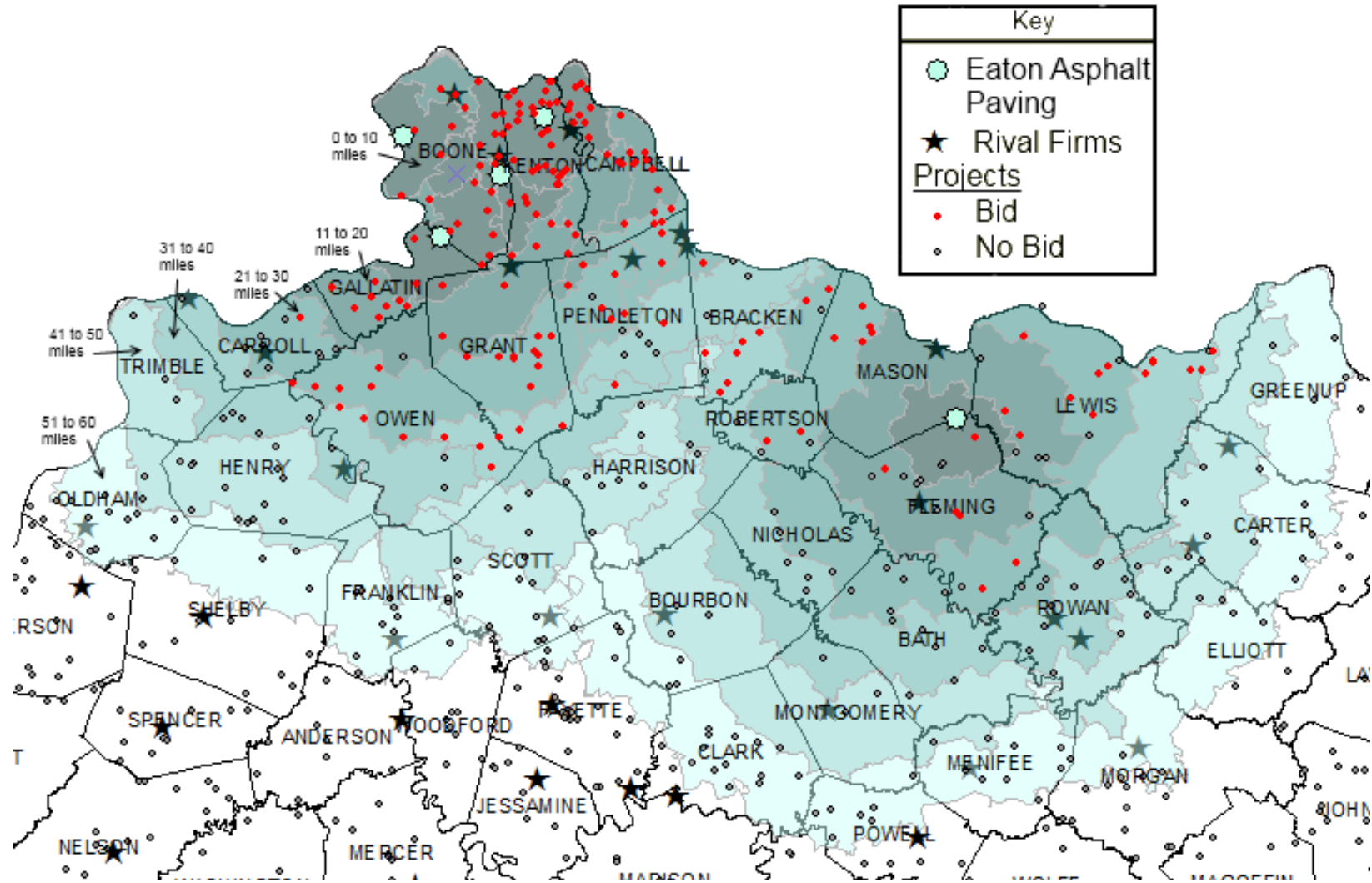


Figure 12: Central Kentucky (District 4) Counties, Firms, and Asphalt Plants

District 4

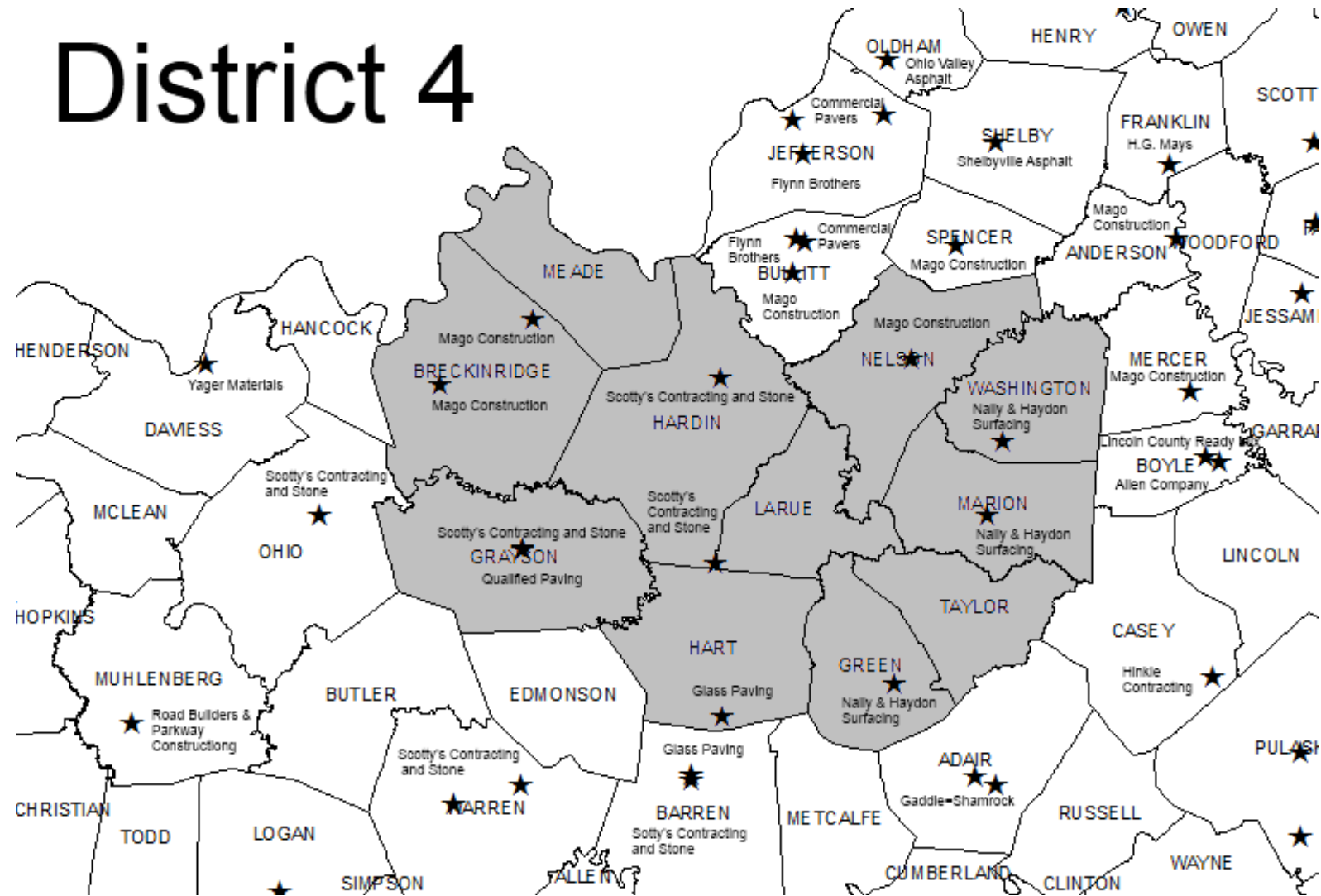


Figure 13: Nally & Haydon Service Area

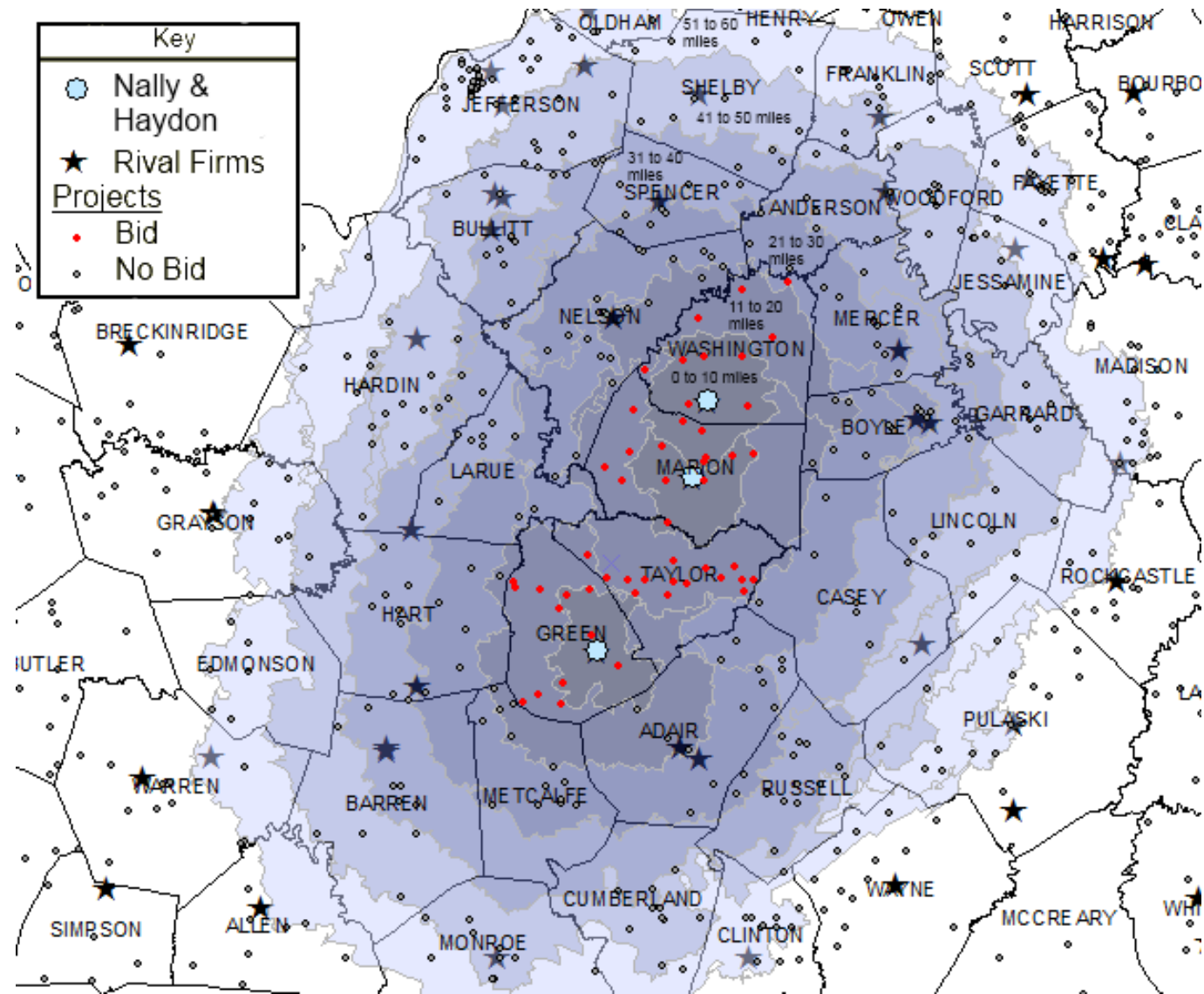
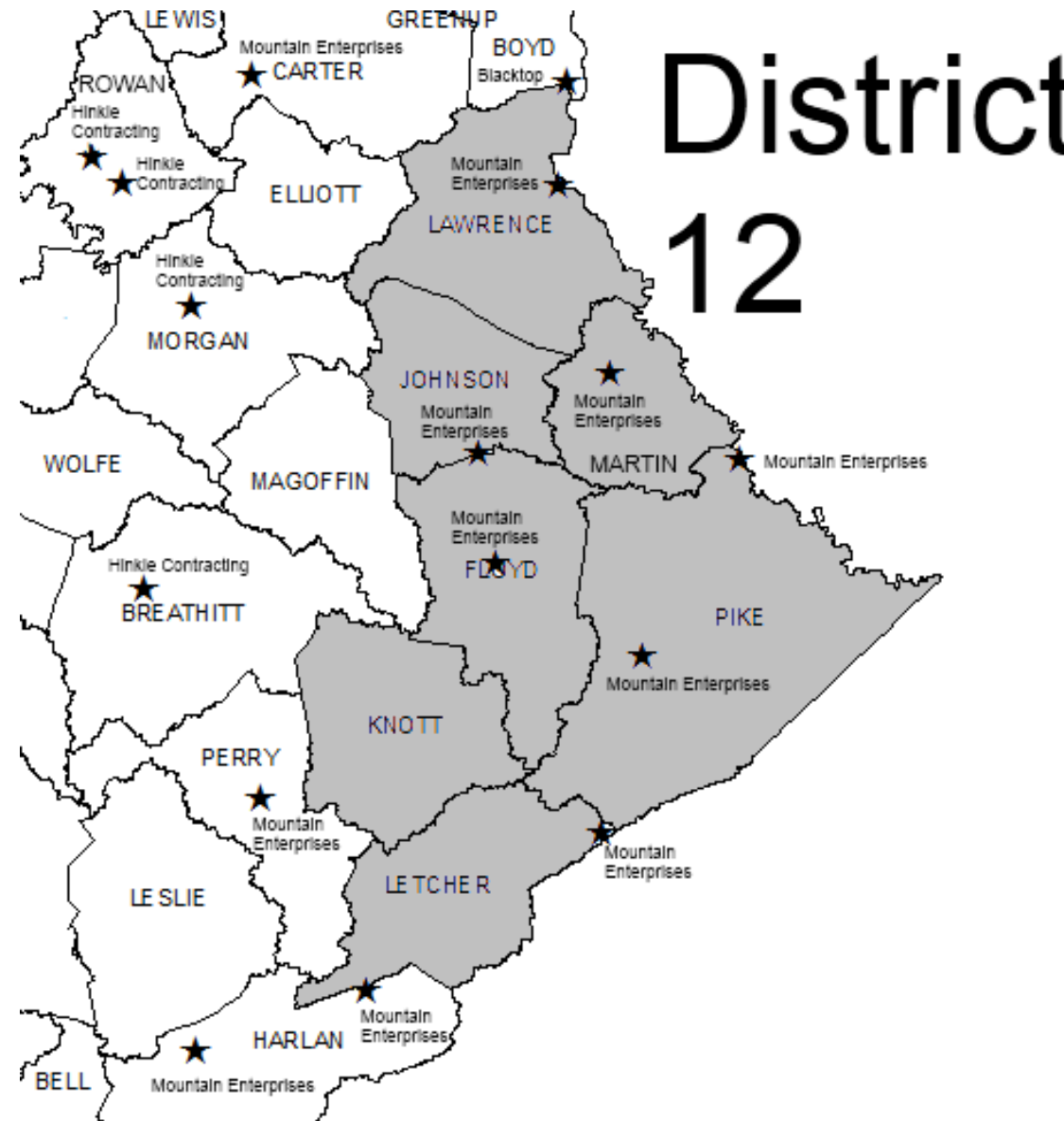


Figure 14: Eastern Kentucky (District 12) Counties, Firms, and Asphalt Plants



District
12

Figure 15: Mountain Enterprises Service Area

