

A perceptual dialect map of Indiana

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Indiana is a state with a surprising amount of dialect diversity for the United States including the Inland North, North, Midlands, and Southern dialects. In this study respondents from Indiana were given a map of the state and asked to draw lines around regions of the state where they believe people speak English differently. They were also asked to provide labels for how they would describe the speech in those regions. The results indicate that the area around Chicago and southern Indiana are the most salient regions, with some suggestion of a distinct northeastern region and a further sub-division of the southern region based on degree of participation in Southern dialect features. In general, the middle region of the state is labeled as sounding "normal" or "standard". These perceived dialect regions generally align well with traditional dialect maps of Indiana. Unlike other studies in perceptual dialectology, there was not a strong urban/rural distinction, rather respondents focused on regional lexical and phonological variation, such as "y'all" in the south or "pop not soda" in the north. It is suggested that Hoosiers are sensitive to established dialect boundaries, and that further work on the acoustic and attitudinal correlates of these regions warrant further study.

Keywords: American English, perceptual dialectology, folk linguistics, language attitudes

1 Introduction

Indiana lies at the crossroads of American dialects. Historical settlement patterns and modern-day cultural and economic forces have created conditions whereby the dialects continue to evolve independently within the state even while Hoosiers (residents of Indiana) maintain a strong identity with the state. The Atlas of North American English (Labov et al., 2005) identifies four major dialect regions that transect the state (Figure 1): North, Inland North, Midland, and South.

Although linguists are able to identify varying dialectal patterns in the state, we may wonder if residents of Indiana are conscious of these dialects. Given the well-known and long-established

awareness of the Southern dialect (e.g., Preston, 1989a), we would expect people to indicate this dialect. Likewise, the “Chicago accent” is frequently the subject of comment among Hoosiers, but do Hoosiers also find that this way of speaking can be found within the borders of their own state? Standard language ideologies around Midwestern speech may also be expected to impact how dialects are talked about by local residents. Is there just one kind of standard, though, or are there different standards in the state?

This study asked people from across Indiana to report their beliefs about the location of regional dialects in their state. Respondents also shared their evaluations of speech in the areas they indicated. While Indiana is perceived by outsiders as a prototypical, homogeneous Midwestern state, these results show that residents embedded in the culture of the state are largely aware of the dialectal variation identified by professional linguists. Beyond identification, Hoosiers also reveal a range of attitudes associated with each of the dialect regions.

2 Perceptual Dialectology

Perceptual dialectology, or folk dialectology, is the study of non-linguists’ beliefs about dialectal variation (Preston, 1989a). On the one hand, the professional linguist may not be interested in folk perceptions since people are notoriously inaccurate at reporting even their own linguistic patterns, to say nothing of their perceptions of others’ speech. However, folk perceptions of language are invaluable in solving many of the problems of synchronic and diachronic variation. Linguistic communities are characterized by ‘orderly heterogeneity’ (Weinreich et al., 1968), meaning that while variation is inherent in a community, the variation is structured, not random. Thus, social factors such as social class, age, gender, and ethnicity have regularly been shown to predict linguistic variation. And beyond these socially constructed factors, cognitive factors such as affinity toward a region/group or future aspirations have also been shown to effect how people perform their language (Eckert, 1988; Labov, 1963; Reed, 2016).

Membership in a speech community is probably better defined by awareness of the patterns of structured variation used by other members of the community than by knowledge of any one speaker’s patterns. As Labov (1972) says:

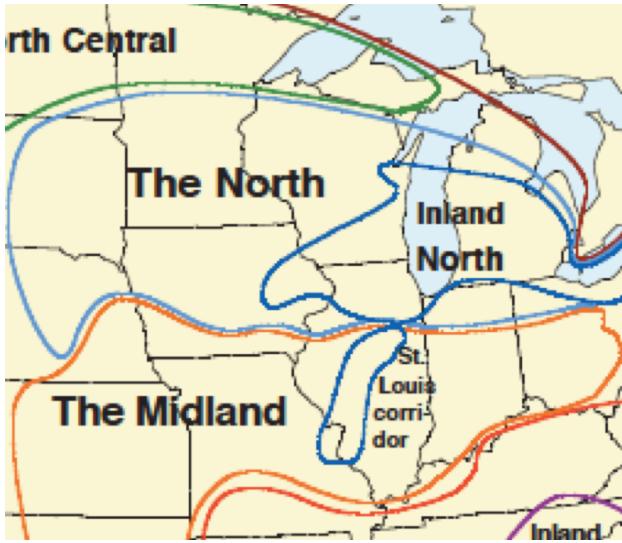


Figure 1: The state of Indiana situated among the dialect regions of North America based on data collected for the Atlas of North American English (ANAE) (Labov et al., 2005).

The speech community is not defined by any marked agreement in the use of language elements, so much as by participation in a set of shared norms: these norms may be observed in overt types of evaluative behavior, and by the uniformity of abstract patterns of variation which are invariant in respect to particular levels of usage (120–121)

Perceptual dialectology deliberately seeks to explore the evaluation of linguistic variation within a speech community.

A further reason to study perceptual dialectology of a given region is to establish what mental constructs associated with language and geography are available to people. As people are listening to language, they are accounting for all kinds of variation, from meaningful linguistic contrasts (e.g., a particular vowel quality chosen to index a certain lexical item, such as saying “bat” and not “bet”) to systematic dialectal variants (e.g., saying “bat” as [bɛt] and not [bæt] because the former is typical of the speaker’s dialect region). When accounting for sources of variation, though, do listeners know that particular linguistic features are geographically constrained? In order to ask questions about how people perceive dialectal variation, it is not enough to know just what people think about regional voices, but we want to know where people think a voice is from and the range of places where a voice might be from (Preston, 1989a). In other words, if someone is being asked to locate a voice, what options is the person considering?

While there are many methods one could use to evaluate folk perceptions of language, one commonly used method is to simply ask respondents to indicate on a map where they believe people in a given region speak differently and how they would describe the speech in that region (Preston, 1981, 1989a). This method, referred to as the ‘draw-a-map’ task, can reveal “what linguistic facts (or even what sort of fact, i.e., phonological, lexical, grammatical) are most salient to the folk” (Preston, 2002, 59). Not only can we learn about salient linguistic facts, but we can also learn about the geographic (and sometimes social) distribution of such facts. With enough data, it may even be possible to form hypotheses about the degree of salience of certain features which can later be tested with directed studies of perception of actual speech.

Early studies of perceptual dialectology focused on entire nations such as Japan, The Netherlands, and the United States (e.g., Preston, 1981, 1989a). More recently, attention has turned to narrower regions such as states or provinces within nations, such as Ohio, California, Texas, Washington, and Oklahoma (Benson, 2003; Bucholtz et al., 2007; Cukor-Avila et al., 2012; Evans, 2011; Weirich, 2018). The importance of studying folk linguistic perceptions in narrow regions cannot be overstated. The consensus of linguists and psychologists is that language—especially phonology—is learned from people we have face-to-face interactions with (e.g., Chambers, 1998; Labov, 2001) and not from television or other media where there is not back-and-forth communication between interlocutors. Successful language users must be able to represent and adapt to variation in their environment. They must also have some knowledge of the social uses of variation. In a narrow geographic region, it is likely that individuals will come into face-to-face contact with a range of other people who represent the diversity of dialectal variation in that region.

Indiana is a region well-suited to the study of representations of geographically-based linguistic variation because people from Indiana—Hoosiers—have a shared identity as residents of the state while also belonging to broader cultural and linguistic regions that cross the state.

Labov (1991) discusses two differing dialects, those characterized by the Northern Cities Chain Shift (NCCS) and the Southern Shift, that figure prominently in American English, and which are found in Indiana. These two dialects are opposed in such a way that applying rules of phonetic-form-to-phonological-intent of one dialect to the other would result in a non-trivial degree of miscommunication.

Beyond simple descriptive differences, these dialects are evaluated differently. Preston (1999) found that while people evaluate both Northern and Southern speech as casual, friendly, down-to-earth, and polite; they rate Southern speech as abnormal, dumb, uneducated, and slow. Northern speech, on the other hand, was rated positively on the same scales: normal, smart, educated, and fast. There also appears to be variation in who speaks “correct” English. In an earlier study, Preston (1989b) found that people in Michigan, a state within the North and Inland North dialect regions (Labov et al., 2005), believe that speech in their own state is the most correct of anywhere in the United States while the speech of people in Indiana is rated lower than Michigan and every other state in the vicinity (Minnesota, Wisconsin, Illinois, and Ohio). Respondents from southern Indiana, however, rated the speech of all neighboring states (besides Kentucky) as having the same degree of correctness, including Michigan. The takeaway from these studies, as they inform attitudes toward Indiana speech, is that Indiana is home to dialects that are formally distinct and evaluated in opposite ways, but the folk perceptions of Indiana’s place among those dialects and evaluations varies in different dialect regions.

A final reason to study the perceptual dialect regions of Indiana instead of in other states which may have a similar distribution of dialectal variation (such as Illinois or Ohio) is that Indiana has a stronger presence of southern dialect features which extend further north than any other state, thanks to what is known of as the “Hoosier Apex” (Carver, 1987). Illinois and Ohio are similarly situated, but Indiana shows evidence of a more striking gradient effect of transition between Southern and Northern dialect regions with the addition that Chicago provides a salient locus for the NCCS leaving the rest of the northern part of the state (which purportedly does not participate in the NCCS) in a dialectally ambiguous position for Hoosiers.

3 English in Indiana

Indiana is a state within the region popularly known as the Midwest. It is bordered to the north by Michigan and Lake Michigan, to the east by Ohio, across the Ohio river to the south by Kentucky, and to the west by Illinois (see Figure 2). Prominent cities in the surrounding states include Dayton and Cincinnati in Ohio, Louisville in Kentucky, and most notably, Chicago in Illinois. The largest city in Indiana is the capitol, Indianapolis. Other prominent cities in Indiana include Ft. Wayne

in the northeast quadrant, Evansville in the southwest tip of the state, and the university towns of South Bend (Notre Dame), West Lafayette (Purdue University), Terre Haute (Indiana State University), and Bloomington (Indiana University). The topography of the state is fairly flat with rolling hills in the southern portion of the state. Hardwood forests dominate the natural terrain, with farmland in between.

According to cultural geographers Kniffen and Glassie (1966), building practices in Indiana suggest that the state was settled in at least three waves (Figure 3). In the north, the New England stream brought settlers across the southern edge of the Great Lakes. The Pennsylvania stream brought settlers from two directions, a direct route that brought settlers across western Pennsylvania and Ohio into central Indiana, and an indirect route that took settlers into the southern states, including Tennessee and Kentucky before eventual settlement north of the Ohio river into southern Indiana.

Migration into Indiana by Anglos from other states began in the early 19th century as settlers from the south moved across the Ohio river and spread out along the valleys of the tributaries to the Ohio river (Bergquist, 1981). Settlers from the Mid-Atlantic and New England states came later, after around 1840.

Unsurprisingly, these settlement routes correspond with the modern linguistic patterns found in the state. Figure 1 shows Indiana among the dialect regions identified by Labov et al. (2005), which focused primarily on phonological data. The North dialect crosses the entire top third of the state, with the area around Chicago being included in the Inland North subregion. The Midland dominates the central portion of the state. The method of the Atlas of North American English (ANAE) focused on cities with populations greater than 50,000 people, so the dialect boundaries shown in the figure are conservative. In particular the Midland-South boundary, which hugs the Ohio river in the figure from the ANAE, would likely be drawn further north if the data set had included speakers from those regions.

Earlier work based on word geography data, summarized in Carver (1987) (see Figure 4), found that many features of the Southern dialect were found much further north in Indiana than in either Illinois or Ohio. In fact, the isogloss between the Southern and Midlands dialect jutted so sharply into Indiana that it was dubbed the "Hoosier Apex."



(a)



(b)

Figure 2: Maps showing a) Indiana, outlined in red, within the United States and b) prominent cities in Indiana and adjacent states.

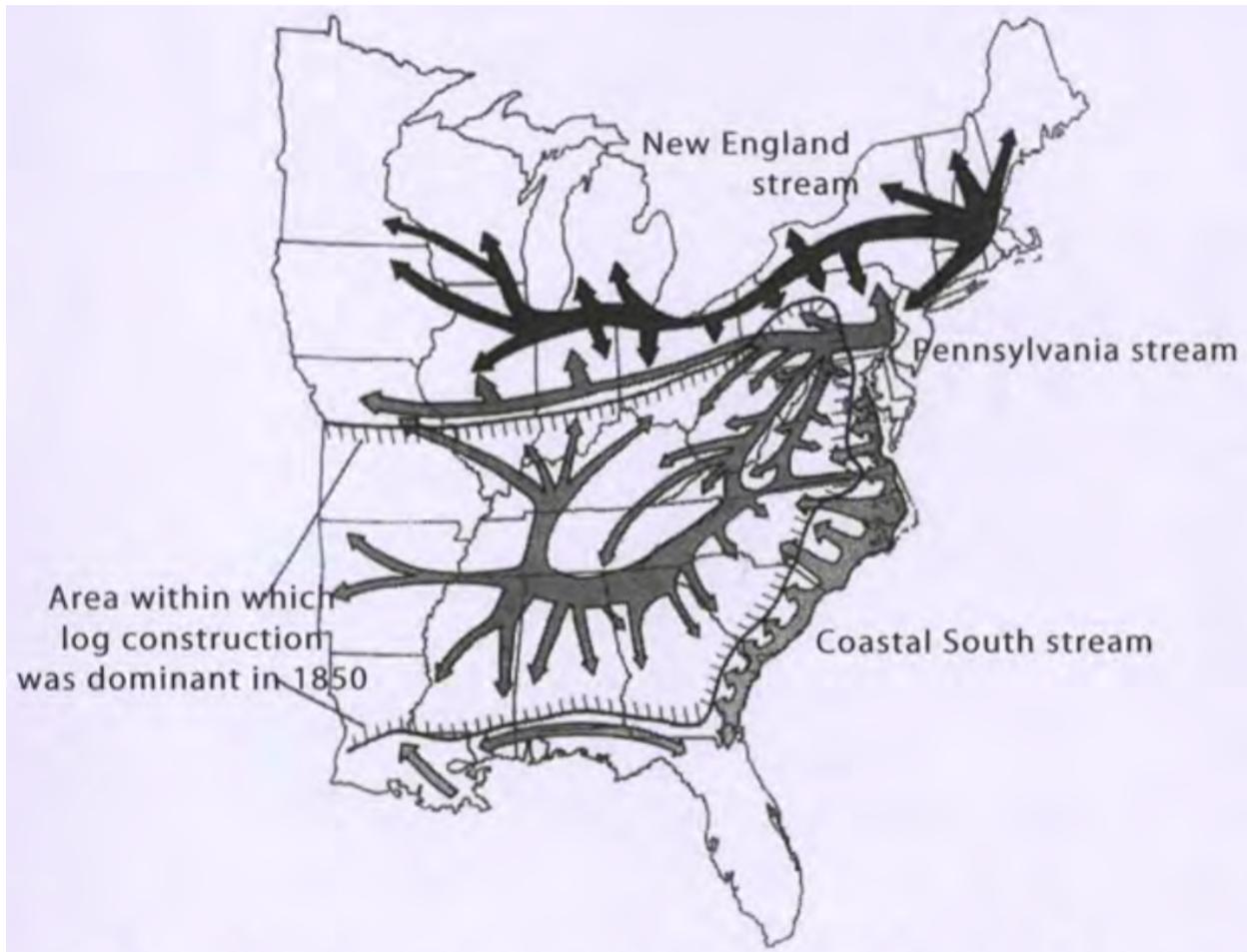


Figure 3: Westward settlement streams as shown by building material (Kniffen and Glassie (1966) in Labov (2012, 285)).

The northern part of the state has been in a curious situation for several generations. Kurath (1949) distinguishes the North Midland and South Midland, and these labels essentially correspond to what Carver (1987) calls the Lower North and Upper South, respectively. Carver (1987), extending Kurath's (1949) boundaries based on additional data, finds that northern Indiana is entirely in the Lower North. Labov et al. (2005), however, find that the North dialect extends into the northern third of Indiana and that the Inland North can be found in northwestern Indiana near Chicago. The earlier dialect boundaries were largely based on lexical items, while more recent dialect boundaries have relied on systematic phonological variation (e.g., Labov et al., 2005).

It is not clear if the extension of the North dialect region into Indiana is the result of dialect diffusion or the different methodologies. However, Labov et al. (2005) find a surprisingly close correspondence between the earlier lexically-determined boundaries and more recent phonologically-

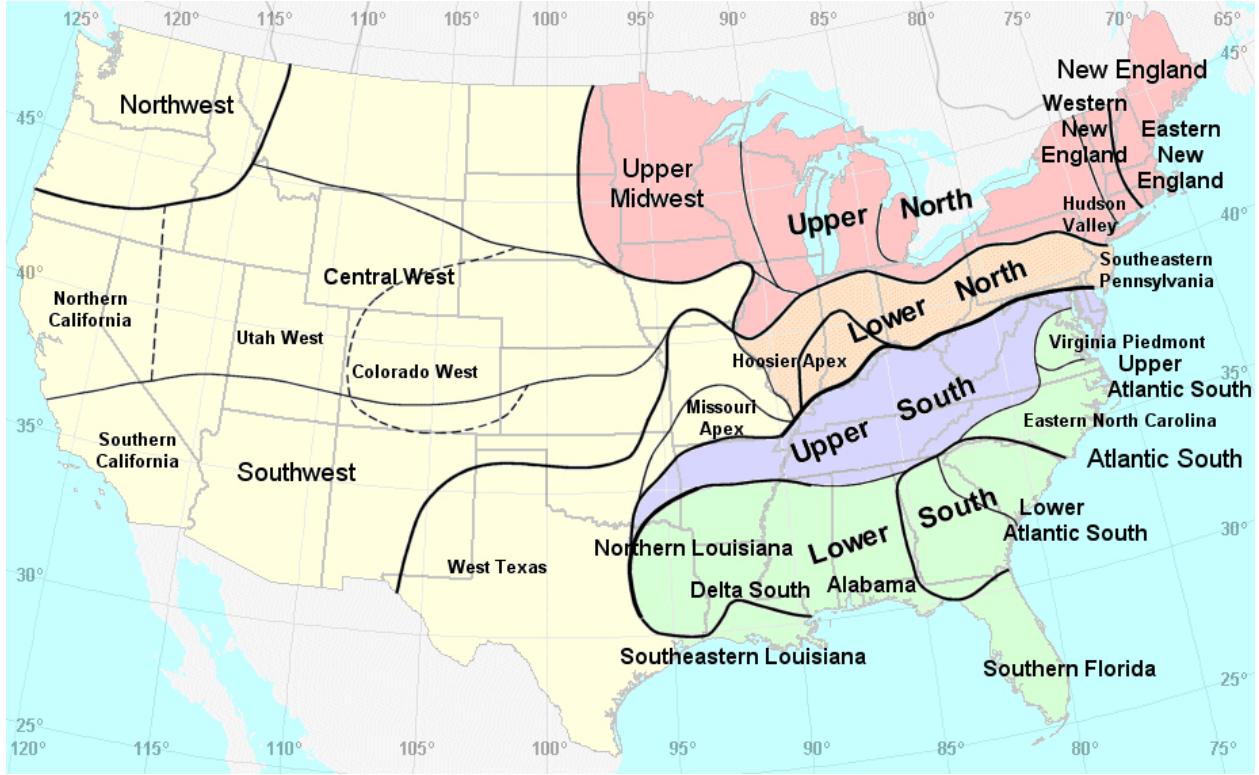


Figure 4: American dialect regions as presented in Carver (1987). Note the “Hoosier Apex” that extends into southern Indiana.

determined boundaries between the Inland North and the North or Lower North dialects (see Figure 5). Thus, despite the difficulty of trying to reconcile three different sets of regional dialect terminology, we can see some consistency across studies conducted at different times with different methodologies. A hedged conclusion, then, is that there is a clear distinction between two dialect regions in northern Indiana, but it is unclear which of three dialects—Inland North, North, or Midland—are implicated in the distinction. The difficulty faced by professional linguists in classifying the speech of northern Indiana begs the question if folk perceptions of Indiana speech can resolve the classification issue. It could be that Hoosiers are aware of a distinction, but they are equivalently unable to say exactly where the distinction should be drawn.

Work on perceptual dialect regions of the entire United States (Preston, 1996), summarized in Figure 6, show that respondents from southern Indiana generally agree that Indiana is situated among the North, Midwest, and Inner South regions. Although state boundaries are not depicted on the map, we can make some observations by interpolating the boundaries. Notably, Hoosiers identify only three dialect regions in their state, but they include the North in the northern third

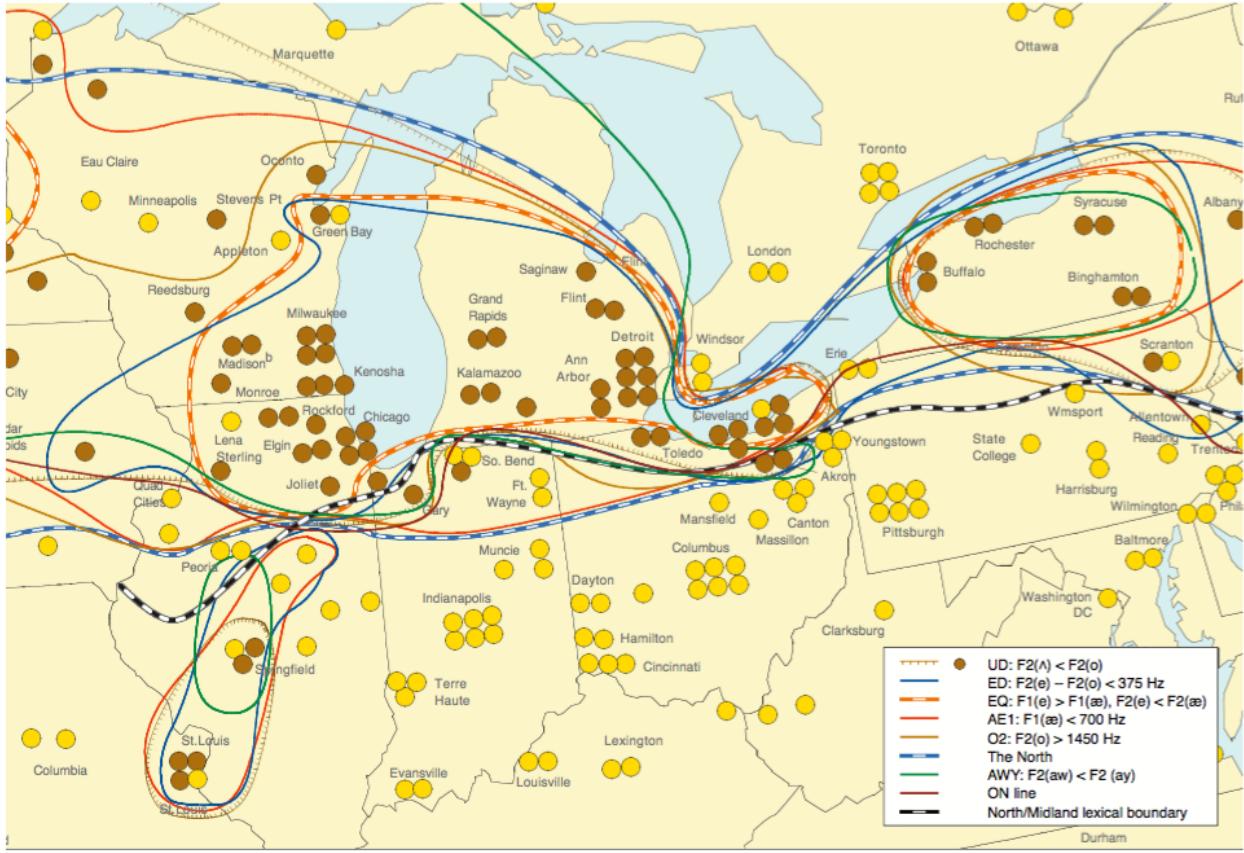


Figure 5: A detailed view of the cities in the Inland North and the relation of eight isoglosses to the North–Midland boundary in Labov et al. (2005, 207, Map 14.11.).

of Indiana, potentially coalescing the Inland North and North into one dialect. These southern Indiana respondents (from the part of Indiana just north of the Ohio River from Louisville, KY) appear to divide the Inner South and Midwest regions along the Ohio River. In other words, they implicitly acknowledge that they live on a dialect boundary line and they place the Inner South outside of Indiana.

4 Methods

This section describes the method used in this study, including the sampling of respondents, a description of the map survey instrument, analysis of the qualitative labels, and digitization method used in analyzing the regions marked as being different.

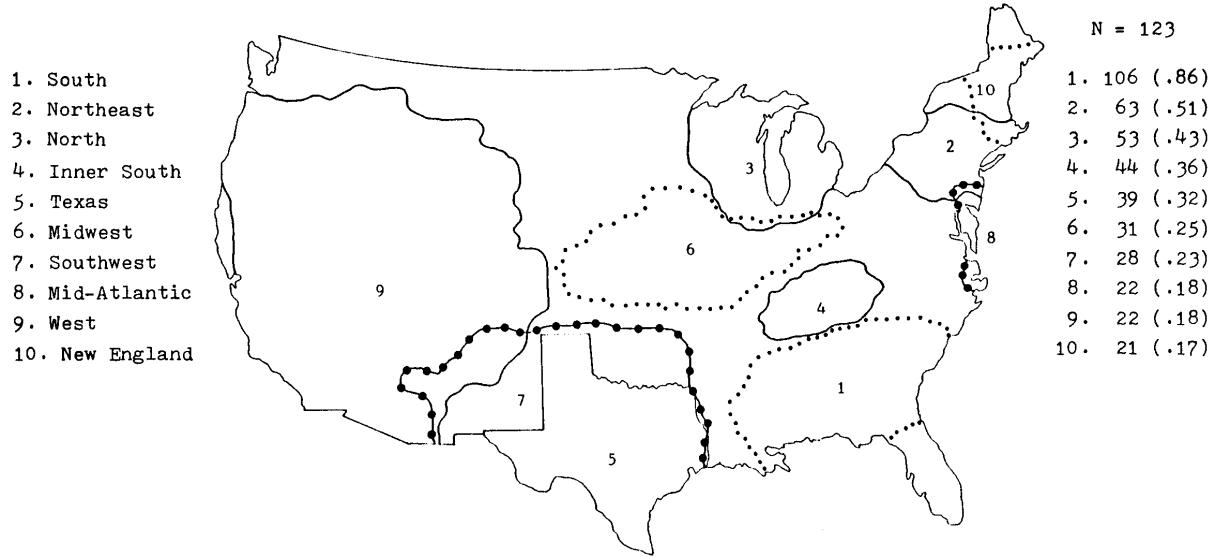


Figure 6: Perceptual dialect regions of the United States based on responses from 106 people in southern Indiana based on regions of 50% agreement among respondents as presented in Preston (1996).

4.1 Sampling

Data for this current project were collected in a variety of contexts between 2013 and 2016. All of the 68 respondents self-identified as being Hoosiers. Limited demographic information was collected and in several cases none at all. Most of the respondents completed the draw-a-map task in an academic setting (that is, during regularly scheduled classes) at Indiana University, although some of the respondents were from the surrounding community and completed the maps in their homes. As a result of this data collection practice, all responses will be presented in aggregate with no systematic attempt to divide the data according to demographic information.

4.2 The map survey instrument

Respondents were presented the map shown in Appendix I. The map shows the outline of the state boundaries as well as light gray lines within the state depicting the interstate highways for reference. The state lacks notable geographic formations that might otherwise be useful reference points such as mountains, and rivers are not commonly used by residents for navigational purposes. No individual cities are specifically indicated on the maps, although the highways imply the location of areas with greater population density, such as the loops around Indianapolis and Fort Wayne as

well additional highways around Chicago, Evansville, and Louisville (which extend into southern Indiana). Respondents were asked to perform the following tasks:

1. Draw a line around places where you think people's English sounds different.
2. Next, write down what you'd call that way of talking, if you can think of a label for it. Give an example of what's different there (is it a word or pronunciation they use? Or a special way of talking?)

4.3 Analysis of the results of the map survey instrument

All labels provided by respondents were extracted from the maps, and the lines drawn on the map were digitized in QGIS (QGIS Development Team, 2017) as polygons following Jeon et al. (2015). Composite maps were generated with ArcGIS (ESRI, 2017) using a method adapted from Honeycutt (2012).

Labels were initially analyzed independently from the polygons drawn on the map. A content analysis (Bauer, 2000) was performed on the labels. Labels were grouped together according to common themes that emerged from the analysis, such as reference to geography or particular ways of speaking. After the general thematic categories were determined, each label was categorized according to the definitions of the categories by the two authors. Although there were 234 independent labels referring to discrete regions, some of these were complex (i.e., sentences or phrases that mentioned several aspects of respondents' perceptions) which were broken down into individual labels for coding, giving us 313 labels for analysis. Overall, coding of labels was quite consistent, and conflicts between coders were resolved in mutual consultation.

Only three of the labels that referred to specific regions could not be categorized. Out of 313 labels, this accounts for 0.96% of all responses. One of the labels refers to a geographic region which we could not justify creating a category for, "Brown Coonty [sic]", and it is unclear if this rendition is accidentally misspelled or deliberately indexing pronunciation or even racist sentiments. The labels "?" and "we eat persimmons" are not clearly members of any general category suggested in our analysis, although the latter could be an in-group symbol of Southern culture.

Following categorization of each label, the category information was merged with the traced polygons to allow for composite maps to be generated. The composite maps depict the density of

responses in particular regions of Indiana. Darker colors represent a greater density of responses. Each map presented in this paper reduces data into five gradient color-coded bins using a natural breaks method resulting in bins that may be of unequal width. Natural breaks are preferred over an equal-bin-width method in many cases in order to reduce the possibility of highly salient regions oversmoothing gradient patterns or overwhelming regions of lesser salience. While the natural breaks method may not be appropriate for all of the composite maps, it is used throughout for consistency.

4.4 Qualitative Label Categories

The content analysis suggested three general categories of labels, those referring to geographic directions or entities, referring to general patterns of speech or attitudes/beliefs about talkers or non-linguistic aspects of speech, and referring to specific examples of linguistic structure. The categories and subcategories are described below.

Manner of speaking: having to do with the overall quality of the speech or attitudes about speech sounds without explicit reference to linguistic structure

- Overall Quality: Having to do with some aspect of non-linguistic quality of speech (e.g., nasal, harsh, twang/drawl)
- Twang/Drawl: Any use of the word Twang or Drawl (or variant spellings of such)
- Neutral/Standard: Having to do with an apparent belief about unmarked, neutral, or standard language (people sound the “same,” “normal,” “newscaster”)
- Prestige: Having to do with an apparent association with social prestige
- Rate: A description of speaking rate
- Vector: Having to do with direction and/or magnitude of a characteristic (more, comparative -er)

Pronunciation: Specific example of how people say or pronounce particular words or sub-lexical elements related to linguistic structure.

- Lexical: Referring to a specific lexical item
- Sub-lexical/phonological: Referring to a vowel or consonant quality distinction
- (Morpho)syntax: Referring to a unit of analysis larger than a discrete lexical item or a distinction that relies on a grammatical distinction rather than a phonological one

Geography: Any label having to do with a particular geographic region

- Regions: Any geographic region using cardinal directions or specific use of the word “region”
- Cities: A mention of a specific city or town
- States: A mention of a specific state
- Population density: Some reference to urban or rural areas (includes words that are commonly associated with these areas, such as “ghetto” or “hick”)
 - Urban
 - Rural

5 Results

The respondents’ drawings revealed a range of attitudes and beliefs about dialectal variation in Indiana. Figure 7 shows one of the more detailed maps that was collected. Respondents described the speech of people in Indiana with reference to geographic regions, general manners of speaking, and specific examples of how people talk. This section will present a summary of these results, providing examples of specific labels as well as composite maps of regions associated with particular labels where relevant.

Table 1 presents a summary of the kinds of labels provided on the maps along with representative examples. Major categories are given on the left followed by the subcategories of which they are composed. The frequency count of labels within each category are given along with the percentage of those occurrences based on the total number of labels.

5.1 Geography

The broad category “Geography” includes any label having to do with a particular geographic region. Respondents referred to specific *cities* and *states* as well as broader geographic *regions* using compass directions (north, northwest, south) or specific regions such as “Appalachia.” Some labels

¹Population Density is composed exclusively of Urban and Rural responses.

²Overall Quality is composed of several label categories. Twang and Drawl counts are shown because of their relatively higher frequency than other labels within this category.

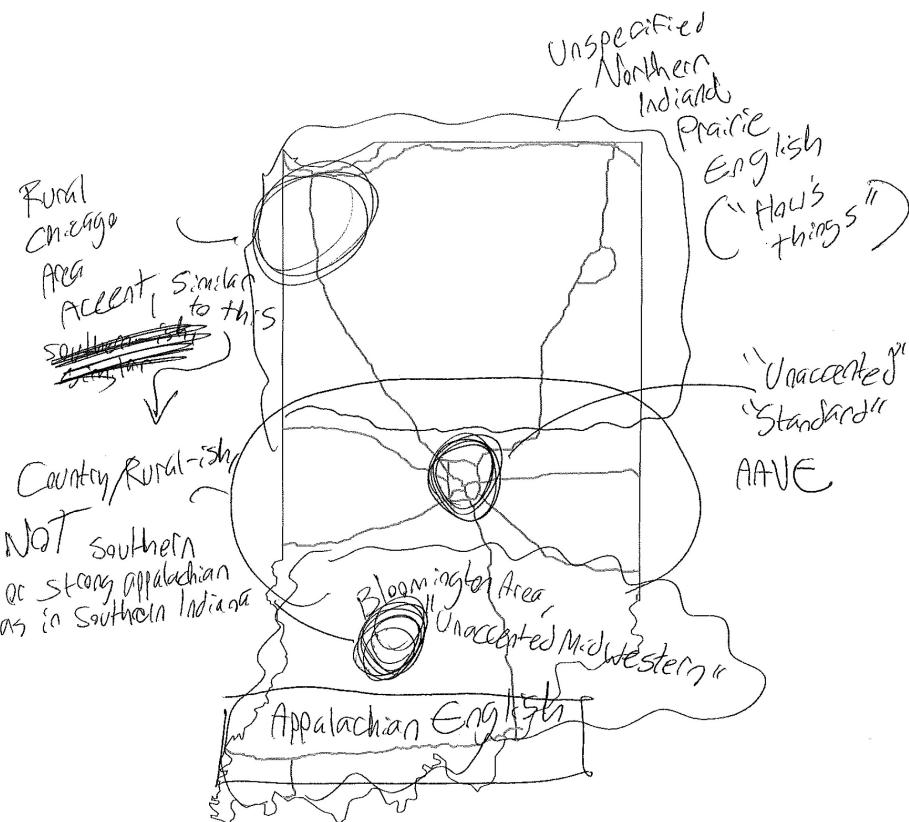


Figure 7: Hand-drawn map by 20-year-old male from Bloomington. (Note that the lighter gray lines are the interstate highways included on the base map.)

also referred to the general *population density* with reference to urban or rural areas, including words that are commonly associated with these areas, such as “ghetto” or “hick.”

For Hoosiers, one of the most salient categories in the labeling task is Geography. This category has the second greatest number of labels out of all the general categories, having only slightly fewer mentions than the most mentioned category, Manner of Speaking. Based on the categorization method developed here, out of the 68 maps, 130 labels fell under the Geography category. Labels in this category are as specific as “Louisville (Southern)” and as general as “Fairly country.” This category is then further subdivided into the subcategories Region, City, State, and Population Density.

“Region” is any label that uses cardinal directions or the word “region” itself. Labels such as “the Region” are included in this subcategory because it is a widely accepted nickname for the northwest region of Indiana. Labels that are categorized under Region refer mostly to the North

Table 1: Categories of labels associated with areas marked on maps

<i>Category</i>	<i>Subcategory</i>	<i>Frequency</i>	<i>Example Labels</i>
Geography		130 (41.5%)	
	Region	76 (24.3%)	“southern,” “upper Midwest”
	Cities	50 (16.0%)	“Chicago,” “Indy area,” “Louisville”
	States	27 (8.6%)	“Michigan,” “kentuckiana,” “Indiana accent”
	Pop. Density ¹	34 (10.9%)	
	*Urban	→15 (4.8%)	“urban dialect,” “ebonics”
	*Rural	→19 (6.1%)	“country,” “back woodsy,” “redneck”
Manner of Speaking		145 (46.3%)	
	Neutral/ Standard	37 (11.8%)	“normal,” “nothing,” “everything else”
	Prestige	9 (2.9%)	“educated,” “upper class,” “perfect”
	Rate	11 (3.5%)	“slow,” “faster”
	Vector	51 (16.3%)	“faster,” “strong Chicago influence,” “very southern”
	Overall Quality ²	74 (23.6%)	“harsh,” “nasally!,” “twang,” “drawl”
	*Twang	→17 (5.4%)	
	*Drawl	→12 (3.8%)	
Pronunciation		38 (12.1%)	
	Lexical	18 (5.8%)	“pop,” “cornhole,” “sneakers vs. tennis shoes”
	Sub-lexical	20 (6.4%)	“tighter vowels,” “Chicago like long a”
	Morphosyntax	2 (0.6%)	“I seed it’ rather than ‘I saw it’,” “How’s things”
TOTAL		313	

and the South, while relatively few mention Central/Midwest regions. There are 76 labels in total that fall under this subcategory.

The subcategory “City” can be defined as any label that mentions a specific city or town. There are 50 labels within this category. The city mentioned does not necessarily have to be in Indiana as one label suggests that people in the eastern part of the state sound “Cincinnatianesque.” However, in general, most labels in this category refer to Chicago (45). Interestingly, Indianapolis itself is only labeled once with “Indy area,” though it is indicated frequently in the drawing task, typically with a circle around the metropolitan area. One might expect the capitol of Indiana to be singled out more often as being different. Since this is not the case, it is possible to consider that it is seen as the standard for Indiana English.

The subcategory “State” can be defined as any label that mentions the state of Indiana, or any of the states surrounding it. There are 27 labels which fall under this category. When Indiana is mentioned at all, it is typically paired with a Region label such as “South central Indiana, sound similar.” Otherwise, this subcategory encompasses labels that compare Hoosiers to speakers in Kentucky or Michigan.

The final subcategory of Geography is Population Density. This subcategory includes any label that makes a reference to speakers’ urbanness or ruralness. There are 34 labels under Population Density, wherein 15 are “urban” labels and 19 are “rural.” Labels in this category include “normal/eubonics [sic],” “backwoodsey,” and “urban dialect.” Furthermore, these labels can either be positive/neutral or negative in connotation. An example of a positive or neutral label is “inner city/urban sound” as there is nothing in this label that seems overtly insulting. A negative label is one that is clearly demeaning in nature, such as one map’s “ghetospeak” around the Chicago area or “hick” in rural areas.³

Although most people did indicate at least one region on the map and provide a label, four people reported that they do not perceive dialectal variation in Indiana. They said, “I think we all sound alike,” “I think all Hoosiers sound the same,” “I really don’t hear a difference,” and “all the same.” All of these remarks are of the “There are no differences” type identified by Evans (2013). Evans considered maps from respondents in Washington who did not complete the draw-a-map task as intended. None of these labels from Indiana respondents match Evans’ other categories: “Differences are urban vs. rural,” “Differences aren’t geographic,” “I don’t know,” or “Uncategorized.”

5.1.1 All responses

The following sections present composite maps of the regions associated with particular label categories. As mentioned in the methods section, darker regions on the maps indicate a higher density of responses for those regions.

While every area of the state was indicated by at least 16 respondents, as seen in Figure 8, nearly everyone pointed out the regions around Chicago in the northwest corner of the state and the

³Certainly some of the positive/neutral labels may covertly index a stigma, and some negative labels may be used in a positive sense as an in-group identity marker.

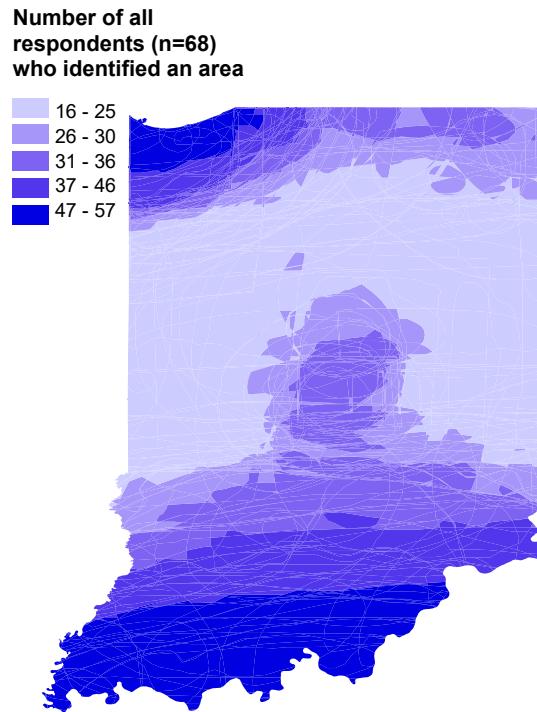


Figure 8: Composite map of all areas identified as being different.

southern part of the state, with approximately half of respondents indicating a broad swath of the northern part of the state and Indianapolis in the center of Indiana. This composite map of all responses suggests that it would be beneficial to consider regions labeled as urban and rural as well as those dealing with individual geographic regions.

5.1.2 Geography regions

Consideration of all regions associated with a geographic label, shown in Figure 9, reveals a map not much different than the compiled regions, with the exception that Indianapolis is no longer indicated. Both the southern and the northwestern areas are still quite salient. There is a clear horizontal gradient of southernness, while the northern region emanates from the Chicago area. There is a moderate awareness of a broader northern region.

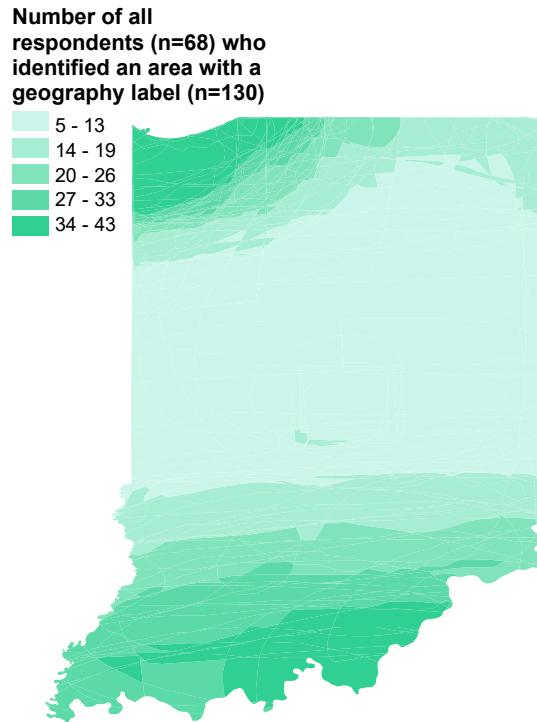


Figure 9: Composite map of all areas identified with a *Geography* label.

5.1.3 Urban regions

Unsurprisingly, Figure 10 shows that areas labeled urban are centered around Indianapolis and Chicago with a small number of respondents including the Fort Wayne area. Of notable interest is the lack of urban areas anywhere in the southern half of the state.

5.1.4 Rural regions

The regions indicated as rural are nearly the inverse of the urban regions, as Figure 11 demonstrates. Indianapolis and the Chicago area are excluded from the rural regions, however, Fort Wayne is included despite having a metropolitan population around 400,000. While several areas just outside of Indianapolis were called rural, the greatest concentration of rural responses are in the south. It is curious to note that the areas around Louisville (south of the middle of the state, with a metropolitan population of roughly one million) and Evansville (in the southwest corner, with a metropolitan population of around 400,000), are included among the rural regions and excluded from the urban regions.

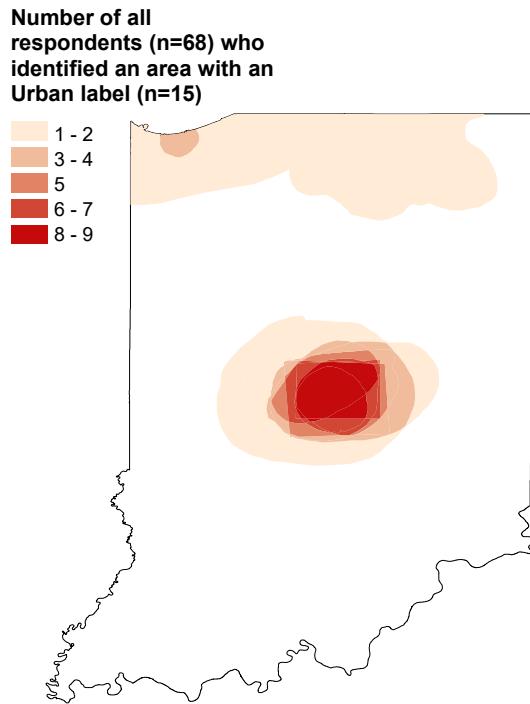


Figure 10: Composite map of all areas identified with an *Urban*

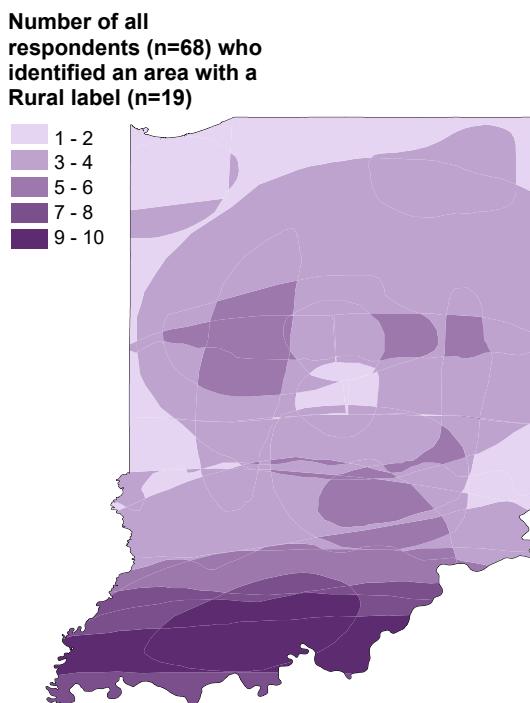


Figure 11: Composite map of all areas identified with a *Rural* label

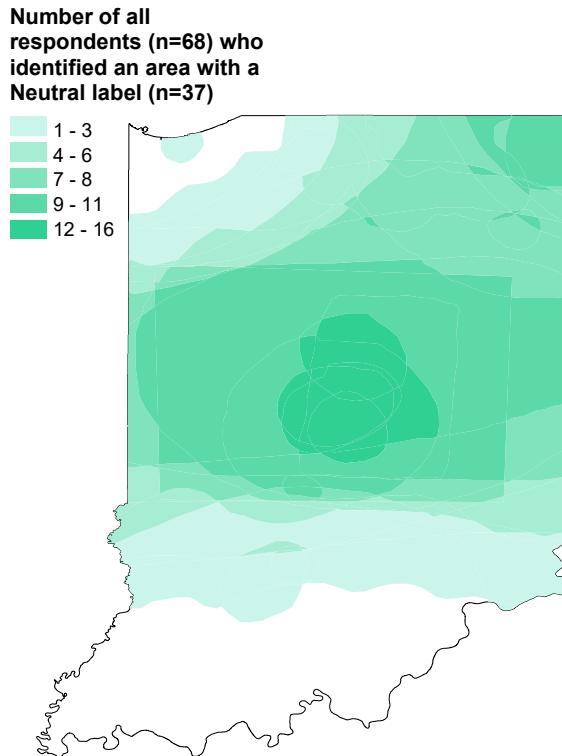


Figure 12: Composite map of all areas identified with a *Neutral* label

5.1.5 Neutral regions

Next, Figure 12 summarizes the regions labeled as neutral or standard. This map predictably excludes the southern and Chicago-area regions. The majority of responses are found around Indianapolis and in the northeast corner. Through this map we see a possible explanation for the paucity of responses indicating a broad northern region; the northeast corner is not recognized by many respondents as being different from the central portion of the state, and when the region is mentioned at all, it is to point out that speech in that region patterns with what is considered standard among the respondents.

Some areas of the state were given specific regional labels. Many of the labels made use of cardinal directions (e.g., north and south), while others made use of popular region names such as Midwest and the Chicago-area.

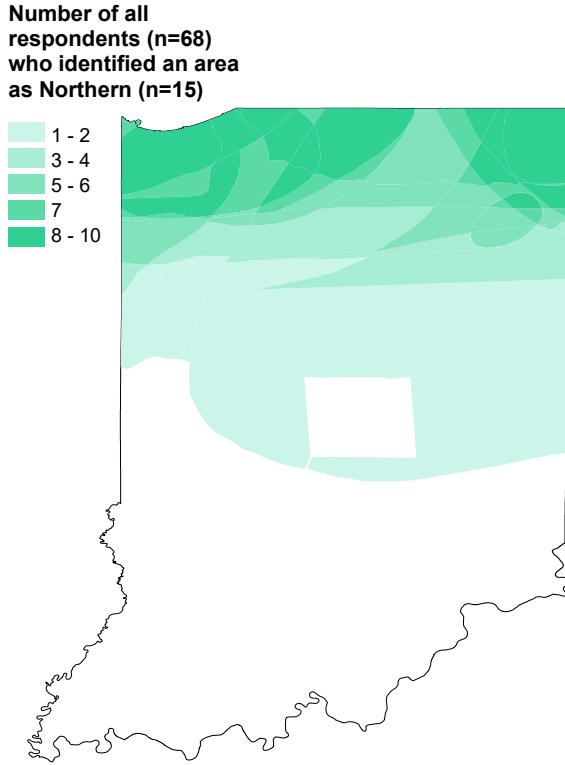


Figure 13: Composite map of all areas identified with a *North* label

5.1.6 Northern regions

Most of the responses that labeled regions as Northern are found in the top third of the state, seen in Figure 13. Little preference is given for a specific corner of the northern part of the state, although some respondents chose to single out either the eastern or western corners. In general, though, responses evenly cover the entire northern third of the state.

5.1.7 Chicago regions

Chicago was the most frequently referenced area ($n=41$) (cf. South, $n=39$). Figure 14 shows that areas labeled as Chicago are clustered fairly tightly around the northwestern corner of the state near the city. While a limited number of respondents ($n \leq 9$) extend the Chicago region across the entire northern area, the great majority of these areas trace a buffer around Lake Michigan and stop before Southbend. The Fort Wayne area was not included in any of these labeled areas.

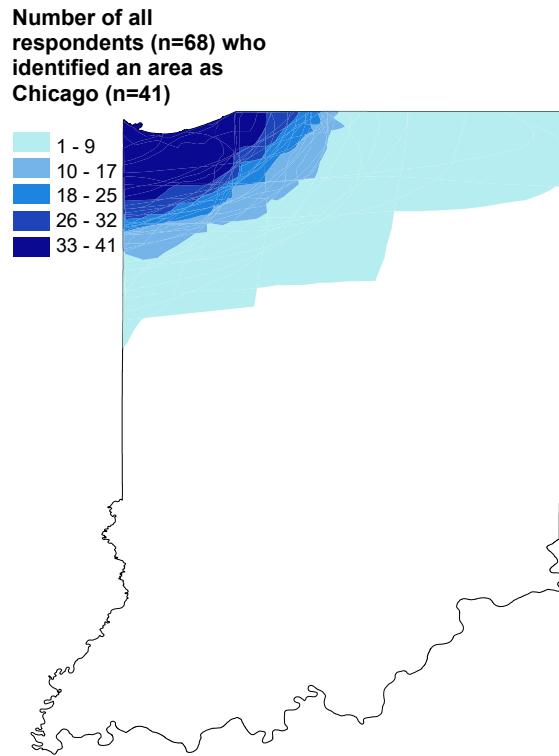


Figure 14: Composite map of all areas identified with a *Chicago* label

5.1.8 Southern regions

The southern region of the state was mentioned nearly as frequently as Chicago ($n=39$). Comparable with the northern region, most of the southern labels, depicted in Figure 15 identify the lowest third of the state. Some respondents mark the southern boundary at the middle of the state, and one person even placed the boundary to include everywhere in the lower two-thirds of the state (i.e., everywhere besides the northern region). The southern region, emanating from the entire southern border of the state, is much broader and more gradient than the tightly clustered regions around Chicago (Figure 14).

At this point we have seen that the northern region is not nearly as salient as the Chicago area (Figures 13 and 14), although these regions are both primarily contained in the northern third of the state. Accordingly, the southern region is concentrated in the southern third of the state. While there is no subregion of the southern region that competes to subdivide the region as Chicago competes with the broader northern labels, the areas labeled ‘rural’ (Figure 11) are found more frequently in the southern region than in other parts of the state.

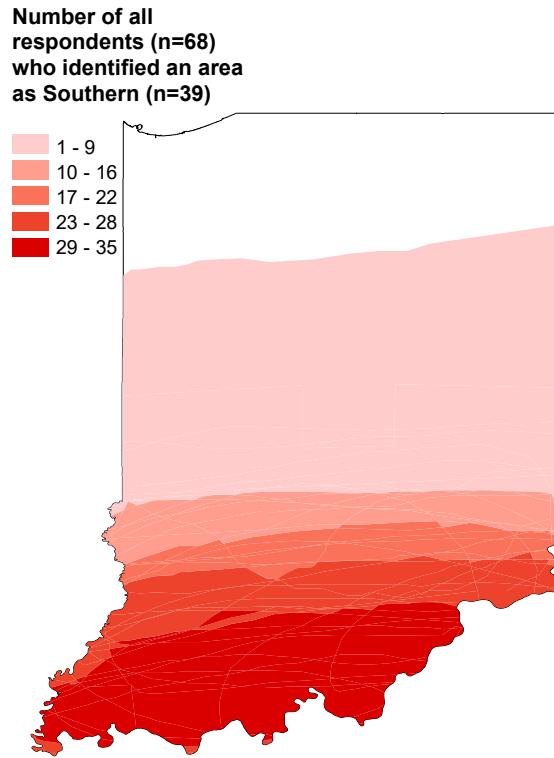


Figure 15: Composite map of all areas identified with a *South* label

5.1.9 Midwestern regions

Thus far, it might be expected that the remaining part of the state that is neither north/Chicago or south would have some regional label, such as Midwest. Figure 16 shows that while the areas labeled Midwestern do, indeed, outline the anticipated region that is neither south nor Chicago—including the northeast corner—this region was only mentioned by three respondents. In fact, just as ‘rural’ (Figure 11) tends to co-occur with ‘south’ labels (15), the region we would expect to be called ‘Midwest’ is much more frequently associated with the ‘neutral/standard’ labels (12).

5.1.10 Conclusion: Geography Labels

These results suggest that Hoosiers do not necessarily have a North–South distinction, but rather non-south and non-Chicago distinctions; everywhere else is “standard,” “normal,” or otherwise unmarked, as depicted in the hand-drawn map in Figure 17). While a Northern dialect is noticed, it is often conflated with what is referred to by respondents as the “Chicago accent.” The non-Chicago northern area is largely considered “normal/standard.” This lack of awareness of a distinct dialect

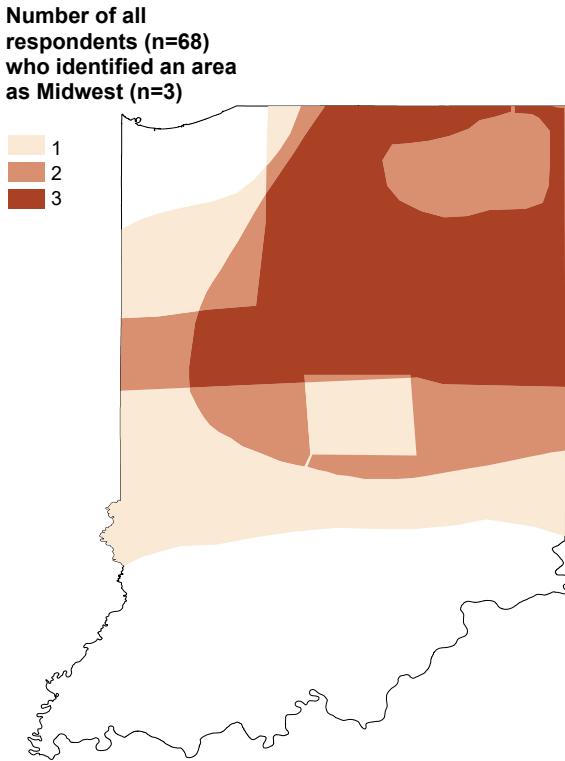


Figure 16: Composite map of all areas identified with a *Midwest* label

region in the northeastern region is in conflict with previous work in dialect geography. The ANAE (Labov et al., 2005) places this area in the general Northern dialect region, whereas only the northwestern corner is included in the Inland North region, associated with the NCCS. We may ask if people from this northeastern, “standard” region respond differently than people from the central “standard” region. That is, is either region more likely to be aware of dialectal differences between the northeastern region and the central region, or are both groups equally unaware of differences that dialectologists have identified? Further research targeted at these populations is needed to resolve this question.

5.2 Manner of Speaking

Many of the labels described the overall quality of the speech or attitudes about speech sounds without explicit reference to linguistic structure.

The Manner of Speaking category has the second most number of labels with 145. These labels make some reference to how people speak in Indiana and have to do with the overall quality of

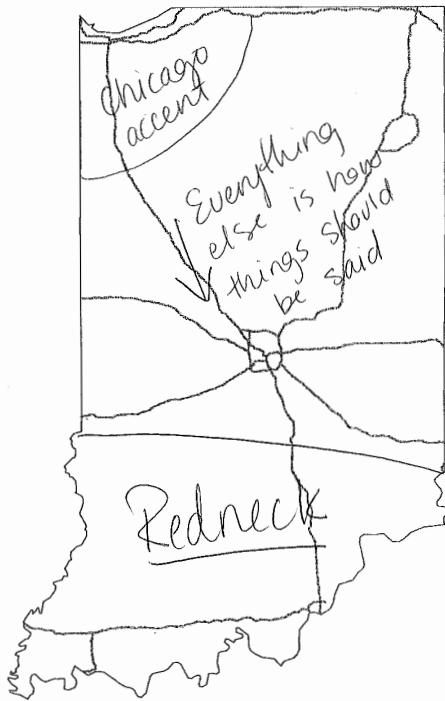


Figure 17: Representative map by 89-year-old female depicting Chicago, Southern, and Neutral regions. (Note that the lighter gray lines are the interstate highways included on the base map.)

speech or attitudes about speech sounds without explicit reference to linguistic structure. Examples of this include general labels like “twang/loose” and “neutral,” and more specific labels like “talk a little from the side of their mouth.” This general category is divided further into five subcategories: Neutral/Standard, Prestige, Rate, Overall Quality, Vector, and Twang/Drawl.

Overall Quality is a broader subcategory under Manner of Speaking, and it has 74 labels. This subcategory has to do with some aspect of non-linguistic quality of speech (e.g., nasal, harsh, twang/drawl). Additionally, any label that specifically mentions “accent” or “dialect” falls under Overall Quality. For example, we include “Chicago accent” in this category because by using “accent” the respondent is referring to some aspect of how people in this region sound without mentioning any specific linguistic structures.

A further subdivision of Manner of Speaking within the set of Overall Quality labels are mentions of Twang and Drawl; the labels include the words “twang” or “drawl” and variant spellings. Twang has 17 labels, and Drawl has 12. Variations of these labels include the variant spelling “draw” and “twangesque.” What is most interesting about these labels is how they are perceived as being the same or different. For example, one map (0008) differentiates the two by

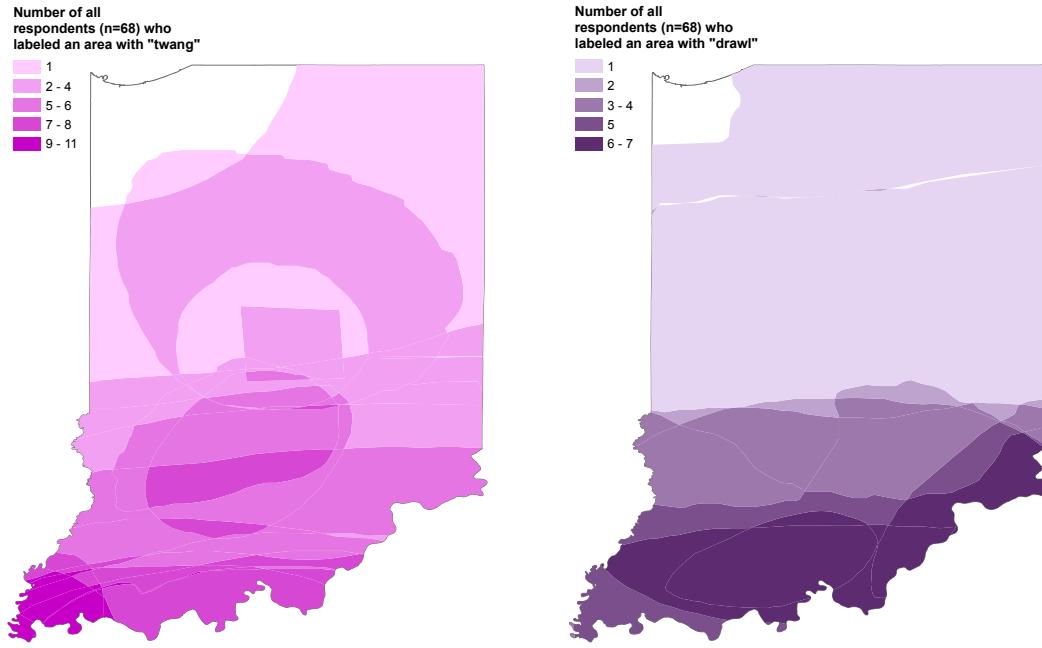


Figure 18: Composite maps of areas labeled *twang* (left) and *drawl* (right)

labeling south-central Indiana with “drawl” and southern Indiana with “twang.” Unfortunately, there are no other maps that have both labels that we could compare this to. The maps have either “twang” or “drawl,” so it is difficult to speculate on potential contrastive connotations. We can, however, map the areas associated with these labels to check for any divergences in their geographic patterning.

Figure 18 shows the areas labeled with “twang” and “drawl.” Both of the areas are generally oriented toward the southern third of the state corresponding with the areas explicitly labeled “southern” and also those assigned “rural” labels; however, all areas of the state are indicated by at least one person except for the region near Chicago. For the areas labeled with “twang,” Evansville was specifically singled out as having twang more frequently than other areas, but respondents also indicated the area around Bloomington. There is an interesting relationship between twang and the region of Indianapolis, the largest city in the state. Indianapolis is both explicitly included and excluded from the twang areas by different respondents.

“Drawl” is used to describe speech especially along the southern border. The area around Indianapolis is not specifically singled out as having a “drawl.” It may be a coincidence that

Evansville is not among the areas most frequently labeled with “drawl.” Nonetheless, it is notable that “drawl” appears to be uniquely associated with Southern speech whereas “twang” also includes the other areas of the state that are considered rural.

There is less agreement among respondents about the areas that have “twang.” The fact that the main differences between the “twang” and “drawl” areas are found around Indianapolis, Bloomington, Evansville (a city that, anecdotally, is not prototypically southern), and the northern rural areas suggests that “twang” is associated with a non-southern rural way of speaking or even that it reflects an attempt to describe some ill-defined characteristic of speech that is otherwise considered neutral or standard (that is, it acknowledges variation within the “standard” conception of the language).

This ambiguous nature of “twang” in Indiana is also found in Oklahoma, a state that also has elements of Midwestern and Southern culture. Rodgers (2016, 416) finds that “twang has a complex socioindexical profile characterized by several value dimensions.” While twang purports to be a folk linguistic term to describe phonetic features such as nasality or diphthongization, it also serves important rhetorical purposes to index a range of socially-relevant values. Rodgers (2016, 416) reports that these values include “a positive value of solidarity and local group membership and negative evaluations associated with a social persona ‘redneck.’” Perceptual dialect maps of Oklahoma show a similar pattern of twang and drawl distributions as in Indiana suggesting that drawl is uniquely Southern while twang is found in areas associated with the South as well as in the cities (Hughes and Weirich, 2019).

The subcategory Neutral/Standard is defined as any label that references the idea of normal or standard speech. There are 37 labels in this category. Interestingly, many labels in this category reference how newscasters speak. For example, the areas around Indianapolis and Fort Wayne have labels such as “CNN English” and “The Ideal Newscaster Accent, apparently.” The popular belief among Hoosiers, then, is that these areas are where Standard American English is spoken. They do not see the Chicago region in the same way as there are no labels that indicate normal/standard English in that area. Instead, Hoosiers are cognizant of Chicago’s differentness. Labels in this category can also reference sameness such as, “I think we all sound alike.”

The subcategory Prestige encompasses labels that refer to having an apparent association with social prestige. As one of the smaller categories, there are only 9 labels. Labels in this category

include “perfect,” “upper class,” and “Educated.” Like Neutral/Standard, labels in Prestige are typically around the Indianapolis and Fort Wayne regions.

The subcategory Rate refers to any label having to do with speaking rate. This category has 11 labels. Labels in this category are generally restricted to “fast” or “slow.”

Vector is the final subcategory under Manner of Speaking having 51 labels. Labels that fall under Vector have to do with direction and/or magnitude of a characteristic. This includes labels that are comparative (e.g., “faster,” “more,” “slightly,” etc.). The vector category shows what people believe can be measured on a gradient scale. People can have a “slight ‘Southern’ accent,” “more of a Southern accent,” or even sound “very Southern,” while others can have “no accent” at all. They can put “less emphasis on vowels” or just generally have “less articulation.” They can have an “over pronunciation” of the “Chicago accent” or a “bit of a drawl.” Unsurprisingly, people can talk “faster” or “slower.” Certain regions can have “longer vowels.” Some accents can have varying degrees of influence; there is a “strong Kentucky influence,” and a region can have a “strong Chicago influence.” There can be an “intense twang” or “small amounts of twang” or a “slight southern drawl the further down you go.”

5.3 Pronunciation

Some labels included specific examples of how people say or pronounce particular words or sub-lexical elements related to linguistic structure, such as vowel quality or length.

The third general category coded for is Pronunciation, which has 38 labels. In order to differentiate it from Manner of Speaking, labels in this category must include a specific example of how people say or pronounce particular words or sub-lexical elements directly related to linguistic structure. Thus, this category has three subcategories: Lexical, Sub-lexical/Phonological, and Morphosyntax.

Labels in the Lexical subcategory have a specific reference to a unique word usage. There are 18 labels that meet this definition. This refers to labels such as “say pop not soda” and “door wall” vs. “sliding glass door” where the labeler compares two dialectal variants of a concept. In these labels, they are presumably comparing that area of the map’s lexical variations with their own or what they consider to be standard. Other labels in this category include stand-alone words in quotation

marks such as “cornhole” and “y’all” or “ya’ll” to indicate examples of lexical variations on the map.

With 20 labels, the Sub-lexical/Phonological subcategory is defined as labels that refer explicitly to phonological variations across speakers in Indiana. The labels can be as vague as “vowels distorted a bit,” and as specific as “crick” (as opposed to “creek”) and “‘bags’ → exaggerated ‘a.’” Clearly, some participants were linguistically knowledgeable as one even included a label in IPA (“æjnd”). In general, though, most were not, and they tended to rely on folk linguistic vocabulary in their attempts to describe phonological differences.

Finally, there is the smallest subcategory with only 4 labels, Morphosyntax. Very few labels referred to distinct sentence structures. An example of labels includes “How’s things.” Such a small category suggests that sentence structure is less salient in differentiating Indiana’s dialects compared to phonological and lexical differences. We include this category for comparative purposes.

6 Conclusion

This paper has considered Hoosiers’ perceptions of dialectal variation in their home state. Overall, perceptual dialect regions indicated by non-linguists, when considering the composite results, align fairly well with dialect maps constructed by dialectologists. The most salient regions are the South and Chicago. The North and Central regions as a group are treated similarly, although there is a mild awareness that something is different between the two regions.

As in other state-level surveys, such as Washington (Evans, 2011) and Oklahoma (Weirich, 2018), an urban–rural distinction is important for Hoosiers, but much less so than a three-way distinction between *Chicago*, *Southern*, and *Non-Chicago/Non-Southern*. Labels that dealt with rural areas indicated either the entire non-Indianapolis regions of the state or seemed to conflate ideas of Southernness and Rurality. While the former conception of the location of rural areas is a closer match to the reality of population distribution in Indiana, the latter conception is in-line with popular stereotypes of the South in which Southernness implies rurality, along with other beliefs about people who speak with a Southern accent mentioned above (Preston, 1989b).

The results that emerge from this analysis suggest that Indiana is an interesting laboratory to study the perception of dialectal variation, and that such study could shed light on some issues involving the nature of sociolinguistic representation and variable processes of phonological categorization. While the two opposing dialects of American English (Labov, 1991), those affected by the Northern Cities Chain Shift and the Southern Shift, are in fact the most salient geographic dialects in Indiana, there is the widespread belief that Indiana is the seat of Standard American English, even in regions where dialectologists report systematic dialectal differences. The fact that people who speak different dialects and yet fail to consciously notice the difference leads us to consider how phonological information is represented in the minds of these people and what processes may guide their categorization of speech sounds.

Future work on perceptual dialectology in Indiana can improve on this study by deliberately recruiting participants from the various dialect regions of the state and comparing their responses. Of particular interest would be comparing people's responses to their self-reported home town location. Asking the respondents to draw a star at the location of their hometown at the end of the task would reveal richer information regarding individuals' orientations toward their own dialect region and may suggest further insights into the relationship between language diversity and sociolinguistic identity.

Extending the study of perceptual dialectology beyond the draw-a-map task, we would explore Hoosiers' perceptions using auditory stimuli of people from different regions of Indiana. A deeper understanding of the relationship between linguistic structure, sociolinguistic orientation/identity, and the perception of dialect variation in a relatively narrow (and culturally unified) geographic area will shed light on some mechanisms of diachronic language change as well as contribute to our knowledge of factors that contribute to the social evaluation of synchronic language variation.

7 Appendix I: Map Survey Instrument

Some people also say that there are different ways of talking within Indiana.

- 1) Draw a line around places where you think people's English sounds different.
- 2) Next, write down what you'd call that way of talking, if you can think of a label for it. Give an example of what's different there (is it a word or pronunciation they use? Or a special way of talking?)



8 Appendix II: Label Categories with examples

This appendix contains each of the label categories and subcategories with representative examples of labels found on maps. The formatting of the labels represents the way respondents originally wrote the labels on the maps, with spelling, punctuation, and special characters retained as faithfully as possible. The values next to the label categories represent the count of total items included in that category and the percentage of all labels contained in the category.

- **Manner of Speaking** (145/313, 46.3%)
 - Neutral/Standard (37/313, 11.8%)
 - * CNN English
 - * Normal
 - * All The Same
 - * Just Basic
 - * (normal) average accent of Indiana
 - * I really don't hear a difference
 - Prestige (9/313, 62.9%)
 - * The Ideal Newscaster Accent, apparently
 - * Everything else is how things should be said
 - * Educated
 - * perfect
 - * Perfect-Newscaster-Accentless
 - Rate (11/313, 3.5%)
 - * fast speaking
 - * talk faster
 - * slow
 - * faster
 - * slow
 - Vector (51/313, 16.3%)
- * Light Southern
- * more Southern b/c of Proximity to KY
- * Longer draw on Names and Subjects
- * Less articulation
- * Strong Kentucky influence
- Overall Quality (74/313, 23.6%)
 - * Northern accent
 - * Urban dialect
 - * harsh
 - * (nasally!)
 - * -articulate
- * Twang (17/313, 5.4%)
 - twang
 - twang-esque
 - Twangy
- Drawl (12/313, 3.8%)
 - Southern draw
 - bit of a drawl
 - drawl
- **Pronunciation** (38/313, 12.1%)
 - Lexical (18/313, 5.8%)
 - * y'all

- * washer
- * "cornhole"
- * "pop"
- * sneakers vs. tennis shoes
- Sub-lexical/Phonological (20/313, 6.4%)
 - * pocket = [pækɪt]
 - * 'bags' → exaggerated 'a'
 - * where people say things like "pop" and "bags" (not cornhole) or like "ruff" instead of "roof"
 - * really less emphasis on vowels
 - * pillow sounds like "pellow" otherwise pretty similar
- (Morpho)syntax (2/313, 0.6%)
 - * ("How's things")
 - * "I seed it" rather than "I saw it"
- **Geography** (130/313, 41.5%)
 - Region (76/313, 24.3%)
 - * Southern Sounding
 - * Midwest accent
 - * country/southern
 - * The Region
 - * Northern accent
 - City (50/313, 16%)
 - * Chicago like
 - * Chicago
 - * Indy area
 - * Cincinnatianesque
 - * Bloomington Area
- State (27/313, 8.6%)
 - * like from MI [Michigan]
 - * kentuckyana accent
 - * like people in Chicago talk fast compared to southern INDIANA
 - * (similar to Kentucky, slight drawl)
 - * ("Indiana newsanchor")
- Population Density (34/313, 10.9%)
 - * Urban (15/313, 4.8%)
 - eubonics
 - ghettospeak
 - African-American urban or no accent
 - city
 - urban Dialect
 - * Rural (19/313, 6.1%)
 - Amish
 - Country
 - appalachian
 - Redneck
 - backwoodsey

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