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464 MD 2021

IN THE COMMONWEALTH COURT OF PENNSYLVANIA

Nos. 464 & 465 MD 2021 (CASES CONSOLIDATED)

CAROL ANN CARTER, ET AL.,

Petitioners,

v.

LEIGH M. CHAPMAN, ET AL.,

Respondents.

***

PHILIP T. GRESSMAN,

Petitioners,

v.

LEIGH M. CHAPMAN, ET AL.,

Respondents.

***

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I. INTRODUCTION & SUMMARY OF THE ARGUMENT

Although the task this Court is set to undertake is one that is ordinarily outside the province of the judiciary, in light of the continued legislative impasse, it has fallen on this Court to select an appropriate congressional redistricting plan. In undertaking this "unwelcome obligation,"[1] however, the Court is not without guidance, as both Federal and State law furnish a variety of useful parameters. Applying those settled precepts to this matter, the proposed redistricting plans attached hereto (labeled in Exhibits A and B as Reschenthaler 1 and Reschenthaler 2) not only amply comport with those baseline constitutional requirements, but also strive to effectuate the fundamental pronouncements embodied in the Free and Equal Elections Clause of the State Constitution. In the end, while this Court may be presented with a number of minimally compliant plans, the attached maps are grounded in ***both*** the letter and spirit of the Commonwealth's Organic Charter.

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[1] *League of United Latin Am. Citizens v. Perry*, 548 U.S. 399, 415 (2006) (explaining that, where "the imminence of a state election makes it impractical" for the legislature to timely enact a redistricting plan, "it becomes the unwelcome obligation of the federal court to devise and impose a reapportionment plan" (internal quotation marks and citations omitted)).

II. QUESTIONS PRESENTED

1. Should the congressional redistricting plan denominated as Reschenthaler 1, or alternatively, the plan denominated as Reschenthaler 2 be adopted in the event a constitutionally compliant redistricting plan is not timely adopted by the General Assembly?

Suggested answer: yes.

2. Should the Court preliminarily enjoin further use and enforcement of the Election Code's provisions relating to the timeline for circulating, filing, and objecting to nomination petitions and immediately adopt the timetable proposed by the Congressional Intervenors for the 2022 General Primary?

Suggested answer: yes.

III. STATEMENT OF THE CASE

The United States Constitution requires a decennial census for the purpose of apportioning the House of Representatives—*i.e.*, allotting a total number of congressional seats generally proportional to the country's total population. *See* U.S. Const. art. I, § 2, cl. 3. By February of the year following the census, the Clerk of the House of Representatives is generally required to "send to the executive of each State a certificate of the number of Representatives to which such State is entitled." 2 U.S.C. § 2a(b). In turn, each state must be redistricted in accordance with the ordinary legislative process, which in the Commonwealth of Pennsylvania requires a duly enacted law approved by the Governor.[2] In addition by April 1 of the year following the census, the Census Bureau is required to provide each state with the detailed tabulation of the data it collects, which is commonly referred to as the PL-94 Data, which contains the detailed information regarding population distribution necessary to begin the redistricting process in earnest.

[2] *See id.*; *see also* U.S. Const. art. I, § 4, cl. 1.

A. Current congressional districts.

Following the 2010 census, Pennsylvania's apportionment of congressional seats was reduced from 19 to 18 and, in keeping with the above statutory scheme, on March 9, 2011, the PL-94 Data was transmitted to the Governor and the legislative leaders. *See generally Holt v. 2011 Legislative Reapportionment Comm'n*, 38 A.3d 711, 719 (Pa. 2012) (*Holt I*). In the subsequent months, a proposed redistricting plan was introduced in the General Assembly and, after proceeding through the ordinary legislative course, was signed into law as Act 131 of 2011 and remained in effect through the 2016 general election.[3]

However, on January 22, 2018—less than three weeks before the first day for circulating petitions for the May 15, 2018 primary—the State Supreme Court declared the 2011 plan unconstitutional, enjoined its further use, and instructed that if a remedial plan was not enacted by February 15, 2018, it would be chosen by the Court.[4] Specifically, the Court held that, in addition to any requirements imposed by federal law, under the Free and Equal Elections Clause of the Pennsylvania

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[3] Act of Dec. 22, 2011, P.L. 599, No. 131, 25 P.S. §§ 3596.101 *et seq*.

[4] *See League of Women Voters v. Com.*, 178 A.3d 717, 821 (Pa. 2018) (*League of Women Voters I*).

Constitution, *see* Pa. Const. art. I, § 5, congressional redistricting plans must be: (1) compact; (2) contiguous; and (3) avoid dividing any county, city, incorporated town, borough, township, or ward, except where necessary to ensure equality of population. *See League of Women Voters v. Com.*, 178 A.3d 737, 816-17 (Pa. 2018) (internal quotation marks omitted).

After the General Assembly and the Governor failed to reach an agreement by that deadline, on February 19, 2018, the Court adopted its own congressional redistricting scheme, which remains in effect to date. *See League of Women Voters of Pennsylvania v. Commonwealth*, 181 A.3d 1083 (Pa. 2018) (*per curiam*) (adopting a congressional redistricting plan) (*League of Women Voters II*). Concomitantly, the Court also approved various changes to the statutorily prescribed dates for circulating, submitting, and challenging nomination petitions. *See id.* at 1088 (adopting a "Revised Election Calendar" and attaching it as Appendix C, which, *inter alia*, set February 27, 2018 as the first day for circulating nomination petitions).

B. 2020 Census and subsequent redistricting efforts.

Unlike the 2010 census, however, the results of the 2020 census were not transmitted in the ordinary course. Specifically, because of the government-ordered shutdowns throughout the spring and summer of 2020, as well as the extensive litigation surrounding the conduct of the census, the PL-94 data was not delivered to the Governor and the General Assembly until August 12, 2021—more than four months after the statutory deadline.[5] Notwithstanding the truncated timeline, the General Assembly—the branch vested with primary responsibility for overseeing elections—appeared poised to timely adopt a congressional redistricting plan, holding extensive hearings throughout the state and solicited significant public input from the voters regarding their preferences. Indeed, on December 15, 2021, the Pennsylvania House of Representatives State Government Committee approved a proposed plan, setting the stage for a robust debate by the full chamber.

C. Present actions filed in the Commonwealth Court.

In the midst of the ongoing legislative efforts, on December 17, 2021, Carol Ann Carter and fifteen other voters (the "Carter

[5] Release of the apportionment counts was similarly delayed and was not transmitted until April 26, 2021.

Petitioners") filed an action in this Court's original jurisdiction against Respondents Leigh M. Chapman, the Acting Secretary of the Commonwealth (the "Secretary"),[6] and Jessica Mathis, the Director for the Pennsylvania Bureau of Election Services and Notaries (the "Elections Director"). Shortly, thereafter, Philip T. Gressman and eleven other voters (the "Gressman Petitioners") filed a similar action against the Secretary and the Elections Director. In general, both the Carter and Gressman Petitioners allege that their vote has been diluted because they reside in malapportioned districts and request declaratory and injunctive relief prohibiting use of the existing congressional redistricting plan for the 2022 May primary. Furthermore, although the Gressman Petitioners only request injunctive relief relative to the extant redistricting plan, the Carter Petitioners ask this Court to adopt a new congressional redistricting plan that complies with all applicable constitutional and statutory provisions. *Compare* Carter PFR, Prayer for Relief, at ¶(c), *with* Gressman PFR, Prayer for Relief.

[6] Acting Secretary Leigh M. Chapman was substituted as the successor to Acting Secretary Degraffenreid by Order of this Court, dated January 20, 2022.

On December 20, 2021, this Court entered an Order consolidating the Carter and Gressman Petitioners' actions and providing for an expedited schedule for their disposition "consistent with the process established in *Mellow v. Mitchell*, 607 A.2d 204 (Pa. 1992)." In accordance with the deadline established by that Order, Congressman Guy Reschenthaler, Swatara Township Commissioner Jeffrey Varner, and former Congressmen Ryan Costello, Bud Schuster, and Tom Marino (the "Congressional Intervenors") filed a timely Application to Intervene as Petitioners on December 31, 2021. On January 14, 2022, this Court issued an Order granting intervention to the Congressional Intervenors (as well as several parties seeking to intervene as Respondents), directing briefing, and scheduling the matter for a hearing to begin on January 27, 2022.

In accordance with this Court's Order, the Congressional Intervenors submit for consideration two redistricting plans—Reschenthaler 1 (attached hereto as Exhibit A) and Reschenthaler 2 (attached hereto as Exhibit B)—and a supporting Expert Report prepared by Dr. Thomas Brunell, which is attached as Exhibit C.

IV. ARGUMENT

Although "the primary responsibility for drawing congressional districts rest[s] squarely with the legislature," *League of Women Voters*, 181 A.3d at 1085, where a timely redistricting scheme has not been enacted, it may "become[] the unwelcome obligation" to select an appropriate plan. *See League of United Latin Am. Citizens v. Perry*, 548 U.S. 399, 415 (2006) (internal quotation marks and citations omitted). The Court's task in this respect is guided by the same constitutional requirements that constrain the General Assembly.

Applying those precepts here, this Court should have no difficulty in determining that both redistricting plans proposed by the Congressional Intervenors satisfy the United States Constitution's one-person-one-vote requirement, complies with the Federal Voting Rights Act, and comports with the Free and Equal Elections Clause of the State Constitution.

A. The Congressional Intervenors' proposed redistricting plans are in full accord with the United States Constitution's equal population requirement.

As noted by then-President Judge Craig, who served as Special Master for the Supreme Court in *Mellow*, "the 'preeminent if not the

sole,' criterion for appraising the validity of redistricting plans," *Mellow*, A.2d at 214 (quoting *Chapman v. Meier*, 420 U.S. 1, 23 (1964)), is whether it satisfies the United States Constitution's requirement that "one man's vote in a congressional election is to be worth as much as another's." *Id.* (quoting *Wesberry v. Sanders*, 376 U.S. 1, 8 (1964)). In *Mellow*, the Court explained that this assessment is conducted by calculating the plan's "maximum total deviation" from the "ideal" population of a congressional district. Presently, all parties agree that the "ideal" population of a district based on the 2020 census is 764,864 or 764,865. As reflected in the table below, which is derived from Dr. Brunell's accompanying report, both plans offered by the Congressional Intervenors, have a maximum total deviation of one (1) voter and, thus, are properly populated

District	Reschenthaler 1	Reschenthaler 2
1	764,865	764,865
2	764,865	764,865
3	764,865	764,865
4	764,864	764,864
5	764,865	764,865

6	764,865	764,865
7	764,865	764,865
8	764,865	764,865
9	764,865	764,865
10	764,865	764,865
11	764,865	764,865
12	764,865	764,865
13	764,864	764,864
14	764,864	764,864
15	764,864	764,864
16	764,865	764,865
17	764,864	764,864

In short, therefore, both Reschenthaler 1 and Reschenthaler 2 fully comply with the primary consideration guiding this Court's analysis.

B. The Congressional Intervenors' proposals comply with the requirements of the Voting Right Act.

Similarly, the Congressional Intervenors' proposed plans are in full accord with the Voting Rights Act of 1965 (the "VRA") because

sufficiently polarized voting does not exist and, thus, the VRA is simply not implicated. Specifically, in the context of redistricting, the United States Supreme Court has recognized that drawing district lines can have the effect of diluting voting strength of certain minority groups by either fragmenting voters among various districts, or packing them into a smaller district in violation of the Equal Protection clause. *Johnson v. De Grandy*, 512 U.S. 997, 1007 (1994); *see also Bethune-Hill v. Virginia State Bd. of Elections*, 137 S. Ct. 788, 797 (2017) ("The Equal Protection clause prohibits a State, without sufficient justification, from separating its citizens into different voting districts on the basis of race." (cleaned up)). It is well-settled, however, that three factors—commonly known as the *Gingles* factors—are "threshold conditions" for demonstrating dilution under Section 2 of the Voting Rights Act. *Cooper*, 137 S. Ct. at 1470. Under the *Gingles* Factors, the Court evaluates whether (1) the minority group is "sufficiently large and geographically compact to constitute a majority," (2) the minority group is "politically cohesive," and (3) the district's white majority votes "sufficiently as a bloc" such that it "defeat[s] the minority's preferred candidate." *Thornburg v. Gingles*, 478 U.S. 30, 50-51 (1986). If the three *Gingles* factors are met,

then the Court must evaluate the totality of the circumstances, looking to the following factors:

> the history of voting-related discrimination in the State or political subdivision; the extent to which voting in the elections of the State or political subdivision is racially polarized; the extent to which the State or political subdivision has used voting practices or procedures that tend to enhance the opportunity for discrimination against the minority group … ; the extent to which minority group members bear the effects of past discrimination in areas such as education, employment, and health, which hinder their ability to participate effectively in the political process; the use of overt or subtle racial appeals in political campaigns; … the extent to which members of the minority group have been elected to public office in the jurisdiction[;] … evidence demonstrating that elected officials are unresponsive to the particularized needs of the members of the minority group[;]and [whether] the policy underlying the State's or the political subdivision's use of the contested practice or structure is tenuous[.]

League of United Latin American Citizens v. Perry, 548 U.S. 399, 426 (2006) (quoting *Gingles*, 478 U.S. at 44-45). If the *Gingles* factors are met, there is good reason to believe that Section 2 of the VRA mandates the creation of a minority-majority district, but, as succinctly put by the Supreme Court, "if not, then not." *Cooper*, 137 S. Ct. at 1470.

Therefore, if one of the *Gingles* factors, such as white bloc-voting, cannot be established then the requisite good reason for drawing a minority-majority district does not exist. *See Gingles*, 478 U.S. at 49

n.15 (noting that "in the absence of significant white bloc voting it cannot be said that the ability of minority voters to elect their chosen representatives is inferior to that of white voters"). In *Cooper*, for example, the Supreme Court concluded that a North Carolina district created for the purpose of Section 2 compliance did not survive strict scrutiny because the third *Gingles* condition was not met. *Id.* Indeed, the Court explained that for two decades, the district in question had been "an extraordinarily safe district for African-American preferred candidates," which, in turn, meant that the white population in the district did not vote as a bloc to overcome the minority voters' preference. *Id.* In light of this, there was no reason to believe that the district needed to be drawn to be in compliance with the Voting Rights Act. *See id.*; *see also Voinovich v. Quilter*, 507 U.S. 146, 158 (1993) (declining to address the first two *Gingle*s factors where the third *Gingles* factor was not proven).

As in *Cooper*, the data analyzed by Dr. Brunell does not indicate racially polarized voting that necessitates a minority-majority district under the framework set forth above. Dr. Brunell's analysis of past elections in Philadelphia County involving a white Republican against a

Black Democrat demonstrates an absence of polarized voting. Specifically, looking at homogeneous precincts for the 2012 Presidential election, 2018 House of Representatives election, and 2017 Pennsylvania Supreme Court election, Dr. Brunell found that a majority of Black and white voters voted for the Black candidate in all three elections. *See* Brunell Report at 10. Accordingly, based upon a precinct analysis, there is no indication that a white voting bloc exists that thwarts the minority from electing the candidate of its choice. Turning to an analysis of ecological regression, Dr. Brunell again estimated that white voters who voted for Black candidates were 62% in 2012, 70.2% in 2018, and 57.4% in 2017. In terms of Black voters for Black candidates, Dr. Brunell estimated these to be 98.3% in 2012, 97.7% in 2018, and 96.5% in 2017. *Id.* at 11. Finally, Dr. Brunell evaluated the data from the 2015 Democratic primary race and found once more, under both the homogeneous precinct and ecological regression analyses, that there was no indication of racially polarized voting. In the absence of the third *Gingles* factor showing that there is racially polarized voting such that a white voting bloc precludes the minority from being able to elect the candidate of their choice, Section 2

of the Voting Rights Act is not implicated. Accordingly, Reschenthaler 1 and Reschenthaler 2 comply with the requirements of the Voting Rights Act. Accordingly, to the extent any of the alternative redistricting proposals submitted to this Court seek to rely on the VRA to justify their departure from the redistricting criteria identified in *League of Women Voters*, any argument along such lines should be rejected.

C. The Congressional Intervenors' proposals comport with the Pennsylvania Constitution.

In terms of the State Constitutional inquiry, the Congressional Intervenors' proposed maps not only satisfy the core requirements of the Free and Equal Elections Clause—as interpreted by *League of Women Voters*—but also the overarching principles it seeks to advance. *First*, measured against the guideposts established by the panel, both Reschenthaler 1 and Reschenthaler 2 amply satisfy the three basic requirements of the Free and Equal Elections Clauses: compactness, contiguity, and minimal municipal splits. *Second*, both plans are also tailored—insofar as possible—to effectuate the provision's overarching goal of "maintain[ing] the geographical and social cohesion of the communities in which people live and conduct the majority of their day-to-day affairs[.]" *League of Women Voters*, 178 A.3d at 814.

1. The Congressional Intervenors' proposed plans are compact, contiguous, and maintain the integrity of municipalities and wards to the greatest extent practicable.

Pursuant to the landmark *League of Women Voters* decision, in order to pass constitutional muster, a congressional redistricting plan must be: (1) compact; (2) contiguous; and (3) avoid "divid[ing] any county, city, incorporated town, borough, township, or ward, except where necessary to ensure equality of population[.]" *Id.* at 816-17 (internal quotation marks omitted). Although the Court "recognize[d] that other factors have historically played a role in the drawing of legislative districts, such as the preservation of prior district lines, protection of incumbents, or the maintenance of the political balance which existed after the prior reapportionment[,]" it emphasized that "these factors to be wholly subordinate to the neutral criteria of compactness, contiguity, minimization of the division of political subdivisions." *Id.* at 817. As relayed by the *League of Women Voters* panel, because they "provide a 'floor' of protection for an individual against the dilution of his or her vote in the creation of such districts[,] … these neutral criteria [may not be] subordinated, in whole or in part, to extraneous considerations such as gerrymandering for unfair

partisan political advantage[.]" *Id.* As explained below, the Congressional Intervenors' proposed plans—and, in particular, Reschenthaler 1—scrupulously adhere to these requirements.

(a) The Congressional Intervenors' proposed plans are comparable or superior to the existing congressional plan in their compactness scores.

Turning, initially, to the compactness requirement, although there are numerous mathematic compactness measurements, in declaring the 2011 plan unconstitutional, the *League of Women Voters* panel principally relied on the Reock Compactness Score and the Polsby-Popper Compactness Score, which seek to quantify compactness by assigning a score of 0 (least compact) to 1 (most compact). Specifically, the Court noted that the overall Reock and Polsby-Popper Compactness Score of the 2011 plan were .278 and .164. By contrast, the Court explained that based on a computer simulation that applied ***only*** the traditional redistricting criteria, the appropriate range of scores was between .31 and .46 under the Reock measurement, and between .29 and .35 under the Polsby-Popper test. Analyzed against this backdrop, both Reschenthaler 1 and Reschenthaler 2 amply satisfy the compactness requirements articulated by *League of Women Voters*.

As Dr. Brunell's analysis reflects, Reschenthaler 1 has a Reock Compactness Score of .435, which is only .024 units (*i.e.* 5.4%) lower than the existing plan's score of .459 and a Polsby-Popper Score of .363, which ***exceeds*** the current plan's score of .335 by .028 units (*i.e.*, 8.4%). Moreover, based on these measurements, not only is Reschenthaler 1 well within a constitutionally sound range of scores for a redistricting plans, but is, in fact, in the upper echelon in both measurements.

Although ostensibly somewhat less compact, an analysis of Reschenthaler 2 yields a similar compactness score, with only a *de minimis* decrease. Specifically, it has a Reock Compactness Score of .424, which is only 7.6% lower than that of the current plan, and Polsby-Popper Compactness Score of .352, which—like Reschenthaler 2—exceeds that of the existing plan by 5.1%.

(b) The Congressional Intervenors' proposed plans satisfy the contiguity requirements.

Both Reschenthaler 1 and 2 also comply with the contiguity requirement contemplated the *League of Women Voters* panel. Although not extensively analyzed in that decision, in the context state legislative reapportionment under Article I, Section 16 of the State Constitution—which *League of Women Voters* expressly incorporated into the Free and

Equal Elections Clause analysis—a "contiguous district" is defined as "one in which a person can go from any point within the district to any other point (within the district) without leaving the district, or one in which no part of the district is wholly physically separate from any other part." *Holt v. 2011 Legislative Reapportionment Comm'n*, 67 A.3d 1211, 1242 (Pa. 2013) (*Holt II*). Here, no part of any district in either Reschenthaler 1 or 2 is wholly separated from any other part and the configuration of the districts in both proposals allows travel from any point within the district to another point without leaving the district. Accordingly, both Reschenthaler 1 and 2 satisfy the contiguity requirements.

(c) Maintaining the integrity of municipal boundaries and minimizing ward splits.

The final neutral criteria identified by the Court in *League of Women Voters* is the "minimization of the division of political subdivisions[,]" or—stated more precisely—a prohibition against "divid[ing] any county, city, incorporated town, borough, township, or ward, except where necessary to ensure equality of population." 178 A.3d at 817. Specifically, in holding that the 28 county splits and 68 municipal splits violated the Free and Equal Elections Clause, the

Supreme Court explained that a constitutionally compliant redistricting plan would "generally split between 12–14 counties and 40–58 municipalities," *League of Women Voters*, 178 A.3d at 819, and ultimately adopted a plan that splits thirteen counties and nineteen municipalities. *See League of Women Voters*, 181 A.3d at 1087 (*per curiam*). Assessed within this framework, the municipal splits contained in both Reschenthaler 1 and Reschenthaler 2 are in full accord with *League of Women Voters*' standards.

With regard to the total number of counties that are split, the current map is identical to both Reschenthaler 1 and Reschenthaler 2, in that all three plans only split thirteen of Pennsylvania's sixty-seven counties. Moreover, Reschenthaler 1 and Reschenthaler 2 split those counties into fewer segments (29) than the current plan (30).

In terms of municipal splits, both Reschenthaler 1 and 2 contain sixteen such splits and, thus, outperform the current map, which contains 19. Similarly, both Reschenthaler 1 and 2 split these municipal units into 33 total segments—six less than the 39 in the current plan.

2. The Congressional Intervenors' proposed redistricting plan properly accounts for the community interests undergirding the Free and Equal Elections Clause.

A common thread running through *League of Women Voters* is that, to the greatest degree practicable, a congressional redistricting plan should avoid dividing a community with shared interests and concerns. Indeed, in adopting these "neutral criteria," the Court reasoned that "[t]hese standards place the greatest emphasis on creating representational districts that both maintain the geographical and social cohesion of the communities in which people live and conduct the majority of their day-to-day affairs[.]" *League of Women Voters*, 178 A.3d at 814.[7] Accordingly, although compactness, contiguity, and

[7] Indeed, *League of Women Voters* panel repeatedly references the significance of communities in its analysis. *See id.* at 816 ("When an individual is grouped with other members of his or her community in a congressional district for purposes of voting, the commonality of the interests shared with the other voters in the community increases the ability of the individual to elect a congressional representative for the district who reflects his or her personal preferences."). Moreover, in evaluating the historic underpinnings that lead to the development of the neutral criteria it prescribed, the Court emphasized that the Free and Equal Elections Clause, in its original form, provided that "all elections ought to be free; and that all free men having a sufficient evident common interest with, and ***attachment to the community***, have a right to elect officers, or to be elected into office." *Id.* (quoting Pa. Const. of 1776, art. I, § VII) (emphasis added); *see also id.* ("[I]t is evident that [our founders] considered maintaining the geographical contiguity of political subdivision, and barring the splitting thereof in the process of creating legislative districts").

respect for municipal boundaries, are undoubtedly the primary tool for evaluating the constitutionality of a redistricting plan, properly understood these principles serve to advance the Free and Equal Elections Clause's overarching goal of protecting the interest of communities.

With this in mind, to the extent the Court is presented with a series of maps, each of which satisfies the constitutionally prescribed criteria, then the Court should consider how those maps account for the subordinate communities of interest. When viewed in this light, this evaluation assumes greater significance in determining whether the proposed maps—insofar as they are otherwise constitutional—are actually fair and responsive to the day-to-day concerns of the each district's populace.

Because this consideration often proves difficult to measure, courts and commentators have attempted to capture this concept under the generalized rubric referred to as "communities of interests." This formulation is perhaps most relevant with respect to the Court's compactness and political subdivision split analyses because a fair map will, at times, sacrifice mathematical exactitude to maintain the

contiguity of communities that share similar interests. *See* Stephen J. Malone, *Recognizing Communities of Interest in a Legislative Apportionment Plan*, 83 VA.L.REV. 461, 465-66 (1997) ("The matching of interests and representation allows voters with shared interests to have a voice in the legislature that is roughly correlated to their numbers.").

The term "communities of interest" encompasses, according to the esteemed Dean Ken Gormley, "school districts, religious communities, ethnic communities, geographic communities which share common bonds due to locations of rivers, mountains and highways[.]" *Holt I*, 38 A.3d at 746. In *Mellow*, the Court considered a community's "circulation arteries, its common news media …, its organization and cultural ties[,]" its "common economic base[,]" and the relationship among "schools of higher education as well as others." 607 A.2d at 220-21.

In other jurisdictions, courts consider similar factors. *See Diaz c. Silver*, 978 F.Supp. 96, 123 (E.D.N.Y. 1997) ("Common employment services, religion, economy, country of origin and culture"); *Carstens v. Lamm*, 543 F.Supp. 68 (D. Colo. 1982) ("geography, demography, ethnicity, culture, socio-economic status or trade"). And some states, like Colorado, even define communities of interest in the state

constitution.[8] In *Carstens*, *supra*, the Colorado district court considered important, *inter alia*, urban areas with aging infrastructure; communities linked naturally by a highway, which resulted in commercial expansion; communities based in agriculture; and communities with a strong environmental and energy sectors. *See id*. at 96-97.

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[8] The Colorado Constitution defines "Community of interest" as follows:

> (b)(I) "Community of interest" means any group in Colorado that shares one or more substantial interests that may be the subject of state legislative action, is composed of a reasonably proximate population, and thus should be considered for inclusion within a single district for purposes of ensuring its fair and effective representation.
>
> (II) Such interests include but are not limited to matters reflecting:
>
> (A) Shared public policy concerns of urban, rural, agricultural, industrial, or trade areas; and
>
> (B) Shared public policy concerns such as education, employment, environment, public health, transportation, water needs and supplies, and issues of demonstrable regional significance.
>
> (III) Groups that may comprise a community of interest include racial, ethnic, and language minority groups, subject to compliance with subsections (1)(b) and (4)(b) of section 48.1 of this article V, which subsections protect against the denial or abridgement of the right to vote due to a person's race or language minority group.
>
> (IV) "Community of interest" does not include relationships with political parties, incumbents, or political candidates.

Colo. Const. art. V, §46(b).

At first glance, a communities of interest analysis may seem ephemeral, unworkable, and easy to manipulate. *See* Samuel S.H. Wang, et al., *Laboratories of Democracy Reform: State Constitutions and Partisan Gerrymandering*, 22 U. PA. J. CONST. L. 203, 244 (2019) ("Of all the criteria considered by most states, perhaps the most malleable and least quantifiable yet, of central conceptual importance, is that districts preserve 'communities of interests.'"). And, indeed, without a sound framework to constrain its reach, it can doubtless become unworkable. But upon a more careful examination, a communities of interest analysis when, "[w]ielded well," can be "powerful in enhancing representation[.]" Michael Li, Yurij Rudensky, *Rethinking the Redistricting Toolbox*, 62 How. L.J. 713, 732 (2019). Indeed, *Mellow* and *Holt* demonstrate the central role that shared communal interests play in the redistricting process. Similarly, while *League of Women Voters* did not give the concept practical application, the Court's analysis demonstrates that these principles are rooted—at least in some measure—in the Free and Equal Elections Clause.

Thus, rather than be deterred by the difficulties attendant enforcing communities of interest criteria, this Court should draw upon

its own experience and embrace evidence—objective and subjective—consistent with the Commonwealth's precedent to determine whether sufficient evidence exists to identify a particular community of interest. *See id.* at 733 (objective evidence—including census data—combined with subjective evidence—including residents' opinions—can be sufficient evidence to prove a community of interest exists); *see also Favors v. Cuomo*, 2012 WL 928216, at *13 (E.D.N.Y. 2012) (crediting testimony about "certain widely recognized, geographically defined communities").

In many ways, redistricting's most basic objective is to provide communities with adequate representation. Indeed, "[t]o be an effective representative, a legislator must represent a district that has a reasonable homogeneity of needs and interests; otherwise the policies he supports will not represent the preferences of most of his constituents." *Prosser v. Elections Bd.*, 793 F.Supp. 859, 863 (W.D. Wis. 1992); *see Hall v. Moreno*, 270 P.3d 961, 971 (Colo. 2012) ("if an important issue is divided across multiple districts, it is likely to receive diffuse and unfocused attention from the multiple representatives it affects, as each is pulled in other directions by the many other issues

confronting their districts. However, if a discrete and unique issue is placed in one district, that representative may familiarize herself with the complexities of the issue and the stakeholders it affects.").

This Court can properly wield the community of interest considerations used in *Mellow*, *Holt*, and to some degree, *League of Women Voters*, to adopt a map that more accurately, and more fairly represents the citizens of this Commonwealth based on the practical concerns of their daily lives. These considerations—economic, employment, age, income, education, industry, transportation—are not made from whole cloth, but are, in many ways, tied to federal regulations for which representatives advocate. An area with an aging population may have Medicare and Social Security concerns that predominate, whereas an area with a robust higher education presence, or regional hospital network might be concerned with funding for expanding those networks, or increasing investment in roads and public transportation for better access to their jobs.

With this in mind, it is easy to understand how a communities of interest analysis is precisely where the computer-programed, mathematically-exact, maps fail. A computer algorithm can

undoubtedly produce thousands—if not millions—of maps that satisfy the compactness, contiguity, equal population, and minimized splits mandated by the *League of Women Voters* Court. But of that vast batch, how many are workable based on Pennsylvania's communities and geography? Any county or municipality can be sliced and diced in hundreds of ways, but which way makes the most sense based on the needs of the communities in those areas? These are the questions the computer cannot answer.

Congressional Intervenors suggest their maps, in addition to satisfying every constitutionally required measure, best account for the realities of daily life in communities across the Commonwealth. In particular the Congressional Intervenors highlight the following examples of how the needs of certain communities of interest inform the quality of their proposed maps.

(a) Allegheny County

Allegheny County is split between the 2nd and 3rd Congressional District. This split is sensible because it keeps Pittsburgh intact in the 3rd district. Moreover, the Reschenthaler maps are split in the north between Pine, McCandless and Ross in the west and Richland,

Hampton, and Shaler in the east, and this is an appropriate dividing line based on the transportation corridors in those regions. For example, Richland, Hampton, and Shaler share the Route 8 corridor into Pittsburgh and have a closer communal ties to other municipalities in the east. This example, and others including industrial, educational, and transportation interests demonstrate how Reschenthaler maps 1 and 2 endeavored to adhere to the communities of interest in Allegheny County.

(b) Lackawanna County

Lackawanna County is split such that Scranton and cities like, Dickson City, Archibald, Olyphant, and Jessup—*i.e.*, the more urban areas—are all within the 10th Congressional District. The municipalities to the east and south of the Moosic Mountains—*i.e.*, Spring Brook, Roaring Brook, Elmhurst, Moscow, Covington, Madison, Jefferson, and Clifton—are kept together in the 9th district. This is appropriate because these municipalities are more rural communities that share the same school district. And in the northeastern corner, Vandling, Fell, and portions of Carbondale share commercial and commuter connections with the adjacent Wayne County. In addition, all

of these municipalities to the east share many of the same concerns as political subdivisions in Wayne, Pike, and northern Monroe Counties, which are also in the 9th district.

(c) Washington County

Washington County is split between the 2nd and 4th districts. Included in the 4th district is the Mid-Mon Valley that extends through Washington, Westmoreland, and Fayette Counties. The communities contained within the western boarder of the 4th district share manufacturing interests, a public transit authority, and a regional health system. As such, the Reschenthaler maps seek to keep these communities together within the 4th district.

(d) Monroe County

Reschenthaler maps 1 and 2 attempt to keep eastern and southern Monroe County with Leigh and Northhampton Counties because these regions are historically commuter suburbs that see significant influx of travel from New York and New Jersey. In addition, these three regions are composed of several universities and hospital networks. And the western portion of Monroe County, encompasses the resort region of the

Poconos where camps, resorts, and second homes abound, and local residents cater to those community assets.

(e) Dauphin County

Dauphin County is split to the north between the 7th and 8th districts with Upper Dauphin contained in the 7th district. Upper Dauphin County composes roughly the entire region north of the Blue Mountain. This region is much moral rural than Lower Dauphin, and citizens in Upper Dauphin commute less to Harrisburg and its surrounding environs. This Upper Dauphin region has commercial centers and communities more closely tied to Schuylkill and Northumberland Counties. For these reasons, Reschenthaler maps 1 and 2 include the Upper Dauphin region in the 7th Congressional District.

Moreover Derry Township is split from Dauphin County and included in the 9th district because it shares a significant commercial, cultural and transportation connections with Lebanon and Lancaster Counties.

(f) Cambria County

The Reschenthaler map sensibly separates Cambria County between its northern and southern sections. The southern section, contained in the 4th district, features Johnstown, and blends fairly seamlessly with Somerset County. This southern region retains a significant manufacturing sector—including in the defense and technology sectors. The northern section, which is contained in the 5th district, is more rural and does not contain the significant manufacturing presence that the southern region has. In this light, the northern part of Cambria County is more similar to neighboring Clearfield County.

***

In sum, in addition to satisfying every one of the neutral redistricting criteria identified by the Supreme Court, Reschenthaler 1 and 2 also carefully place their county splits so that municipalities with identifiable common interests are kept in the same district. In addition, the mathematically unforgiving compactness scores will not fully appreciate that Reschenthaler 1 and 2 attempt to keep political subdivisions whole—consistent with communities of interest—while

also accounting for the political geography of the state. In this way, the Reschenthaler maps offer a more fair map that accurately "creat[es] representational districts that both maintain geographical and social cohesion of the communities in which people live and conduct the majority of their day-to-day affairs[.]" *League of Women Voters*, 178 A.3d at 814.

D. The Congressional Intervenors' proposals satisfy the relevant extra-constitutional considerations.

To the extent this Court is asked to consider other factors—such as "competitiveness," or "incumbency protection"—it bears noting that, while such an inquiry is not prohibited, it is strictly circumscribed. Specifically, while the Supreme Court *League of Women Voters* "recognize[d] that other factors have historically played a role in the drawing of legislative districts, such as the preservation of prior district lines, protection of incumbents, or the maintenance of the political balance which existed after the prior reapportionment[,]" it cautioned that it "view[s] these factors to be wholly subordinate to the neutral criteria of compactness, contiguity, minimization of the division of political subdivisions, and maintenance of population equality among congressional districts." *Id.* at 817. Nevertheless, to the extent this

Court finds such an inquiry appropriate, the Congressional Intervenors' maps also satisfy these subordinate considerations. Specifically, the Congressional Intervenors' proposals accurately reflect the political makeup of the Commonwealth and maintain the proper balance of political power.

To explain, in *League of Women Voters*, the Court considered several measures of partisan advantage including, the efficiency gap, partisan voter index (the "PVI"), and the mean-median vote gap. Importantly, the Court noted Judge Brobson's skepticism concerning the efficiency gap's short-comings,[9] and did not solely rely on it; rather, the Court compared several metrics which, on whole, demonstrated the

---

[9] Judge Brobson "opined that the full meaning and effect of the gap 'requires some speculation and does not take into account some relevant considerations, such as quality of candidates, incumbency advantage, and voter turnout.' The court expressed additional concerns that the efficiency gap 'devalues competitive elections,' in that even in a district in which both parties have an equal chance of prevailing, a close contest will result in a substantial efficiency gap in favor of the prevailing party." *Id*. at 778 (internal citations omitted). He further explained:

> [s]ome unanswered questions that arise based on Petitioners' presentation include: (1) what is a constitutionally permissible efficiency gap; (2) how many districts must be competitive in order for a plan to pass constitutional muster (realizing that a competitive district would result in a skewed efficiency gap); (3) how is a "competitive" district defined; (4) how is a "fair" district defined; and (5) must a plan guarantee a minimum number of congressional seats in favor of one party or another to be constitutional.

Id. at 783 n.52.

2011 congressional map was unconstitutional. *See League of Women Voters*, 178 A.3d at 818-821. As this Court considers these metrics, it should also bear in mind the potential downfalls of overly competitive plans. In *Rucho v. Common Cause*, 139 S.Ct. 2484 (2019), the High Court explained the difficulty of setting a clear and manageable fairness standard with respect to redistricting because

> [t]here is a large measure of 'unfairness' in a winner-take-all system. Fairness may mean a greater number of competitive districts …. But making as many districts as possible more competitive could be a recipe for disaster for the disadvantaged party. As Justice White has pointed out, 'if all or most of the districts are competitive … even a narrow statewide preference for either party would produce an overwhelming majority for the winning party.'"

Id. at 1250 (internal citation omitted).

Similarly, Nathanial Persily, who served as an expert advisor in *League of Women Voters* and assisted the Court in developing the current redistricting plan, observed that:

> [A] districting scheme that seeks to maximize district-level partisan competition could lead to a legislature wildly unrepresentative of the partisan preferences of the state's population.
>
> A simple example illustrating the worst-case scenario helps prove this point. In a state with a voting population equally divided in its loyalties, the pro[-]competition redistricter would create as many districts as possible in which

> Democrats and Republicans each constitute 50% of the district population. Under such conditions, the slightest shift in voter preferences would lead to a landslide victory for one of the parties. If, for example, a presidential winner has coattails that shift 5% of the vote to his party, then that party could win almost 100% of the seats in the legislature, despite the fact that 45% of the voters voted for the opposition.

Nathaniel Persily, *In Defense of Foxes Guarding Henhouses: The Case For Judicial Acquiescence to Incumbent-Protecting Gerrymanders*, 116 HARV.L.REV. 649, 668 (2002) (footnotes omitted).

Although the Congressional Intervenors were principally guided by the requirements of the United States Constitution and the Free and Equal Elections Clause, in devising both Reschenthaler 1 and 2, they were cognizant of partisan and competitive fairness precepts. As developed below, the resulting maps are sufficiently responsive to voters in each of the districts created.

First, according to the PVI, the Reschenthaler maps create enough competitive districts such that "the majority of the state's congressional delegation may be decide by the political tides and the quality of the candidates and campaigns in each election." Brunell Report at 8 (Ex. C).

The PVI was calculated by comparing the results of the 2016 and 2020 presidential elections because both were "high profile elections

with well-funded candidates" and both resulted in "relatively close" wins—one for Republicans, the other for Democrats. *Id.* at 7. Dr. Brunell "averaged the vote percentage for the Democrat for each district across these two elections and then subtracted 50 percent from each one. Thus if the result is zero, that means the Democrat averaged 50 percent" meaning the district is very competitive. *Id.* According to Dr. Brunell, a district with less than plus or minus five percent is considered a toss-up district.

According to Dr. Brunell's PVI analysis, the Reschenthaler maps are substantially similar to the 2018 court-drawn map, each creating eight republican, five democrat, and 4 toss-up districts, as compared to the 2018 map's seven-six-five breakdown. *See id.* at 8. At bottom, the Reschenthaler maps, as with the 2018 map, have a sufficient number of competitive districts such that the party with a minority of presumably safe seats can achieve a majority of seats. This, of course, is based on factors that are often difficult to account for—*i.e.*, candidate strength, funding, wave elections, and a shifting electorate—and thus will be dependent on the facts specific to each election. *See Vieth v. Jubelirer*, 541 U.S. 267, 287 (2004) ("Political affiliation is not an immutable

characteristic, but may shift from one election to the next; and even within a given election, not all voters follow the party line.").

Second, the mean-median vote gap also compares equally to the 2018 map. This "method takes the mean (average) vote percentage for one party across all the districts and compares it to the median of the same set of vote percentages." Brunell Report at 8. For example, "[i]f the Democratic average votes percentage is 55 percent and the Democratic median vote percentage in the same election is 50 percent, there is a 5 percent difference that favors Republicans." This metric is based on logic that if "one party is 'packed' into a handful of districts they are at a disadvantage and this will inflate the average vote percentage for that party, while the median of a distribution will be unaffected." *Id.* Ultimately, "the closer the mean and median are to one another the less skewness or bias there is in the plan." *Id.*

For his analysis, Dr. Brunell calculated the mean-median differences for the 2018 map and Reschenthaler maps 1 and 2 across all of the presidential, senatorial, and gubernatorial elections in Pennsylvania for the last decade. Dr. Brunell also added the three other statewide elections from 2020 because "Pennsylvania made two

important changes to their elections beginning in 2020—[it] eliminated straight-party voting and instituted no excuse vote-by-mail." *Id*.

Dr. Brunell opined '[w]hile there are no 'bright lines' for when a difference becomes 'significant' all of these scores [from his analysis] are reasonably low." *Id*. at 8-9. In *League of Women Voters*, the Court considered a mean-median vote gap between 0 to 4 percent as competitive. *See League of Women Voters*, 178 A.3d at 820. As such Congressional Intervenors submit a mean-median index below 4 percent is indicative of a sufficiently competitive map.

Here, the mean-median index for Reschenthaler maps 1 and 2 across all the above referenced elections ranges from 0 to 3.8 percent. And, the average mean-median index for Reschenthaler maps 1 and 2 across all of those races in the past decade are 1.85 and 1.89 respectively. These numbers indicate that Reschenthaler maps 1 and 2 are competitive and subject to the changes in the electorate and other election-specific factors. Moreover, the Reschenthaler maps stay below the 4 percent threshold, whereas the 2018 map peaked at 4.3 percent in one election.

Third, these two metrics—considered together—offer proof that Reschenthaler maps 1 and 2 provide a fair partisan balance, and a sufficient number of competitive districts. And, to be clear, these metrics—especially when viewed together—offer a more complete assessment of the partisan fairness than the efficiency gap test. Although the efficiency gap test has been considered by courts, including the Pennsylvania Supreme Court, it has never been relied on *in toto* because its shortcomings limit its effectiveness.

For example, the efficiency gap test punishes competitive districts because all of the votes cast by the losing party are considered wasted. *See* Mira Bernstein and Moon Duchin, *A Formula Goes to Court: Partisan Gerrymandering and The Efficiency Gap*, at 3 (2017), *available at* https://arxiv.org/abs/1705.10812. The efficiency gap test also does not account for the political geography of Pennsylvania—meaning it does not account for voters of the same party naturally packed in groupings across the state—and it assumes voters will vote consistent with past elections. *See* Christopher P. Chambers, et al., *Flaws in the Efficiency Gap*, 33 J.L.& POL. 1, 6-12, 30 (2012). The efficiency gap can also create an absurd result whereby an district made up of 100 percent of voters

from one party would be considered to have a 50 percent efficiency gap score (because the other party had no votes to waste), and thus be over the acceptable 8 percent threshold. Christopher P. Chambers, et al., Flaws in the Efficiency Gap, 33 J.L.& Pol. 1, 14 (2012). These flaws, in addition to others, are part of the reason the Judge Brobson was hesitant to fully endorse the efficiency gap as the sole test for measuring gerrymandering. *See supra.*

This is not to say that the efficiency gap test is wholly unreliable; rather when the efficiency gap test is used alongside other metrics of partisan measure—particularly ones that do not punish competition—it deserves less weight.

As such, Reschenthaler maps 1 and 2 are fair and competitive such that each party has stronghold districts, while simultaneously providing enough toss-up districts that either party can—factoring in election-specific factors like candidate, funding, and electorate shifts—capture a majority of congressional seats.

E. The Court has until at least February 22, 2022 to review, consider and select a congressional reapportionment plan before the 2022 General Primary Election would be impacted.

Finally, Petitioners have attempted to create a number of false "deadlines" by which the General Assembly, the Governor, and/or this Court must purportedly act to either enact or select a congressional reapportionment plan before the date of the 2022 General Primary Election must allegedly be moved or changed. However, based on the Pennsylvania Supreme Court's rulings and guidance in *League of Women Voters*, it would be possible and, indeed, entirely feasible to hold the 2022 General Primary Election on May 17, 2022, as currently scheduled, so long as a congressional redistricting plan is in place by February 22, 2022.

In *League of Women Voters*, the Governor and the Secretary of the Commonwealth took the position that the 2018 General Primary Election could be held on May 15, 2018, and would not need to be moved or changed, if a new congressional redistricting map was in place on or before February 20, 2018. *See* 178 A.3d at 791. Based on these representations by the Governor and the Secretary, the Supreme Court adopted its own remedial congressional redistricting plan on February

19, 2018, and approved of a Revised Election Calendar, as proposed by the Secretary and the Commissioner of the Bureau of Commissions, Elections and Legislation, which moved and shortened certain election-related deadlines for the 2018 General Primary Election.[10] *See League of Women Voters* 181 A.3d 1087-88. Specifically, the Revised Election Calendar for the 2018 General Primary Election provided, among other things, that: (a) February 27th would be the first day to circulate and file nomination petitions; (b) March 20th would be the last day to circulate and file nomination petitions; (c) March 27th would be the last day to file objections to nomination petitions; and (d) April 4th would be the last day for this Court to render decisions in cases involving objections to nomination petitions.[11]

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[10] Similarly, in *Mellow v. Mitchell*, 607 A.2d 204 (Pa. 1992), which involved an impasse between the General Assembly and the Governor similar to the one Petitioners portend here, the Supreme Court adopted a congressional redistricting plan and simultaneously made various adjustments to the election calendar to afford the Secretary adequate opportunity to implement the plan.

[11] Notably, the 2018 Revised Election Calendar includes a provision directing the county boards of elections to count any military-overseas absentee ballots received up to one week after the primary election to ensure compliance with the 45-day requirement of the Federal Uniformed and Overseas Citizens Absentee Voting Act ("UOCAVA"). *See* 52 U.S.C. § 20302(a)(8) (requiring states to "transmit a validly requested absentee ballot to an absent uniformed services voter or overseas voter … not later than 45 days before the election").

Given the Supreme Court's decision in *League of Women Voters*, this Court has, at a minimum, until at least February 22, 2022 to review, consider and select, if necessary, a congressional redistricting plan before the date of the 2022 General Primary Election would need to be moved or changed. This is entirely consistent with the February 20th deadline proposed by the Governor and the Secretary in *League of Women Voters* to ensure that the 2018 General Primary Election would be held on May 15, 2018. *See* 178 A.3d at 791. Indeed, the only notable factual difference between the election-related deadlines adopted and approved by the Supreme Court in *League of Women Voters* and this case is that the 2018 General Primary Election was scheduled for May 15th, and the 2022 General Primary Election is currently scheduled for May 17th, two days later. Thus, the Court can and should simply adopt and approve the same election-related deadlines from *League of Women Voters*, including each of the deadlines set forth in the Revised Election Calendar for the 2018 General Primary Election, with the addition of two extra days to accommodate the date discrepancy

between the 2018 and 2022 General Primary Elections.[12] Doing so would not only give the Court additional time to carefully review, consider, and select a new congressional redistricting plan, but it also would ensure that the 2022 General Primary Election remains on schedule for May 17, 2022.

V. CONCLUSION

For the foregoing reasons, the Court should adopt Reschenthaler 1 or Reschenthaler 2 as the Court-adopted congressional map.

[12] A Revised Election Calendar for the 2022 General Primary Election based on *League of Women Voters* would provide, among other things, that: (a) February 29th would be the first day to circulate and file nomination petitions; (b) March 22th would be the last day to circulate and file nomination petitions; (c) March 29th would be the last day to file objections to nomination petitions; and (d) April 6th would be the last day for this Court to render decisions in cases involving objections to nomination petitions. Again, this accommodates the two-day discrepancy between the March 15, 2018 General Primary Election and the May 17, 2022 General Primary Election.

Respectfully submitted,

Dated: January 24, 2022

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WORD COUNT CERTIFICATION

I hereby certify that the above brief complies with the word count limit of Pa.R.A.P. 2135(a)(1). Based on the word count feature of the word processing system used to prepare this brief, this document contains 8776 words, exclusive of the cover page, tables, and the signature block.

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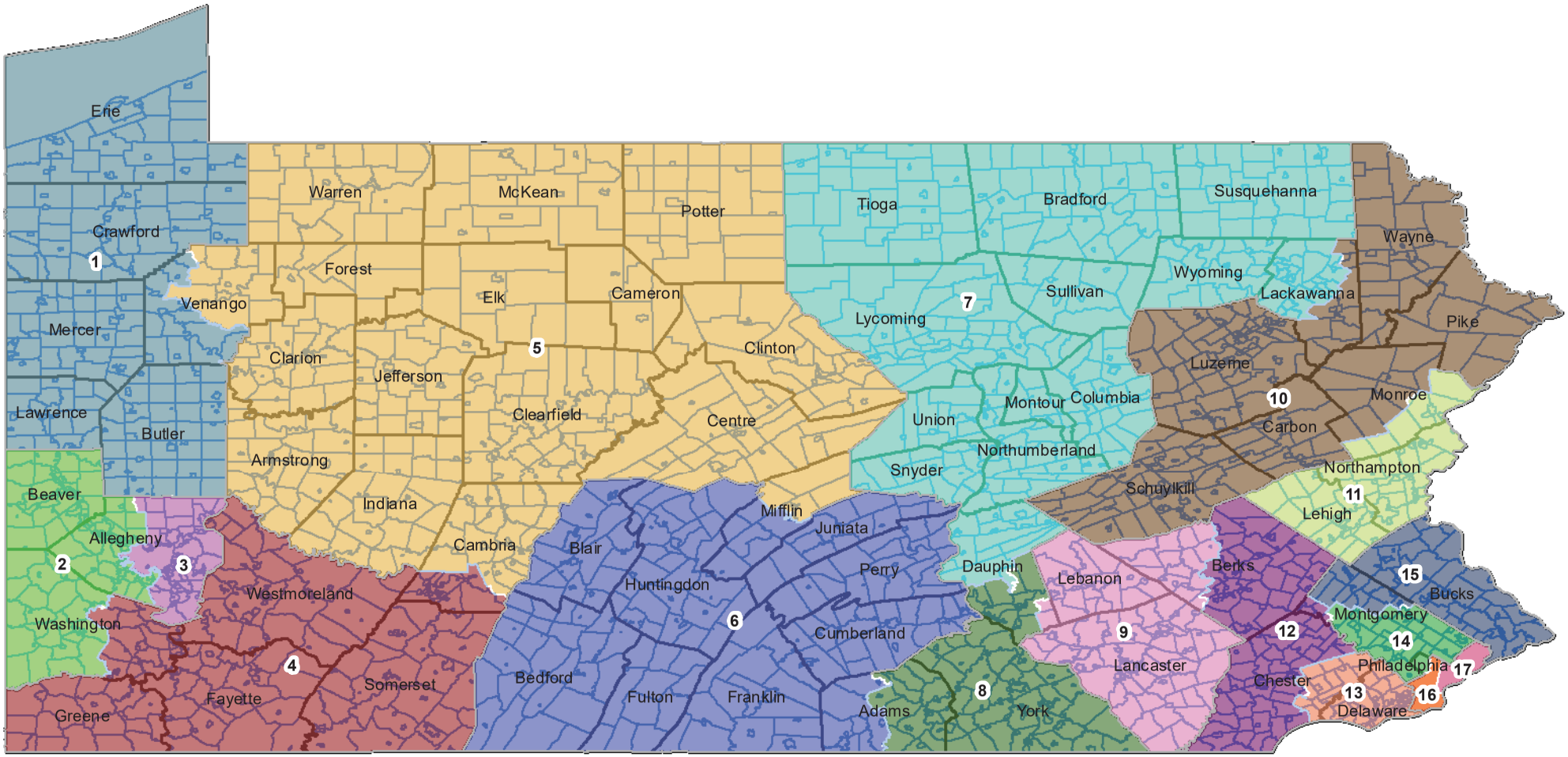
Exhibit A

Reschenthaler 1 Congressional Map



Counties
Municipalities
District 1
District 2
District 3
District 4
District 5
District 6
District 7
District 8
District 9
District 10
District 11
District 12
District 13
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District 15
District 16
District 17

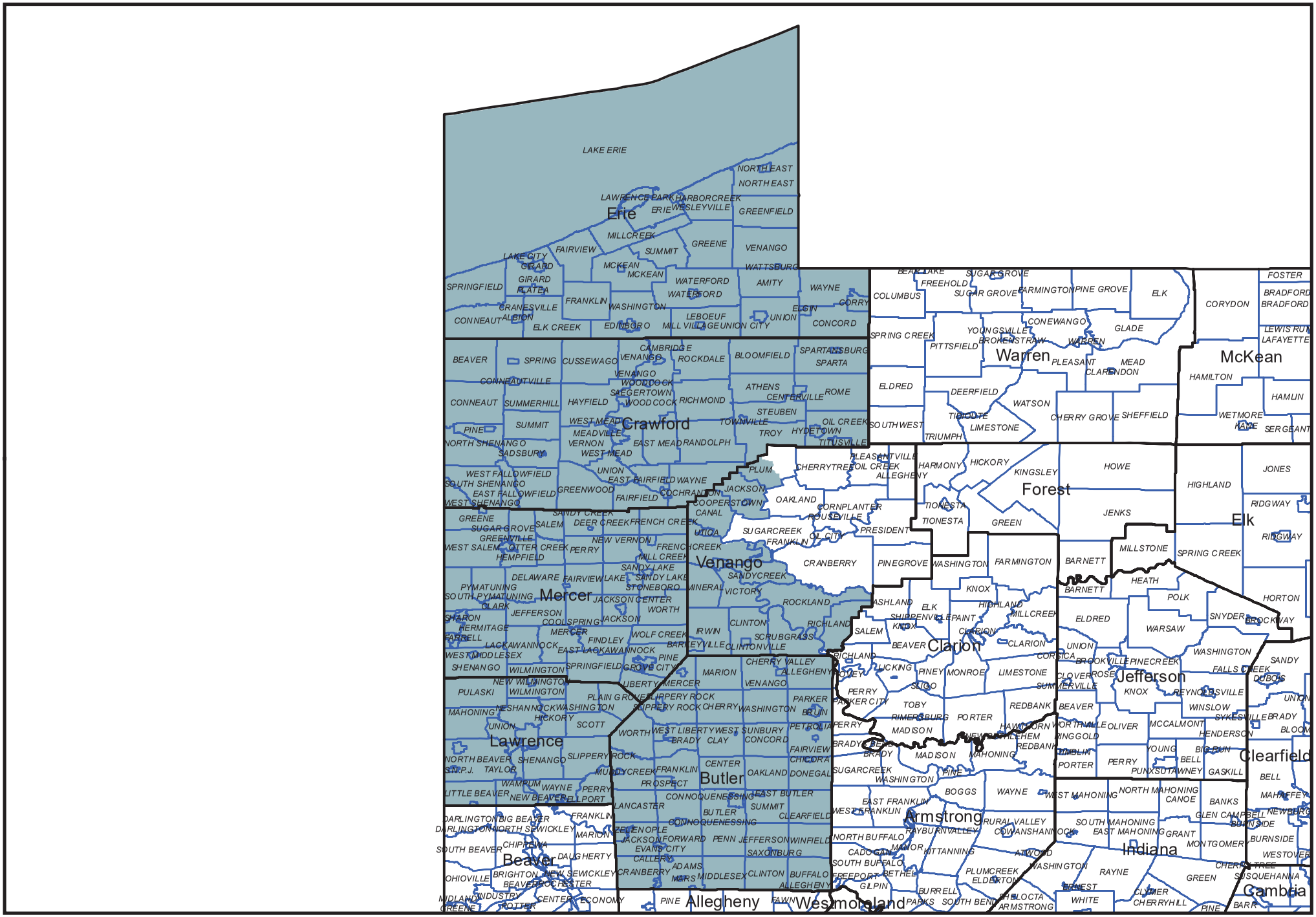
0 25 50 100 Miles

Reschenthaler 1 Congressional Map - District 1

0 12.5 25 50 Miles

Counties

Municipalities

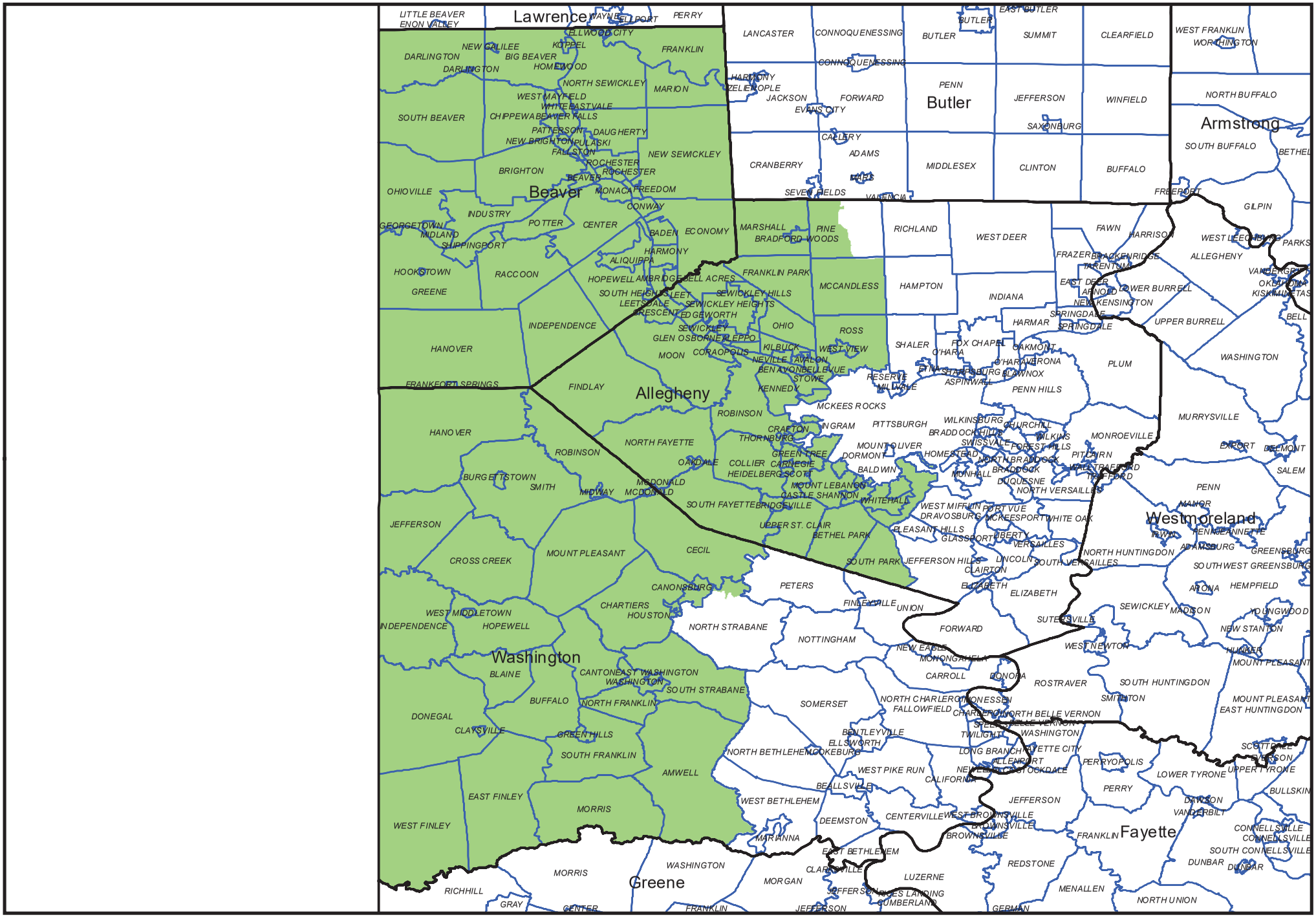


Reschenthaler 1 Congressional Map - District 2

0 5 10 20 Miles

Counties

Municipalities

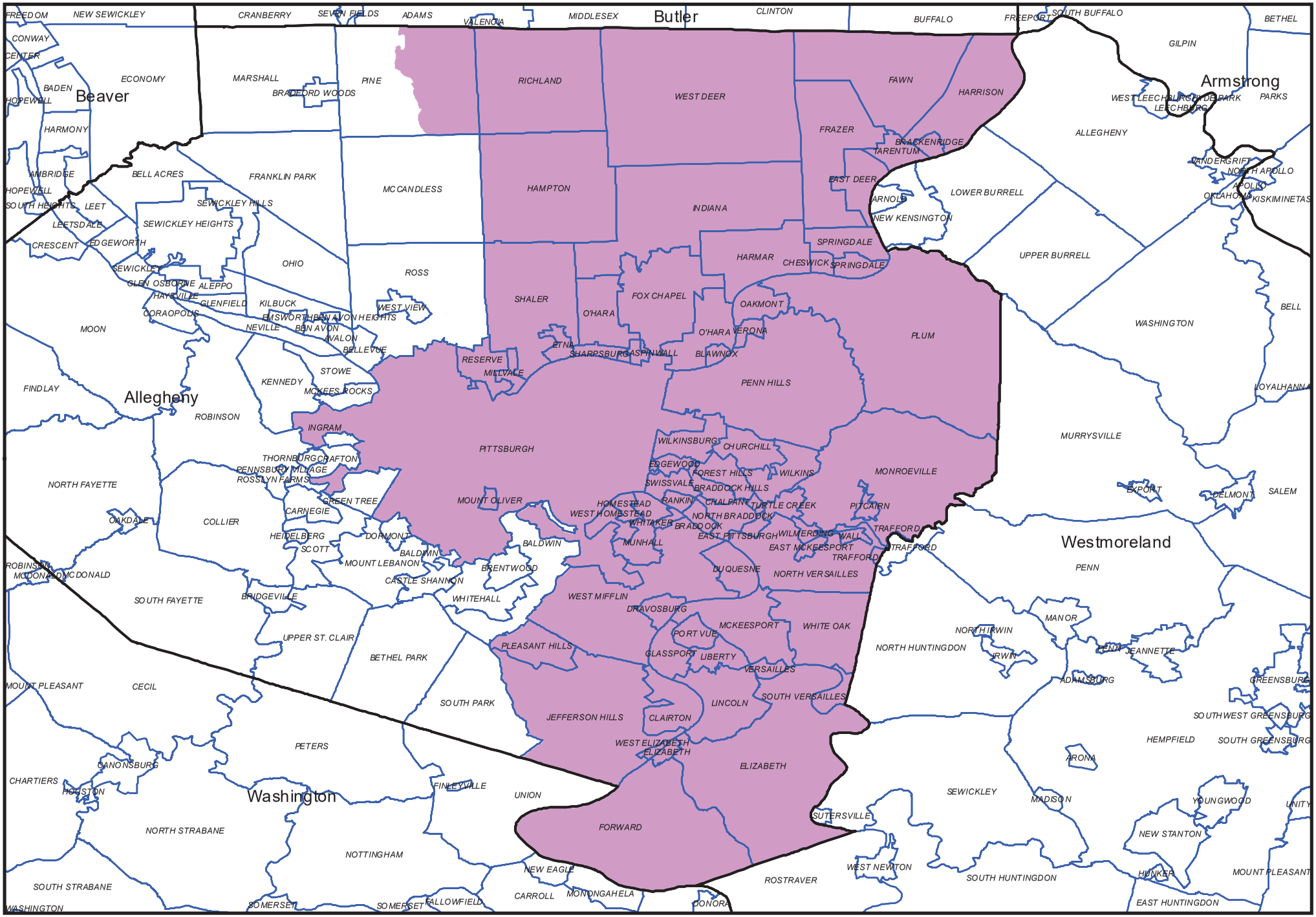


Reschenthaler 1 Congressional Map - District 3

0 3.5 7 14 Miles

Counties

Municipalities

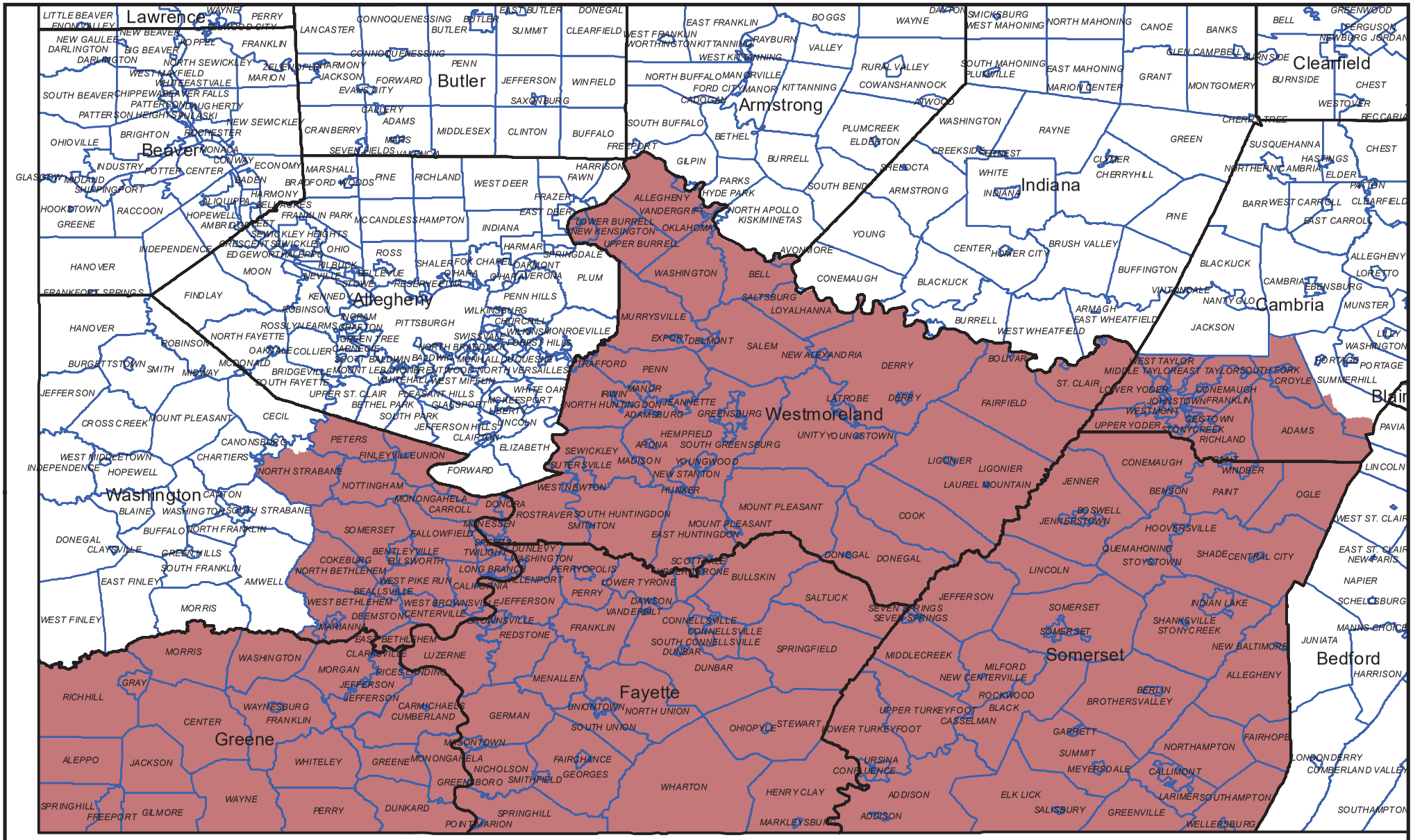


Reschenthaler 1 Congressional Map - District 4

0 5 10 20 Miles

Counties

Municipalities

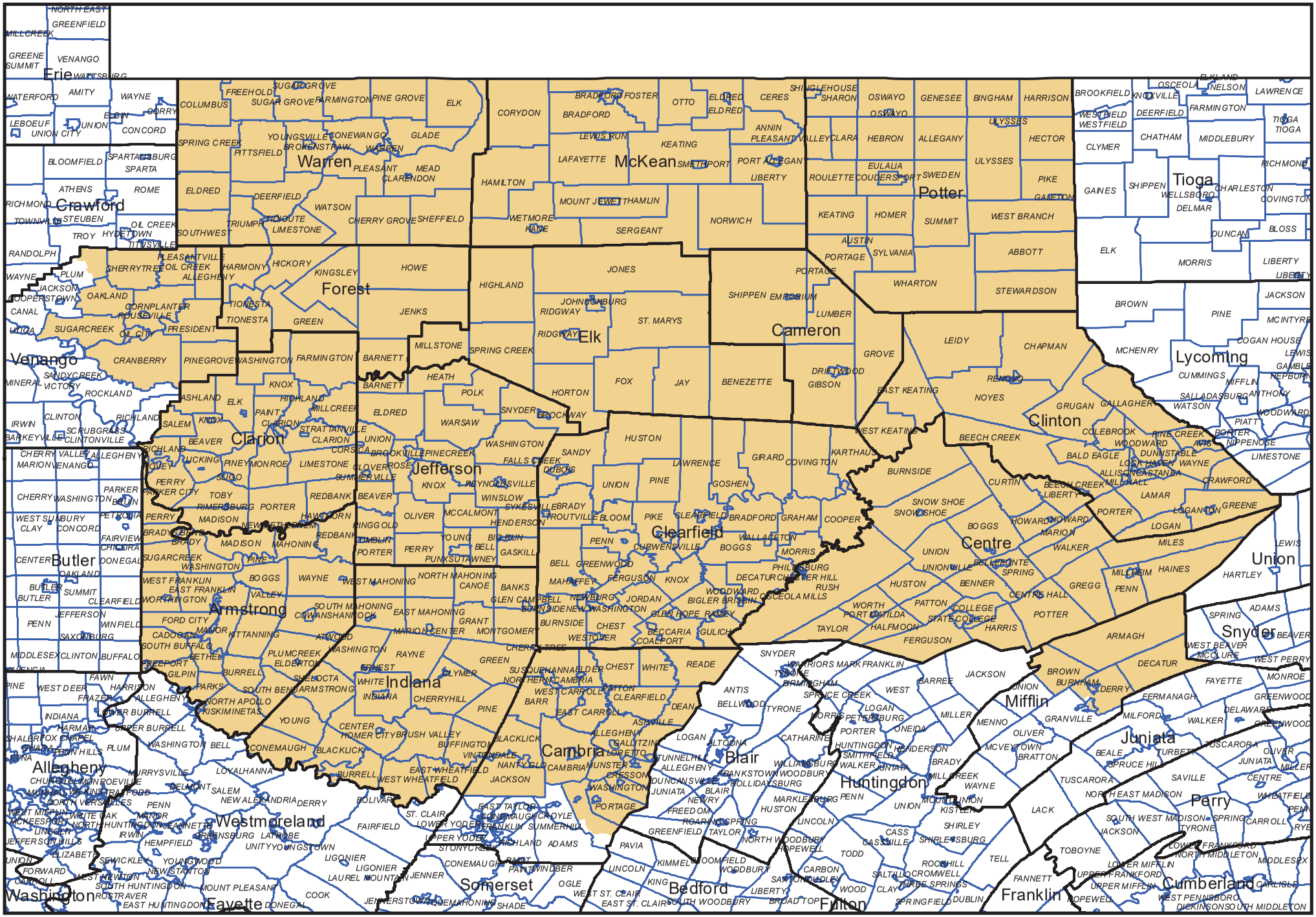


Reschenthaler 1 Congressional Map - District 5

0 12.5 25 50 Miles

Counties

Municipalities

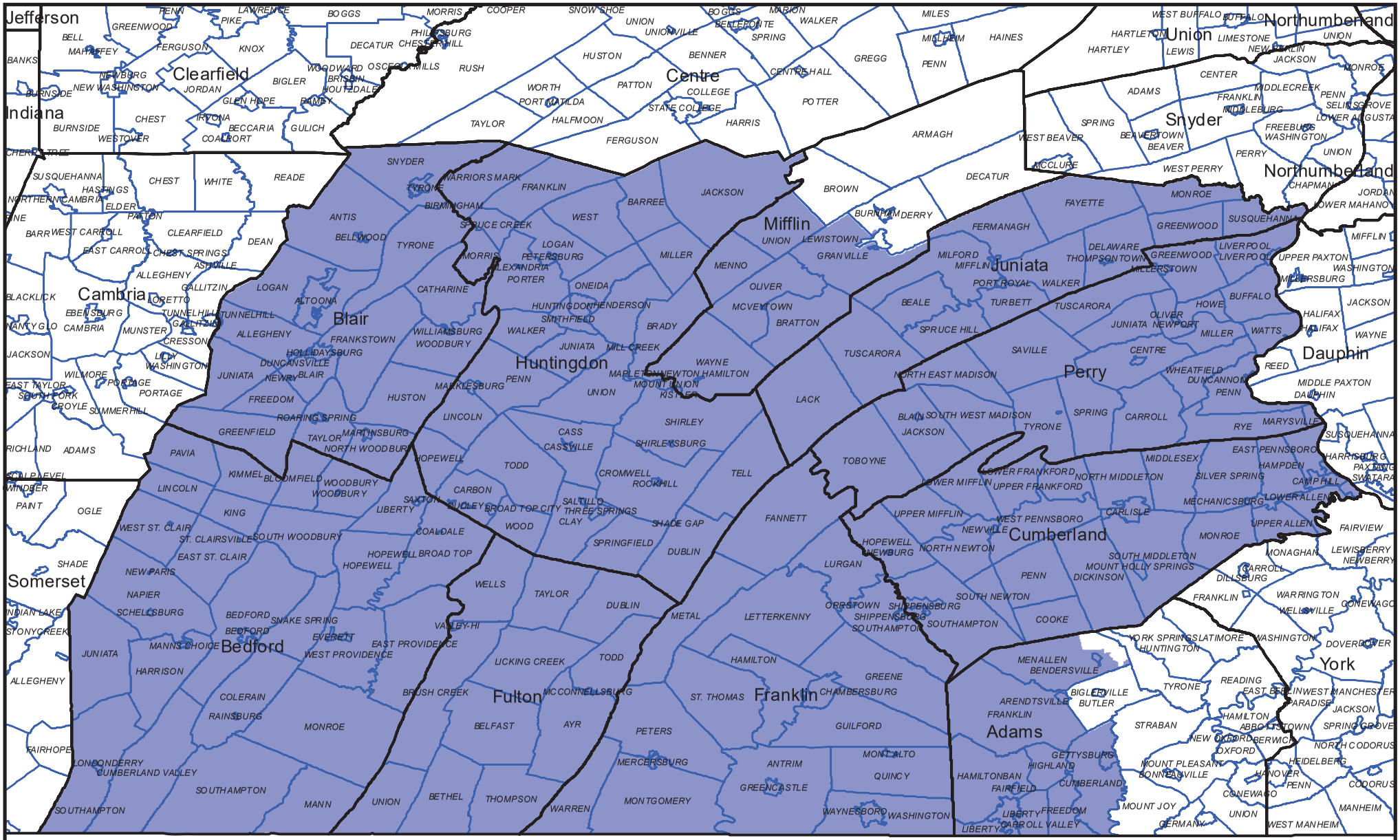


Reschenthaler 1 Congressional Map - District 6

0 10 20 40 Miles

Counties

Municipalities

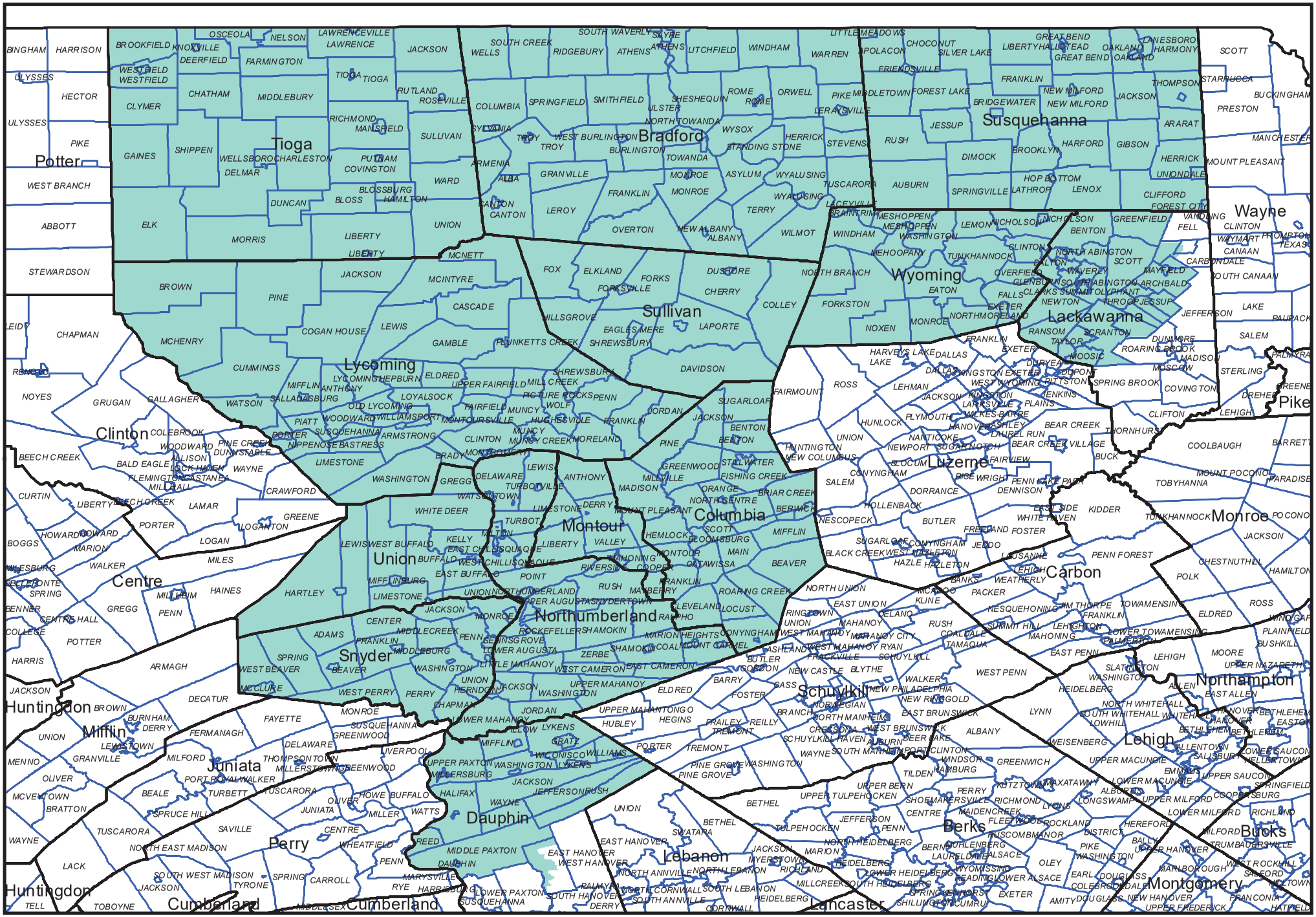


Reschenthaler 1 Congressional Map - District 7

0 12.5 25 50 Miles

Counties

Municipalities

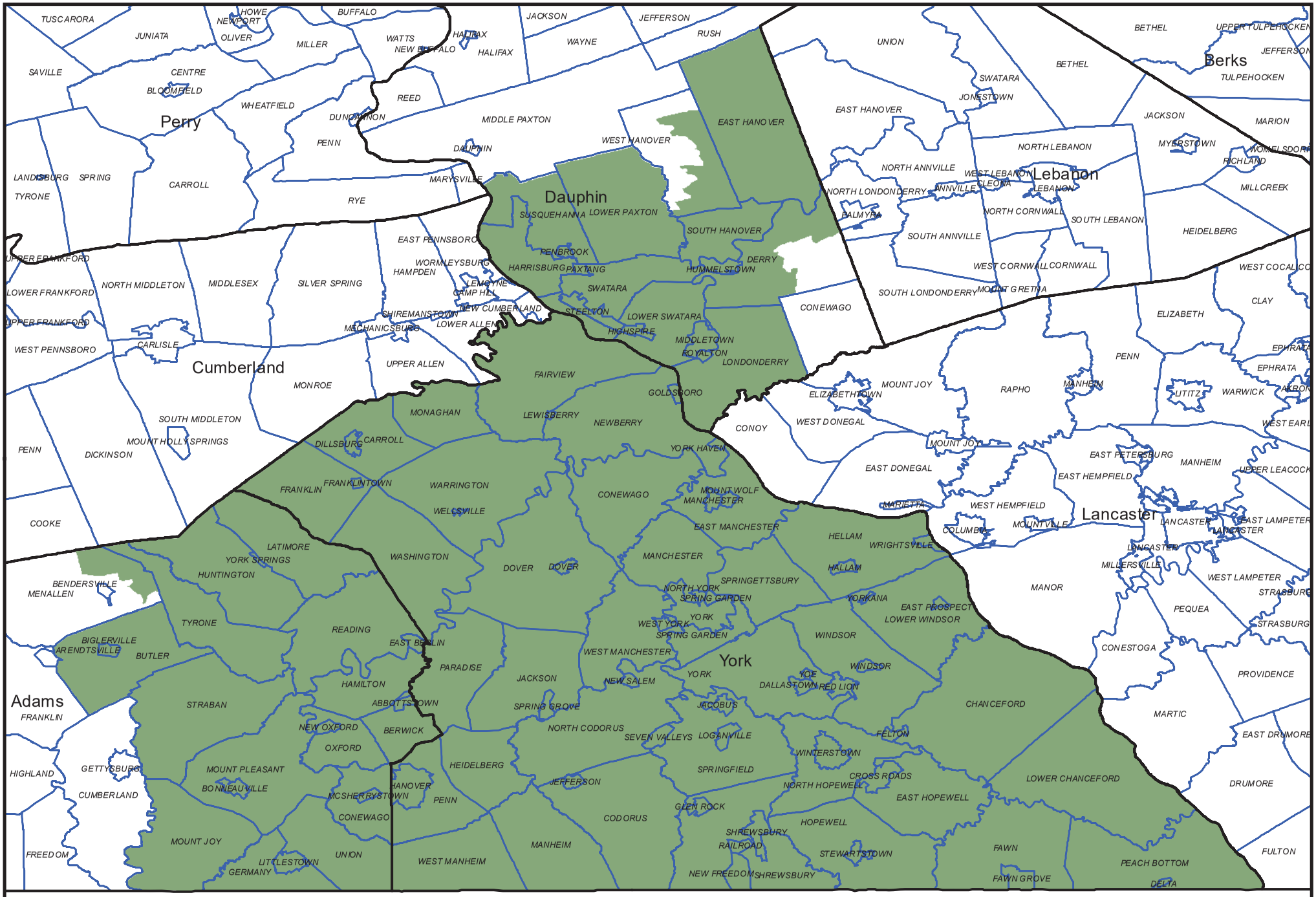


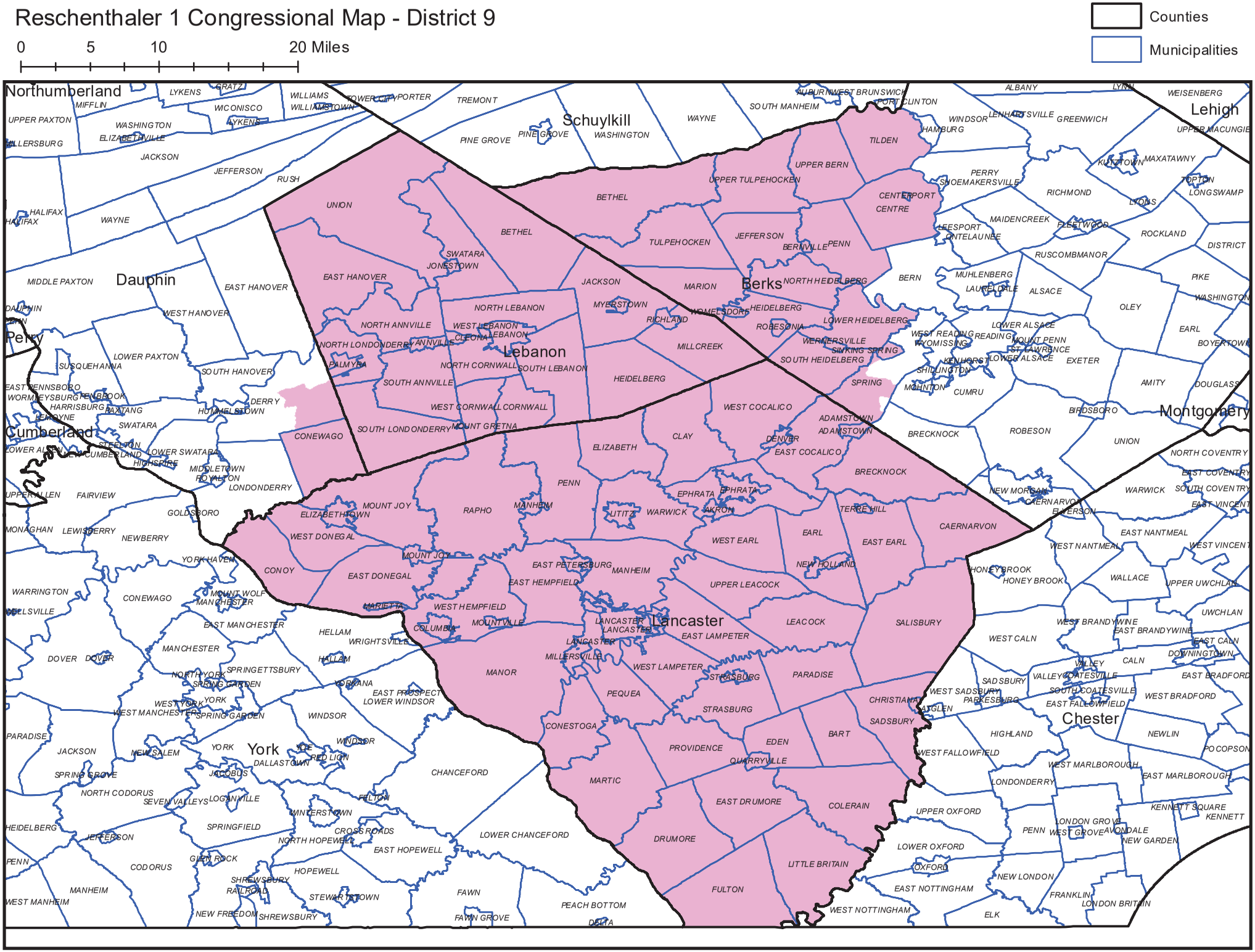
Reschenthaler 1 Congressional Map - District 8

0 5 10 20 Miles

Counties

Municipalities



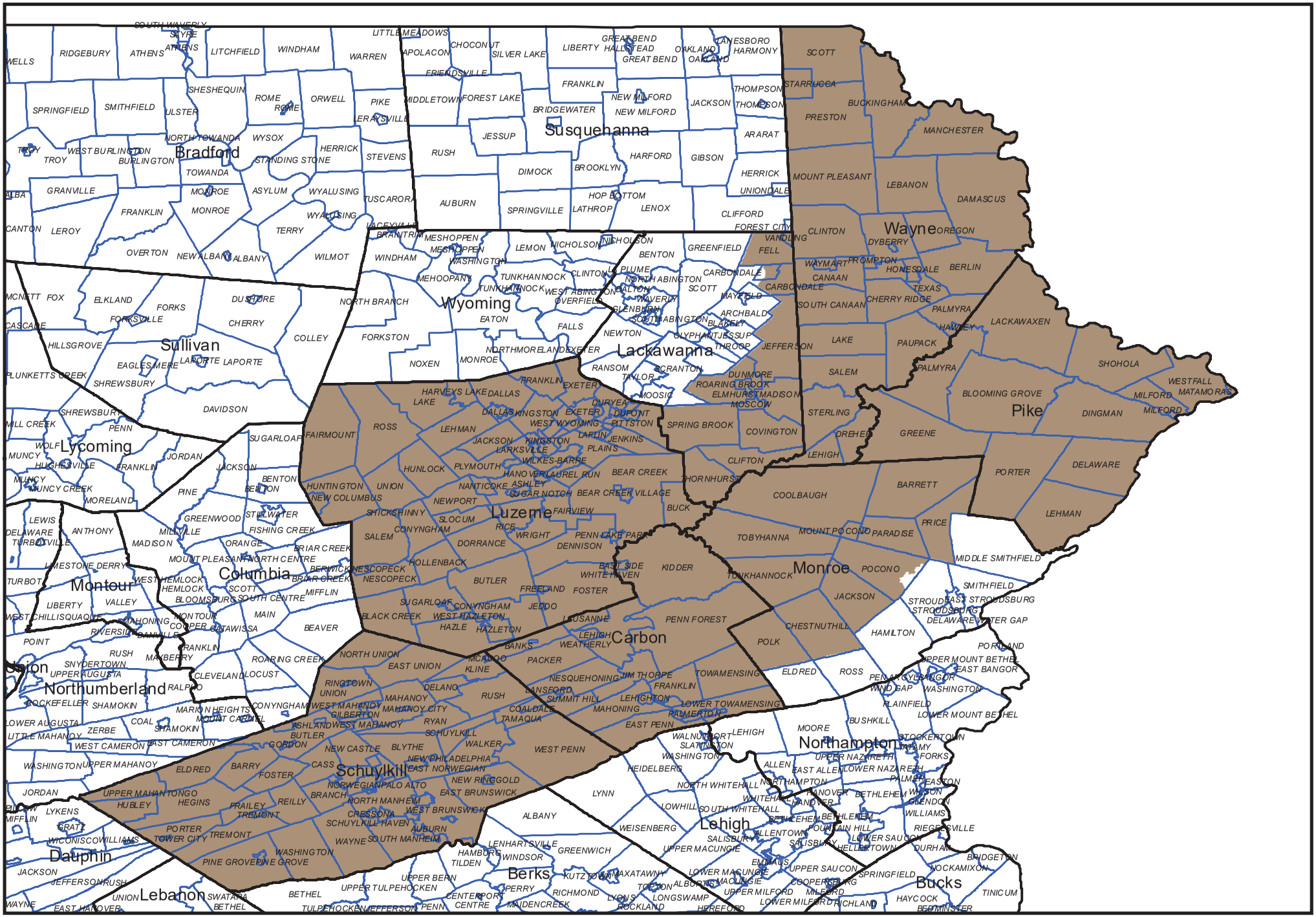

Reschenthaler 1 Congressional Map - District 9
0 5 10 20 Miles
Counties
Municipalities
Northumberland
Schuylkill
Lehigh
Dauphin
Berks
Perry
Lebanon
Cumberland
Montgomery
Lancaster
York
Chester

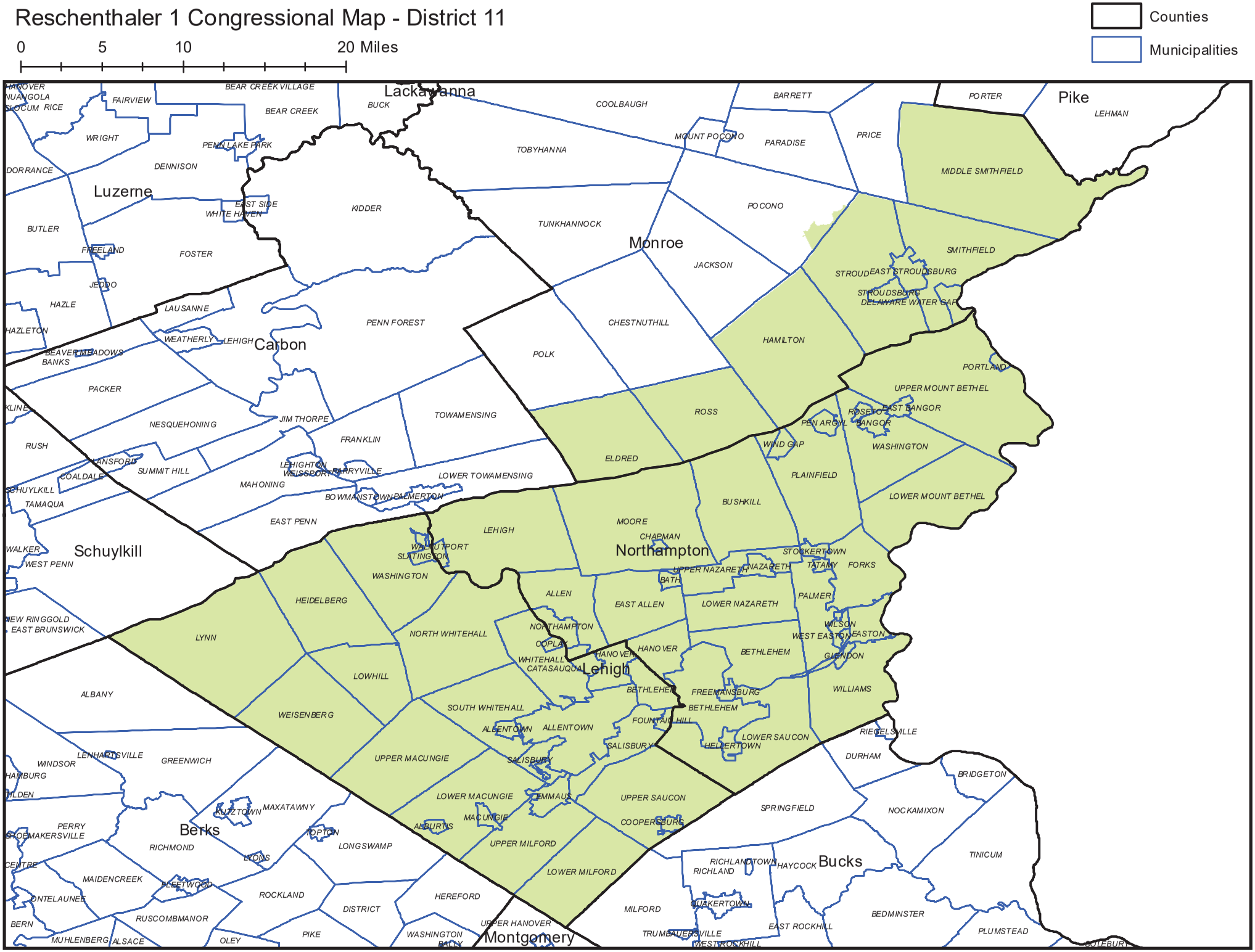
Reschenthaler 1 Congressional Map - District 10

0 10 20 40 Miles

Counties

Municipalities



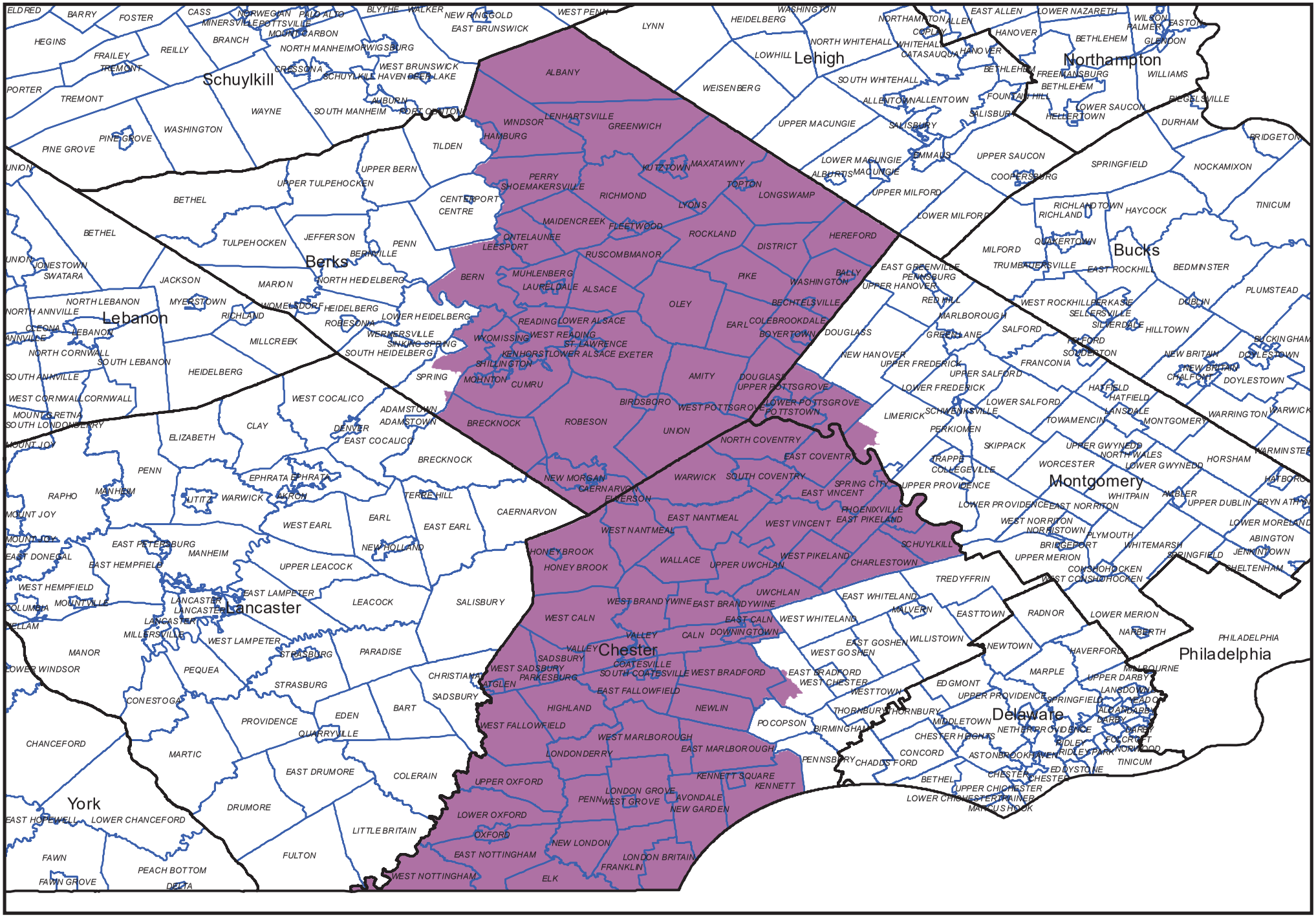

Reschenthaler 1 Congressional Map - District 11
0
5
10
20 Miles
Counties
Municipalities
Lackawanna
Pike
Luzerne
Monroe
Carbon
Schuylkill
Northampton
Lehigh
Berks
Bucks
Montgomery
HANOVER
NUANGOLA
SLOCUM
RICE
FAIRVIEW
BEAR CREEK VILLAGE
BEAR CREEK
BUCK
COOLBAUGH
BARRETT
PORTER
LEHMAN
WRIGHT
PENN LAKE PARK
TOBYHANNA
MOUNT POCONO
PARADISE
PRICE
DORRANCE
DENNISON
MIDDLE SMITHFIELD
EAST SIDE
WHITE HAVEN
KIDDER
POCONO
BUTLER
TUNKHANNOCK
FREELAND
FOSTER
SMITHFIELD
JEDDO
JACKSON
STROUD
EAST STROUDSBURG
STROUDSBURG
DELAWARE WATER GAP
HAZLE
LAUSANNE
HAZLETON
PENN FOREST
CHESTNUTHILL
WEATHERLY
LEHIGH
HAMILTON
BEAVER MEADOWS
BANKS
POLK
PORTLAND
PACKER
UPPER MOUNT BETHEL
ROSS
EAST BANGOR
ROSETO
BANGOR
NESQUEHONING
JIM THORPE
TOWAMENSING
PEN ARGYL
WIND GAP
WASHINGTON
RUSH
FRANKLIN
ELDRED
ANSFORD
LEHIGHTON
WEISSPORT
PARRYVILLE
SUMMIT HILL
PLAINFIELD
COALDALE
LOWER TOWAMENSING
MAHONING
LOWER MOUNT BETHEL
SCHUYLKILL
BOWMANSTOWN
PALMERTON
BUSHKILL
TAMAQUA
EAST PENN
MOORE
LEHIGH
CHAPMAN
WALKER
WALNUTPORT
SLATINGTON
STOCKERTOWN
WEST PENN
UPPER NAZARETH
NAZARETH
TATAMY
FORKS
WASHINGTON
BATH
HEIDELBERG
ALLEN
PALMER
EAST ALLEN
LOWER NAZARETH
NEW RINGGOLD
EAST BRUNSWICK
LYNN
NORTH WHITEHALL
NORTHAMPTON
WILSON
WEST EASTON
EASTON
COPLAY
HANOVER
HANOVER
BETHLEHEM
GLENDON
WHITEHALL
CATASAUQUA
LOWHILL
BETHLEHEM
FREEMANSBURG
WILLIAMS
ALBANY
SOUTH WHITEHALL
BETHLEHEM
WEISENBERG
FOUNTAIN HILL
ALLENTOWN
ALLENTOWN
LOWER SAUCON
RIEGELSVILLE
SALISBURY
HELLERTOWN
LENHARTSVILLE
GREENWICH
UPPER MACUNGIE
SALISBURY
DURHAM
WINDSOR
HAMBURG
BRIDGETON
LOWER MACUNGIE
EMMAUS
UPPER SAUCON
SPRINGFIELD
NOCKAMIXON
KUTZTOWN
MAXATAWNY
MACUNGIE
ALBURTIS
COOPERSBURG
PERRY
BERKS
RICHMOND
TOPTON
LONGSWAMP
UPPER MILFORD
TINICUM
LYONS
RICHLANDTOWN
HAYCOCK
BUCKS
MAIDENCREEK
FLEETWOOD
LOWER MILFORD
RICHLAND
ROCKLAND
HEREFORD
QUAKERTOWN
BEDMINSTER
DISTRICT
MILFORD
RUSCOMBMANOR
EAST ROCKHILL
PLUMSTEAD
UPPER HANOVER
WASHINGTON
TRUMBAUERSVILLE
MUHLENBERG
ALSACE
OLEY
PIKE
MONTGOMERY
WESTROCKHILL

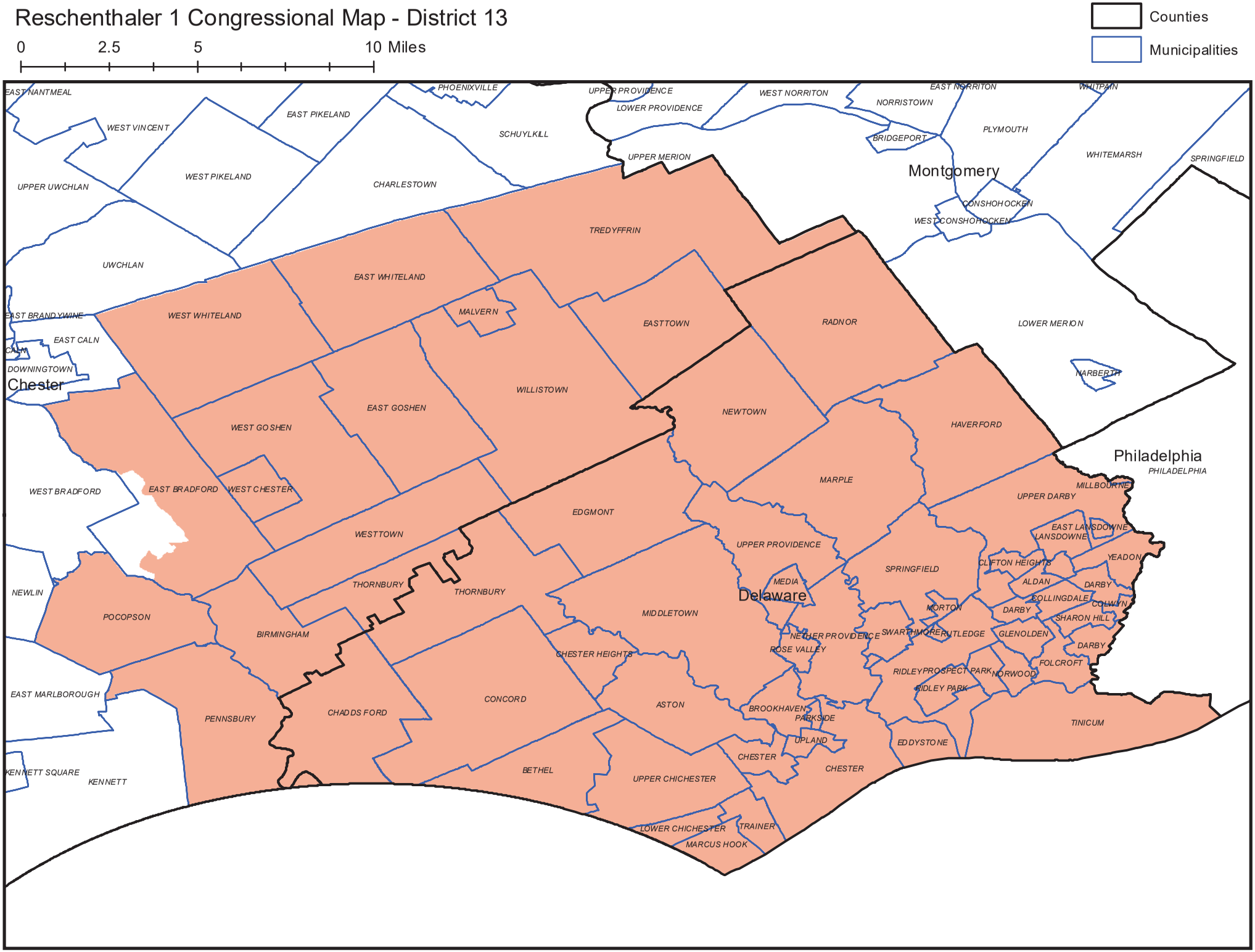
Reschenthaler 1 Congressional Map - District 12

0 5 10 20 Miles

Counties

Municipalities



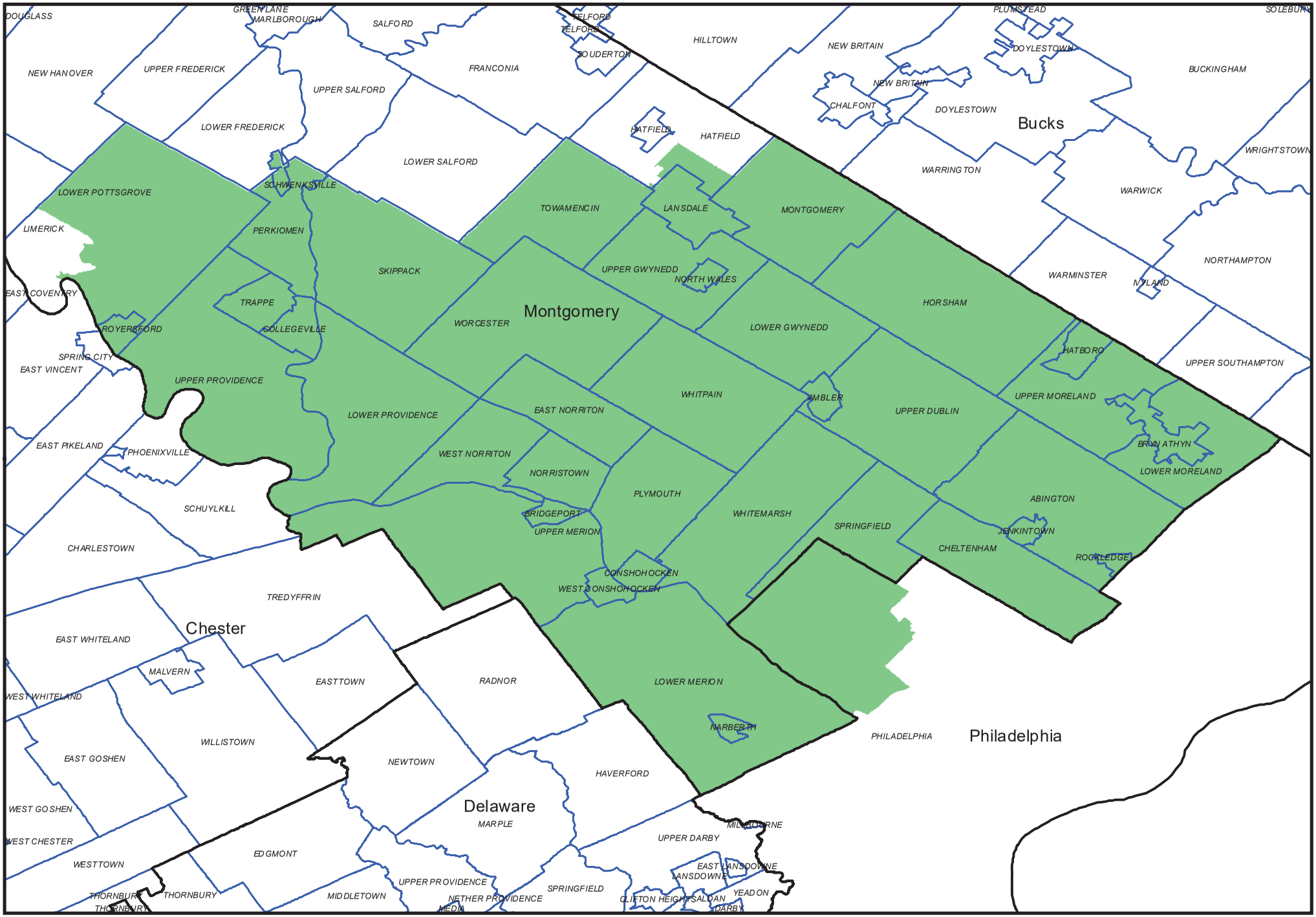

Reschenthaler 1 Congressional Map - District 13
0
2.5
5
10 Miles
Counties
Municipalities
EAST NANTMEAL
PHOENIXVILLE
UPPER PROVIDENCE
WEST NORRITON
EAST NORRITON
WHITPAIN
NORRISTOWN
LOWER PROVIDENCE
WEST VINCENT
EAST PIKELAND
SCHUYLKILL
BRIDGEPORT
PLYMOUTH
WHITEMARSH
SPRINGFIELD
UPPER MERION
Montgomery
UPPER UWCHLAN
WEST PIKELAND
CHARLESTOWN
CONSHOHOCKEN
WEST CONSHOHOCKEN
TREDYFFRIN
UWCHLAN
EAST WHITELAND
WEST WHITELAND
MALVERN
EASTTOWN
RADNOR
LOWER MERION
EAST BRANDYWINE
EAST CALN
CALN
DOWNINGTOWN
Chester
NARBERTH
WILLISTOWN
EAST GOSHEN
NEWTOWN
HAVERFORD
WEST GOSHEN
Philadelphia
PHILADELPHIA
WEST BRADFORD
EAST BRADFORD
WEST CHESTER
MARPLE
MILLBOURNE
UPPER DARBY
EDGMONT
EAST LANSDOWNE
LANSDOWNE
WESTTOWN
UPPER PROVIDENCE
YEADON
SPRINGFIELD
CLIFTON HEIGHTS
ALDAN
DARBY
NEWLIN
THORNBURY
THORNBURY
MEDIA
Delaware
COLLINGDALE
COLWYN
MORTON
DARBY
POCOPSON
MIDDLETOWN
SHARON HILL
BIRMINGHAM
NETHER PROVIDENCE
SWARTHMORE
RUTLEDGE
GLENOLDEN
ROSE VALLEY
DARBY
CHESTER HEIGHTS
RIDLEY
PROSPECT PARK
NORWOOD
FOLCROFT
RIDLEY PARK
EAST MARLBOROUGH
CONCORD
ASTON
BROOKHAVEN
PARKSIDE
TINICUM
PENNSBURY
CHADDS FORD
UPLAND
EDDYSTONE
CHESTER
CHESTER
KENNETT SQUARE
KENNETT
BETHEL
UPPER CHICHESTER
LOWER CHICHESTER
TRAINER
MARCUS HOOK

Reschenthaler 1 Congressional Map - District 14

0 2.75 5.5 11 Miles

Counties

Municipalities

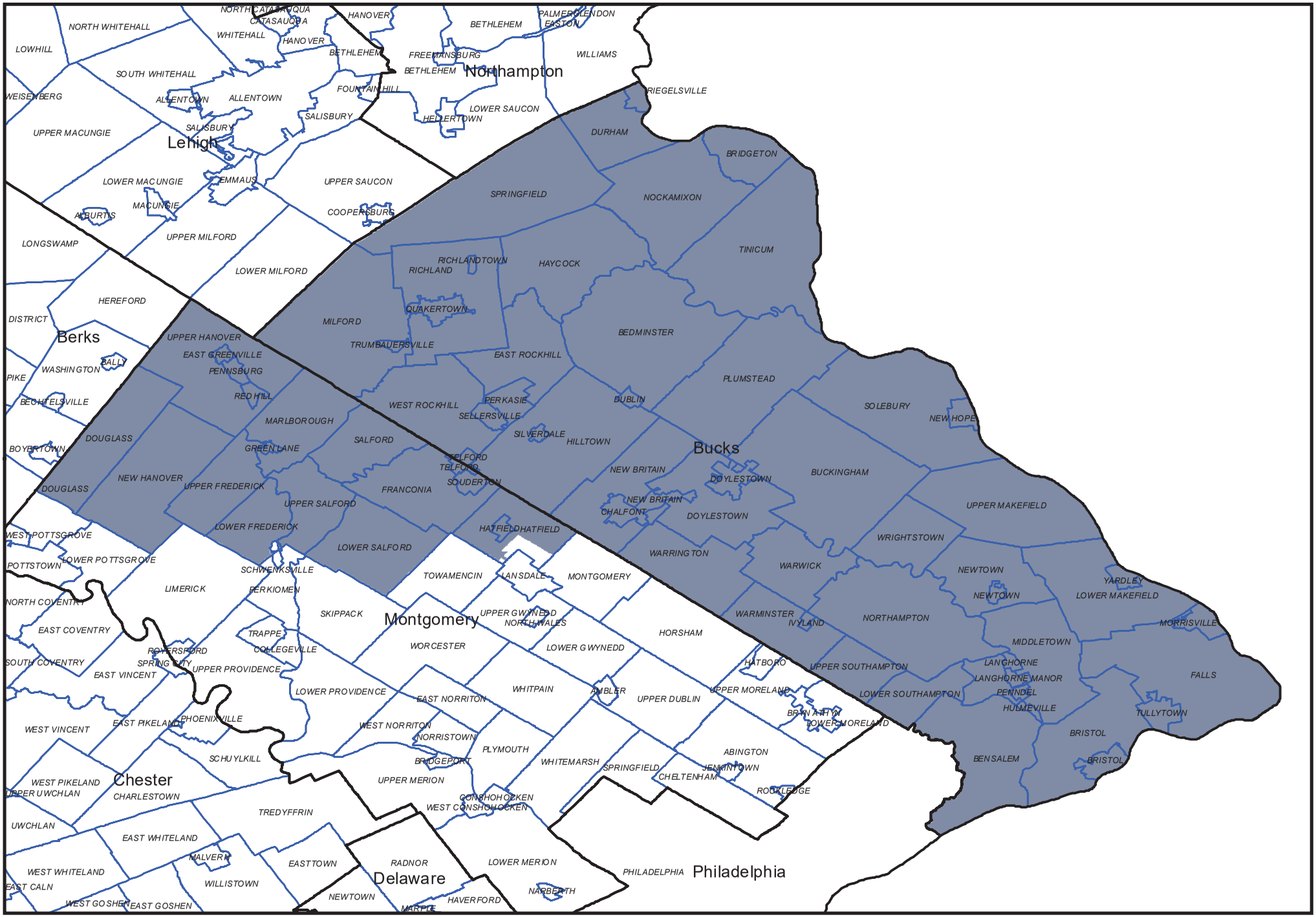


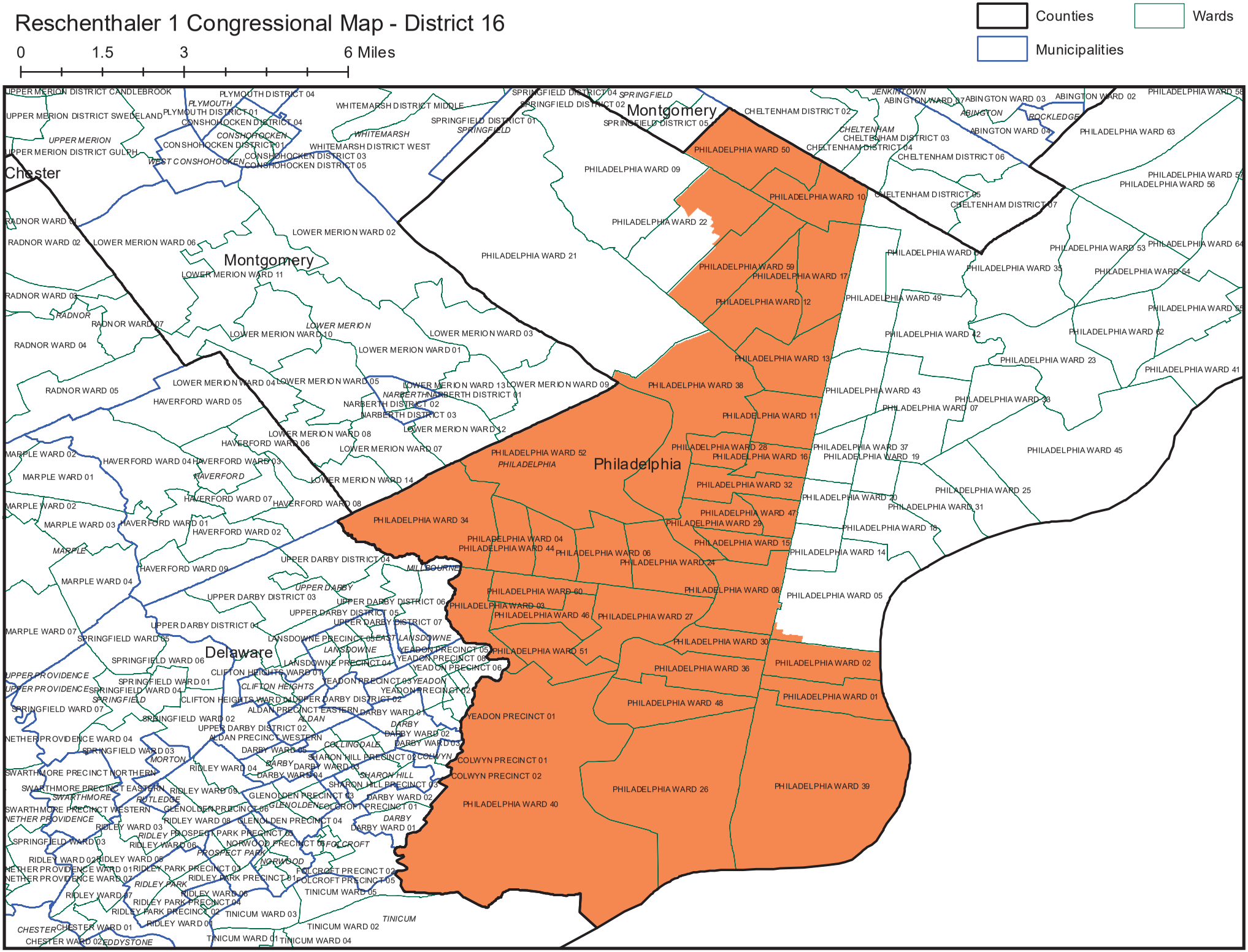
Reschenthaler 1 Congressional Map - District 15

0 4.75 9.5 19 Miles

Counties

Municipalities




Reschenthaler 1 Congressional Map - District 16
0
1.5
3
6 Miles
Counties
Municipalities
Wards
Philadelphia
Montgomery
Delaware
Chester

Reschenthaler 1 Congressional Map - District 17

0 1.5 3 6 Miles

Counties
Municipalities
Wards

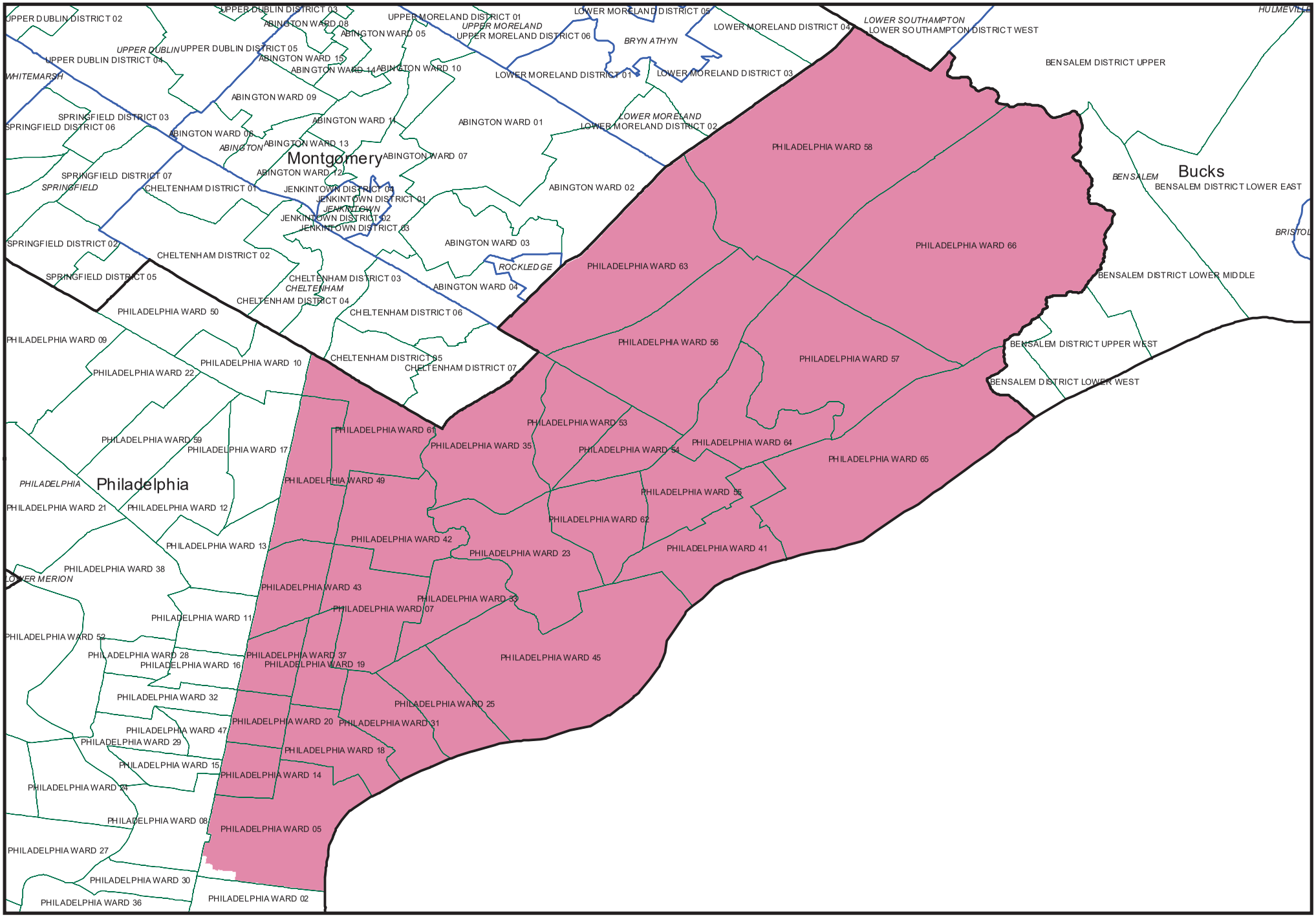
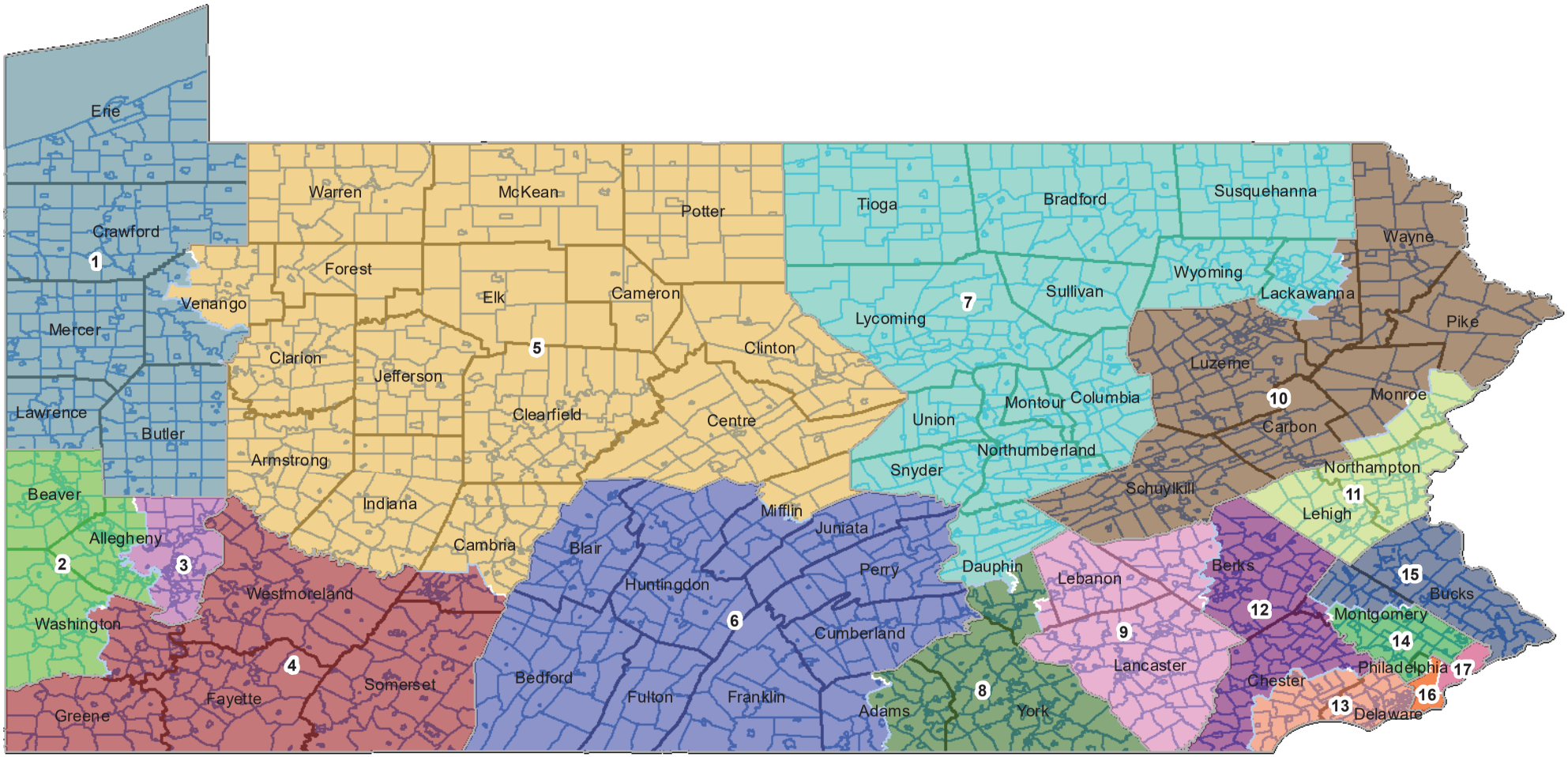


Exhibit B

Reschenthaler 2 Congressional Map



Counties
Municipalities
District 1
District 2
District 3
District 4
District 5
District 6
District 7
District 8
District 9
District 10
District 11
District 12
District 13
District 14
District 15
District 16
District 17

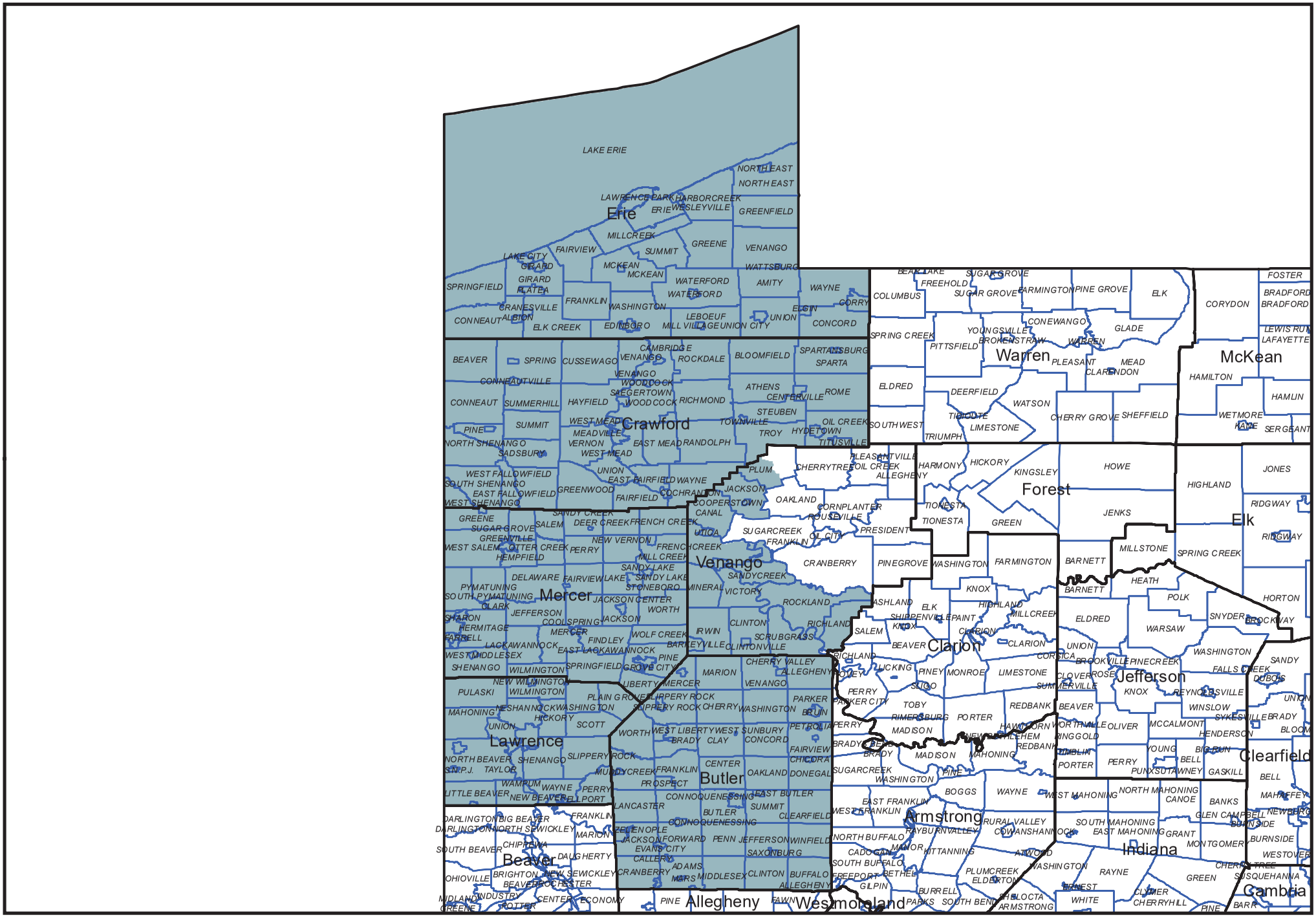
0 25 50 100 Miles

Reschenthaler 2 Congressional Map - District 1

0 12.5 25 50 Miles

Counties

Municipalities

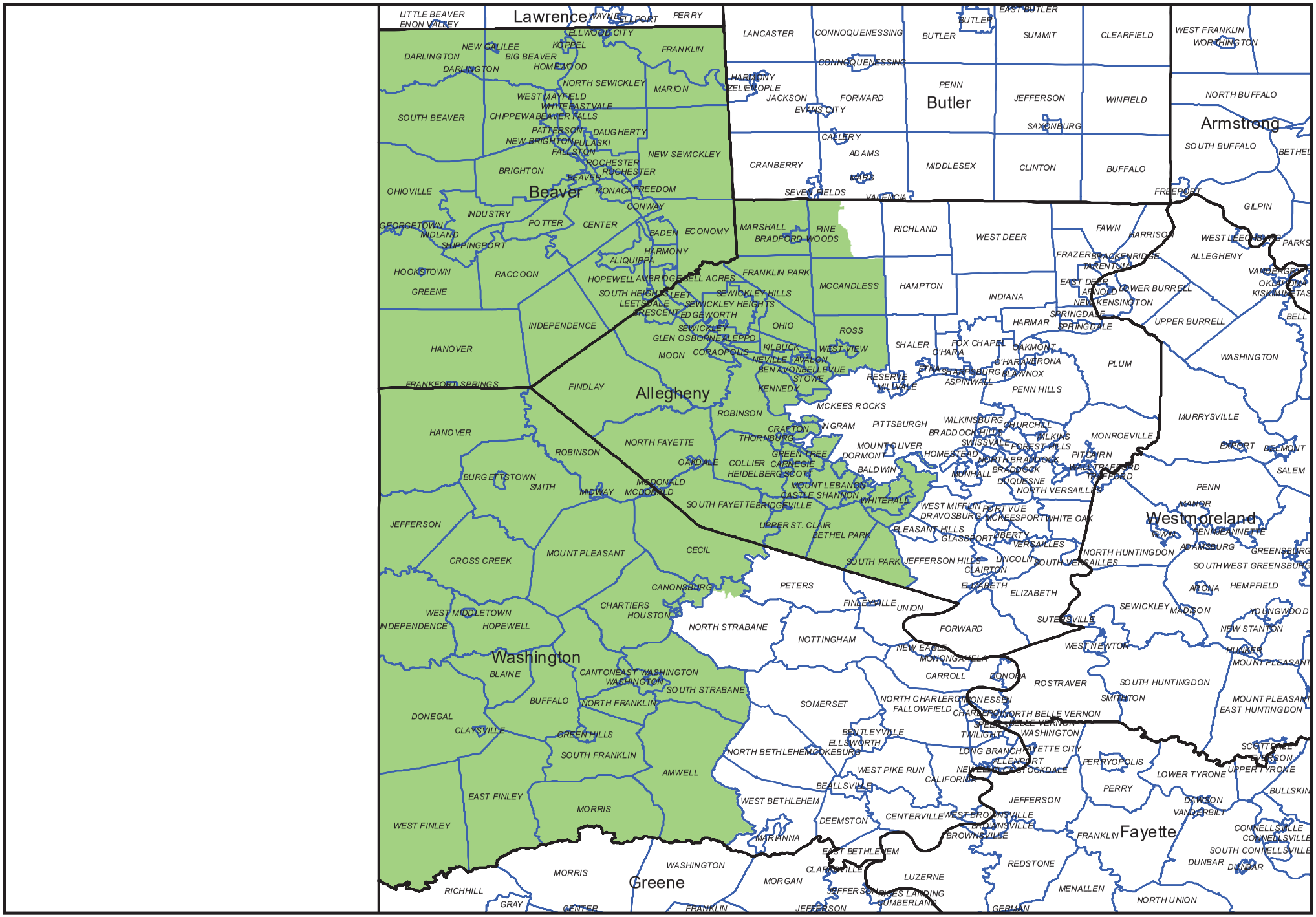


Reschenthaler 2 Congressional Map - District 2

0 5 10 20 Miles

Counties

Municipalities

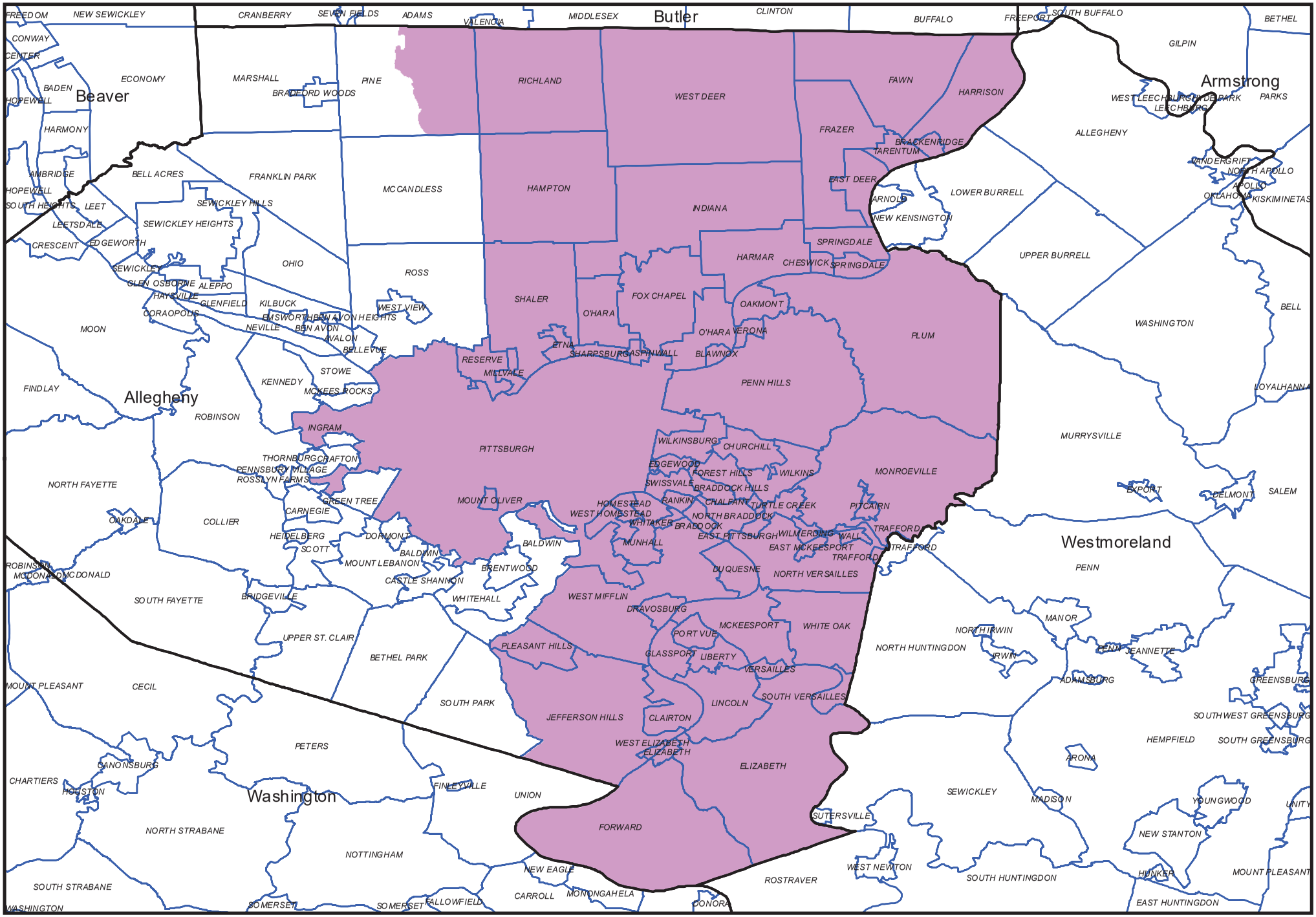


Reschenthaler 2 Congressional Map - District 3

0 3.5 7 14 Miles

Counties

Municipalities

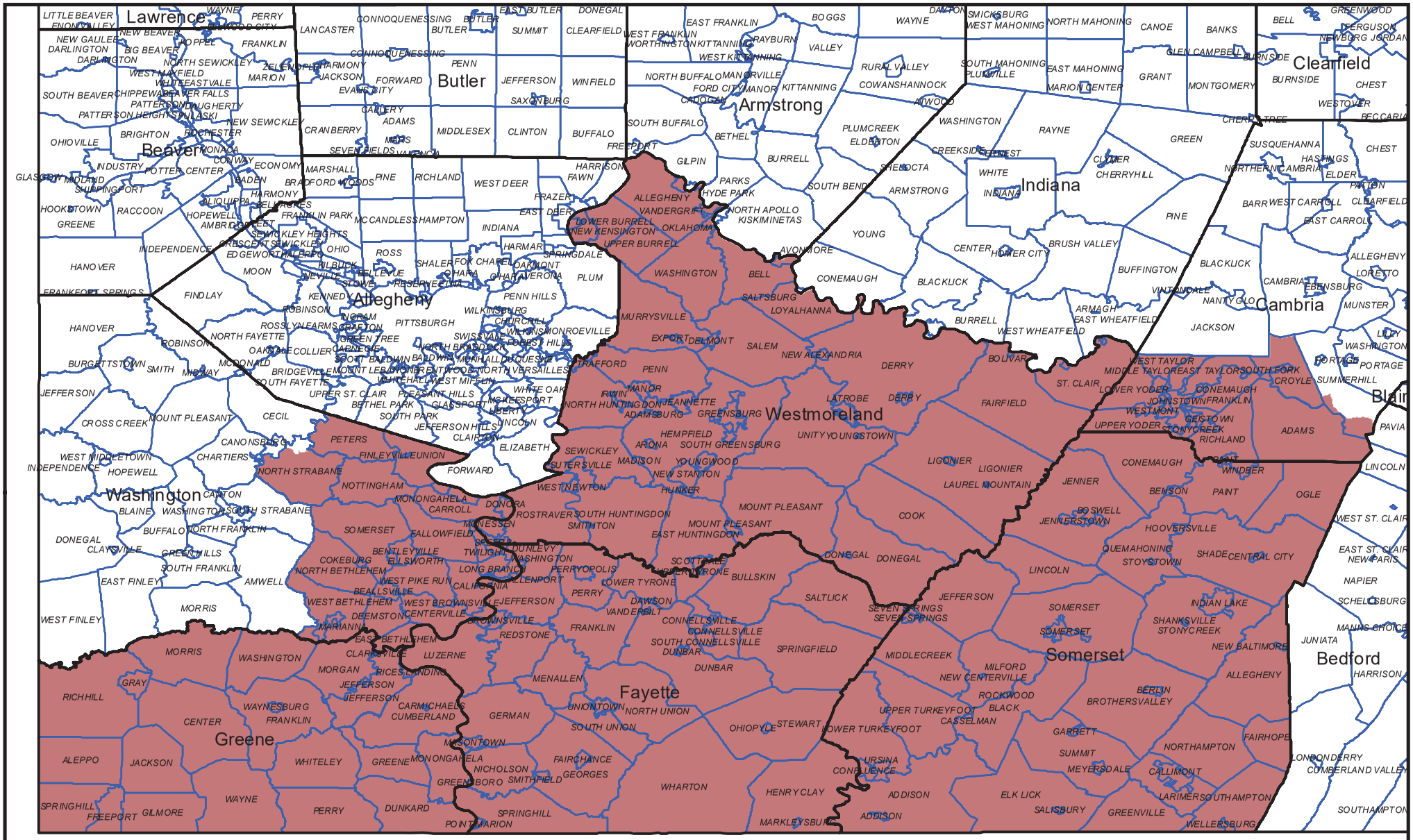


Reschenthaler 2 Congressional Map - District 4

0 5 10 20 Miles

Counties

Municipalities

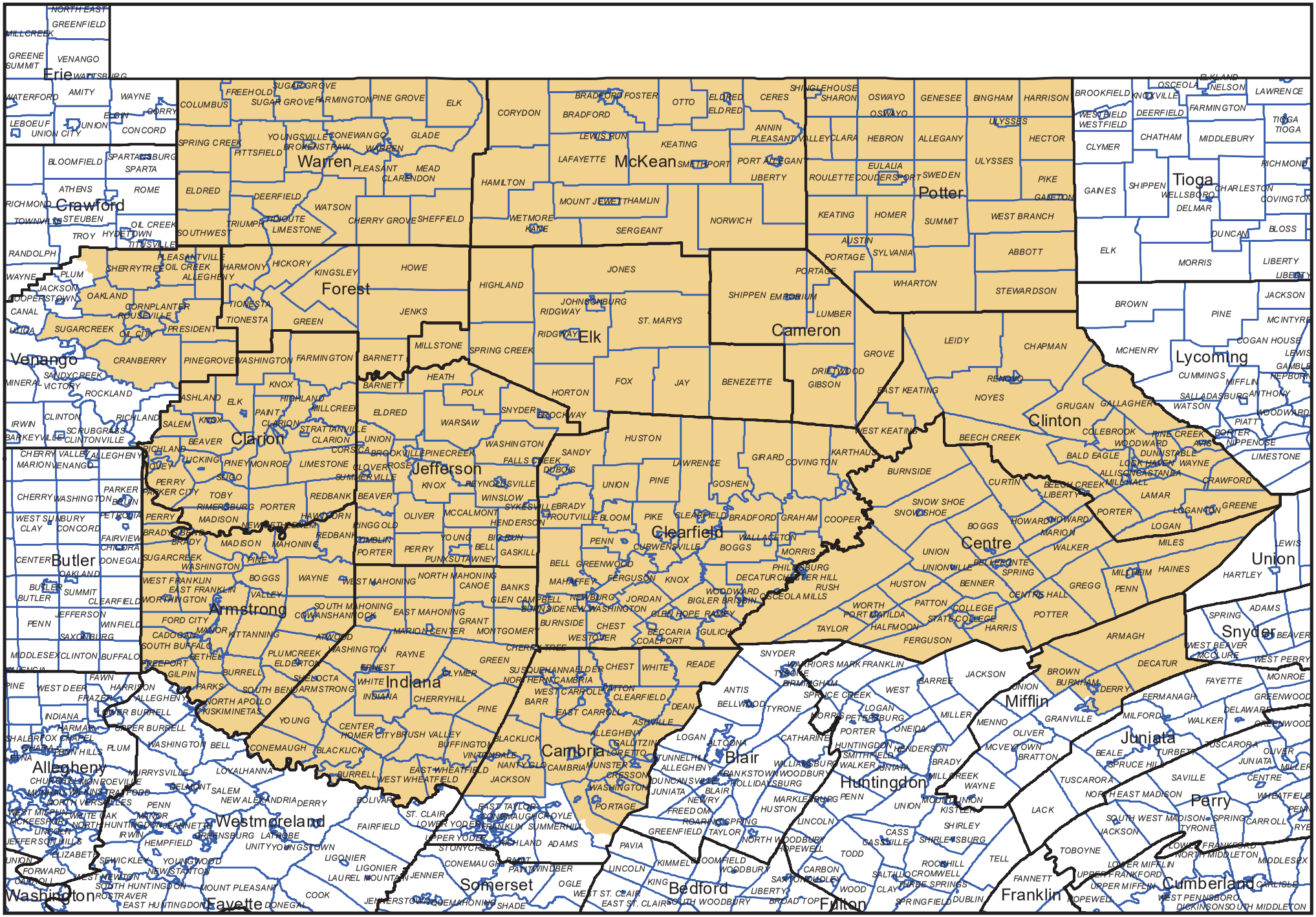


Reschenthaler 2 Congressional Map - District 5

0 12.5 25 50 Miles

Counties

Municipalities

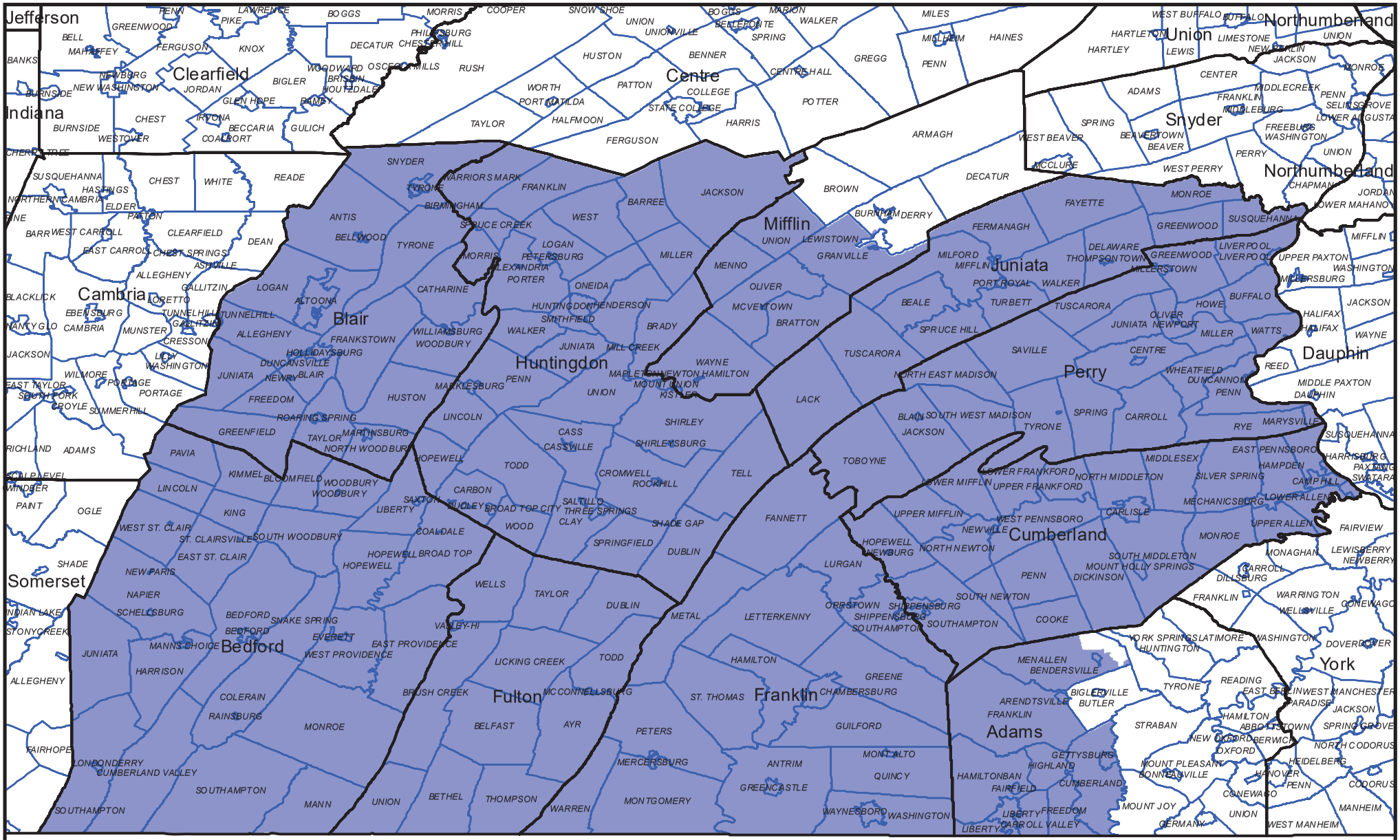


Reschenthaler 2 Congressional Map - District 6

0 10 20 40 Miles

Counties

Municipalities

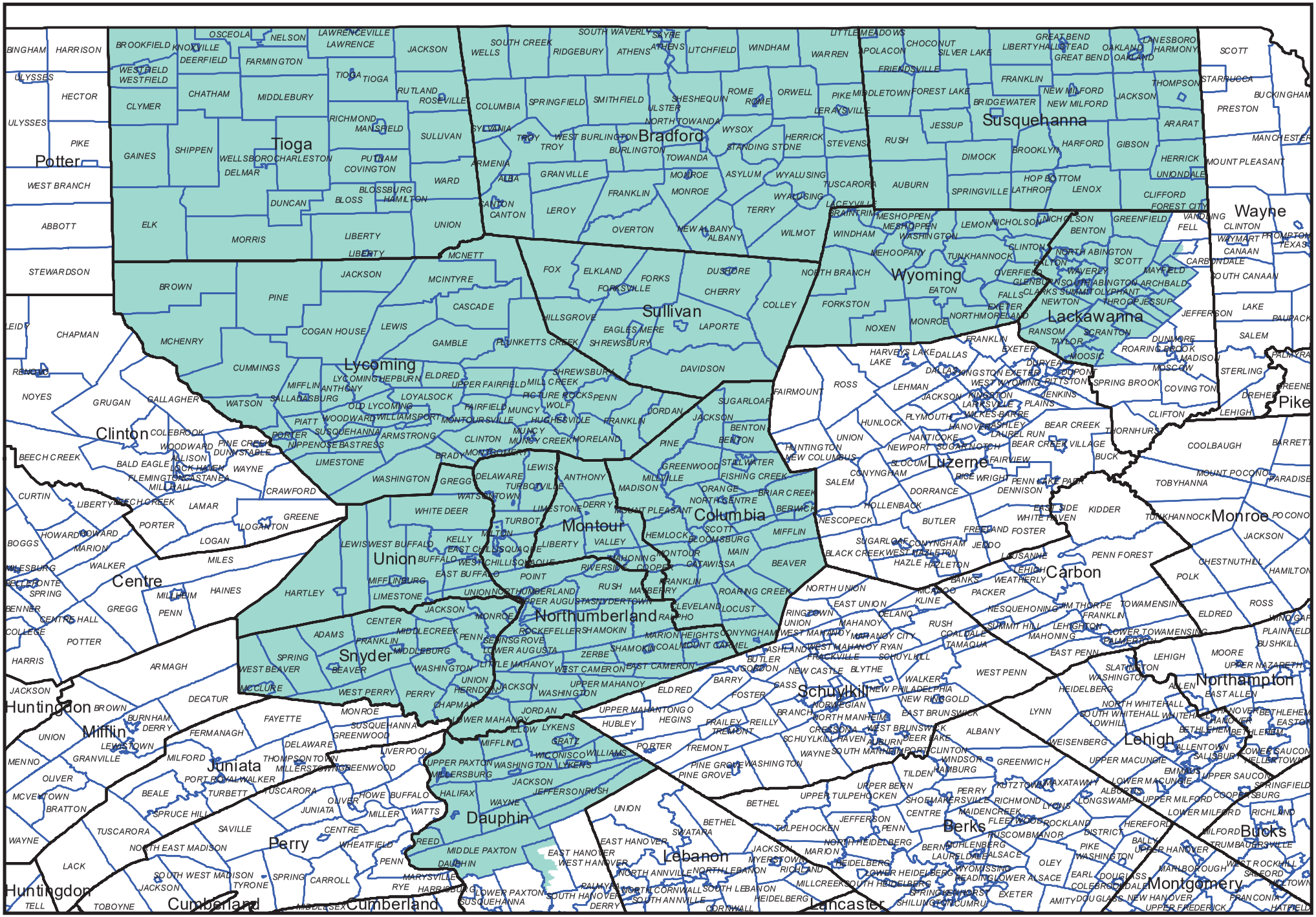


Reschenthaler 2 Congressional Map - District 7

0 12.5 25 50 Miles

Counties

Municipalities

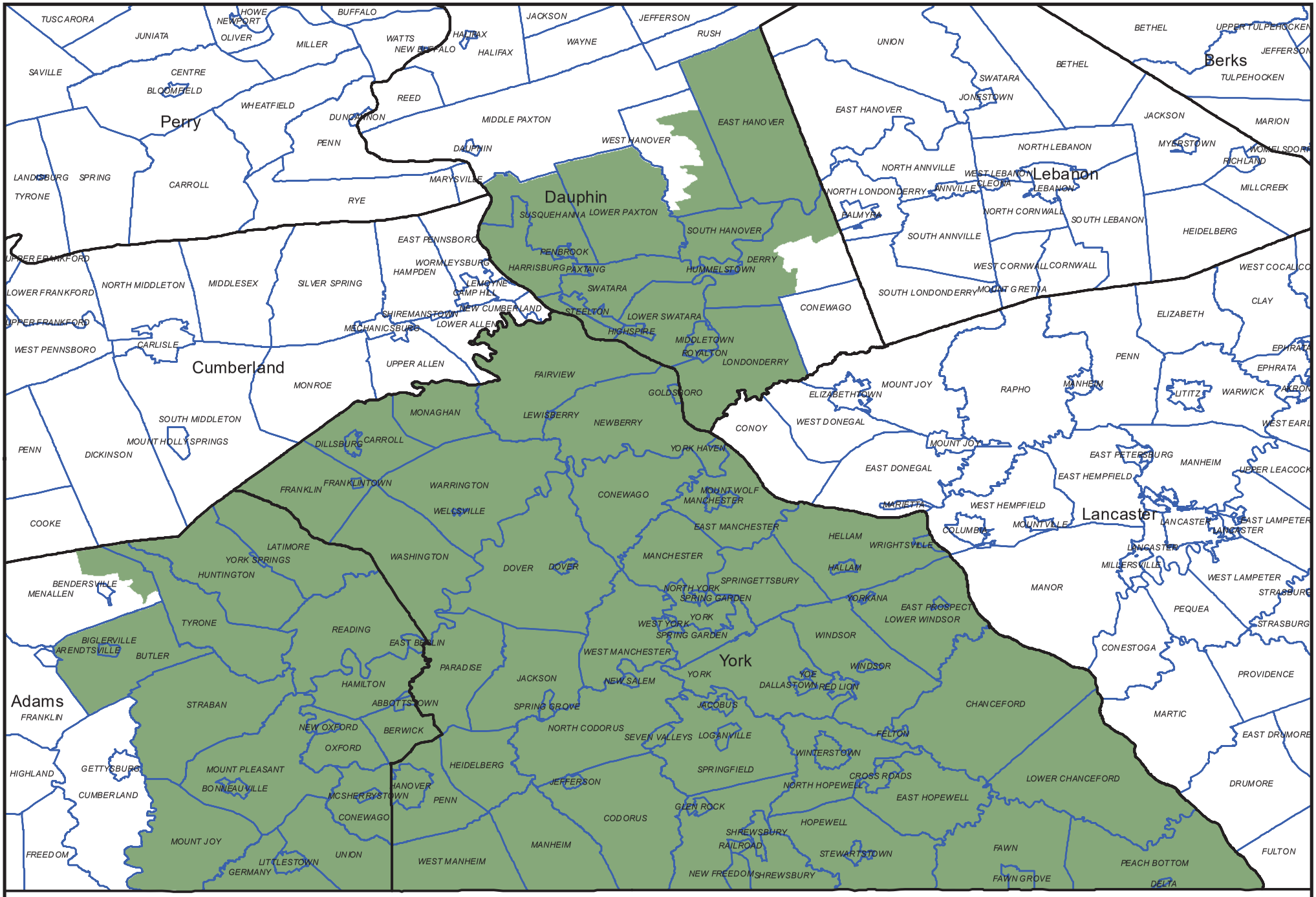


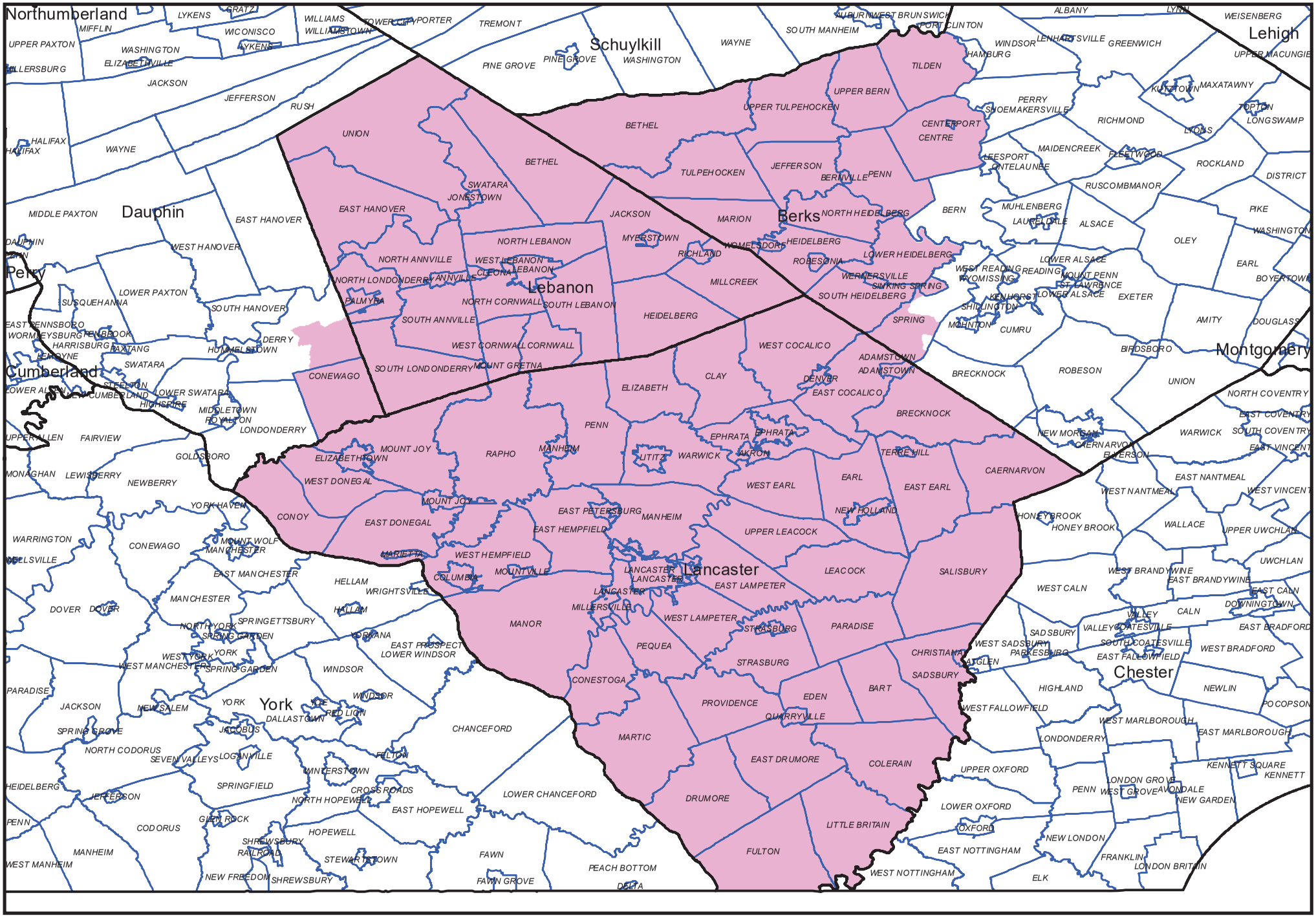
Reschenthaler 2 Congressional Map - District 8

0 5 10 20 Miles

Counties

Municipalities



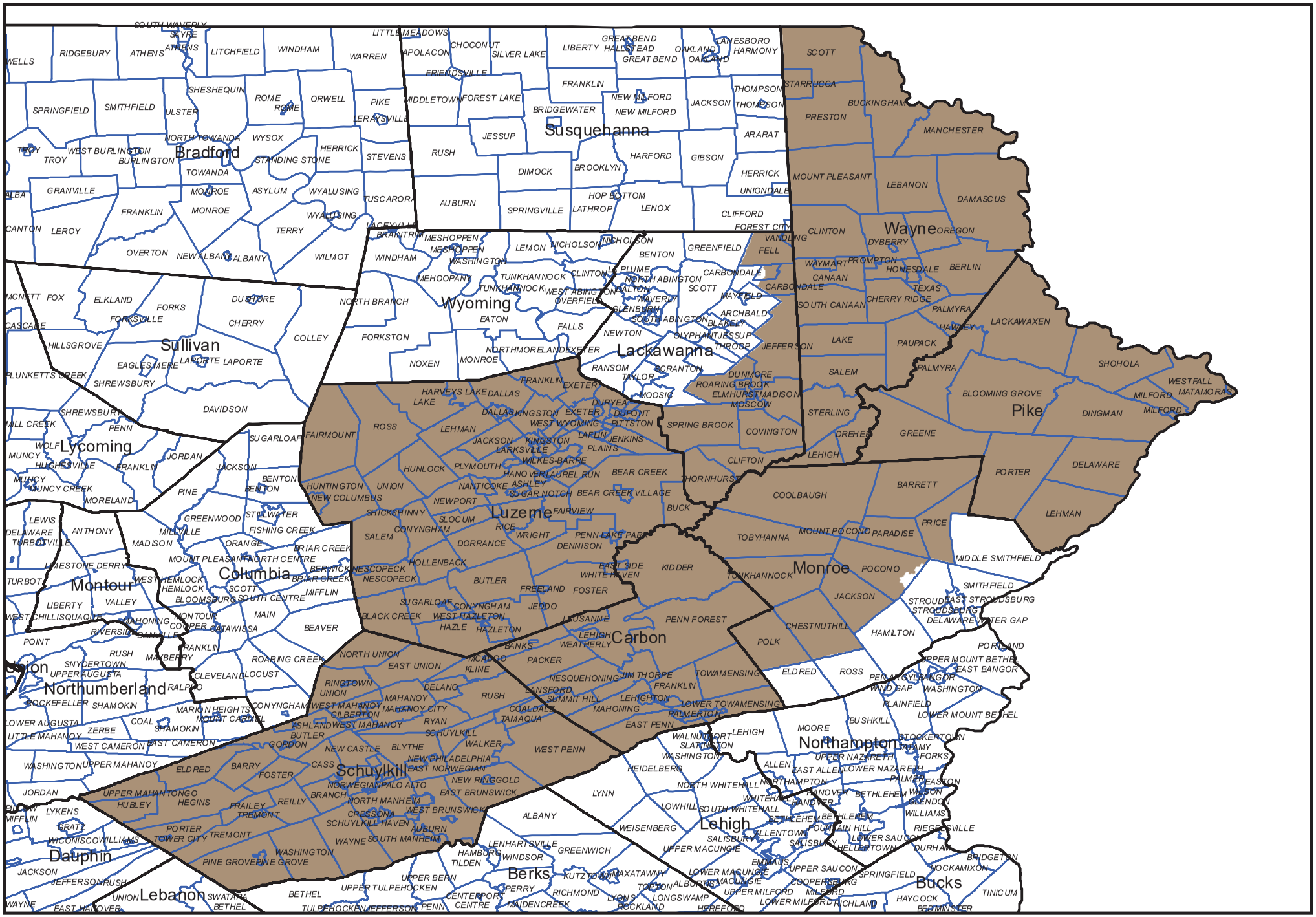

Reschenthaler 2 Congressional Map - District 9
0 5 10 20 Miles
Counties
Municipalities
Northumberland
Schuylkill
Lehigh
Dauphin
Berks
Perry
Lebanon
Cumberland
Montgomery
Lancaster
York
Chester

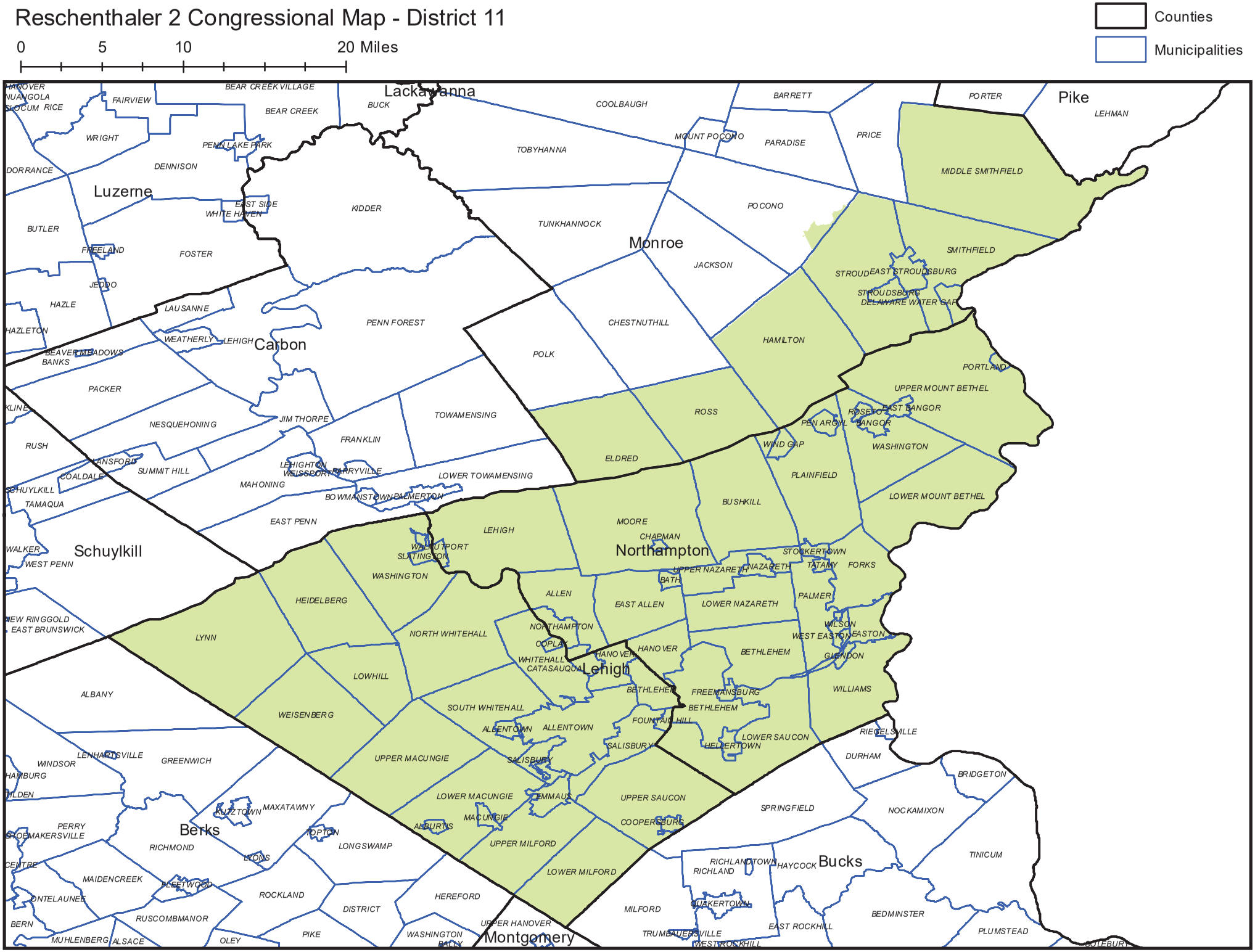
Reschenthaler 2 Congressional Map - District 10

0 10 20 40 Miles

Counties

Municipalities



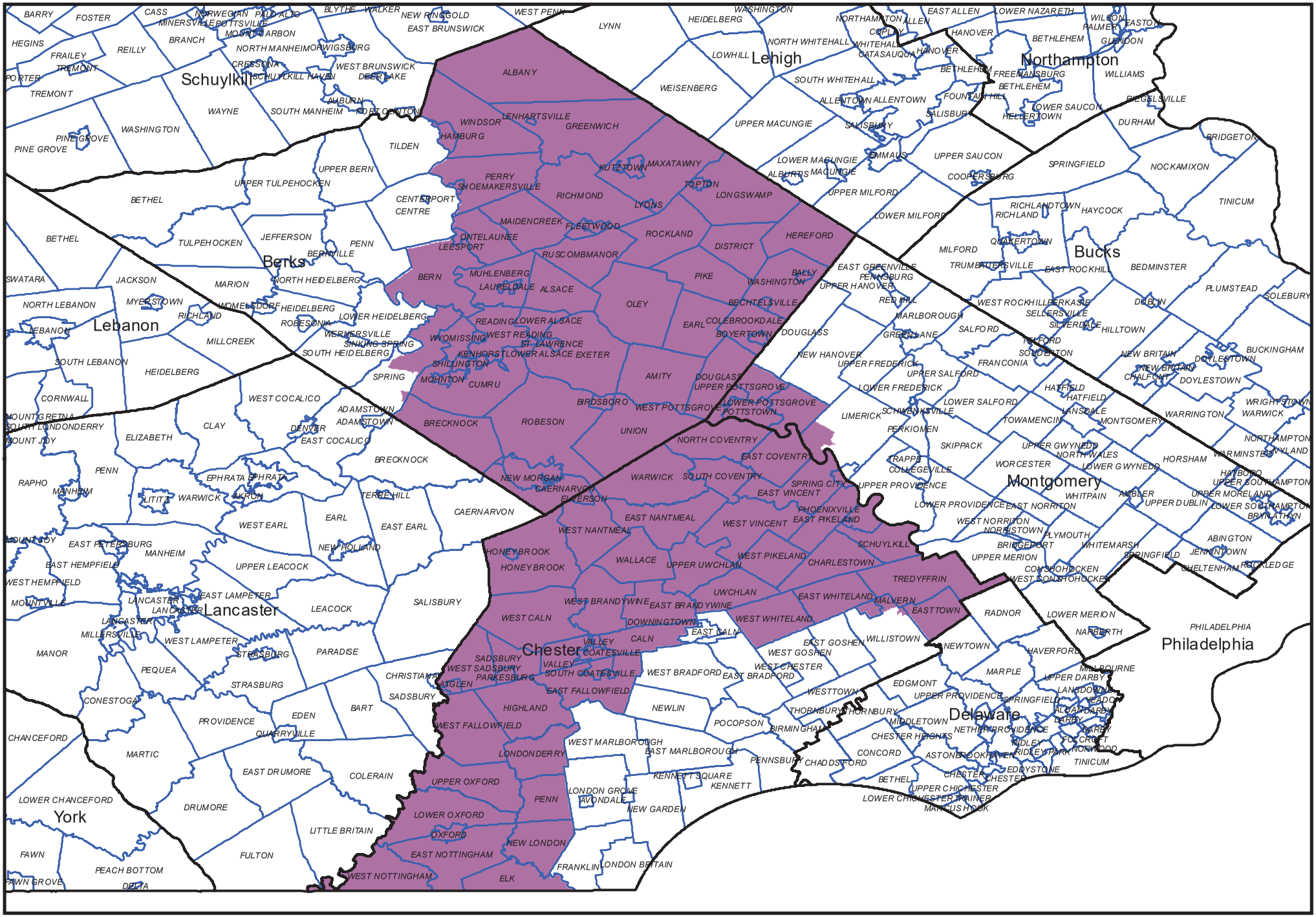

Reschenthaler 2 Congressional Map - District 11
0
5
10
20 Miles
Counties
Municipalities
Lackawanna
Pike
Luzerne
Monroe
Carbon
Schuylkill
Northampton
Lehigh
Berks
Bucks
Montgomery
HANOVER
NUANGOLA
SLOCUM
RICE
FAIRVIEW
BEAR CREEK VILLAGE
BEAR CREEK
BUCK
COOLBAUGH
BARRETT
PORTER
LEHMAN
WRIGHT
PENN LAKE PARK
TOBYHANNA
MOUNT POCONO
PARADISE
PRICE
DORRANCE
DENNISON
MIDDLE SMITHFIELD
EAST SIDE
WHITE HAVEN
KIDDER
POCONO
BUTLER
TUNKHANNOCK
FREELAND
FOSTER
SMITHFIELD
JACKSON
STROUD
EAST STROUDSBURG
STROUDSBURG
DELAWARE WATER GAP
JEDDO
HAZLE
LAUSANNE
HAZLETON
PENN FOREST
CHESTNUTHILL
WEATHERLY
LEHIGH
HAMILTON
BEAVER MEADOWS
BANKS
POLK
PORTLAND
PACKER
UPPER MOUNT BETHEL
ROSS
EAST BANGOR
ROSETO
BANGOR
NESQUEHONING
JIM THORPE
TOWAMENSING
PEN ARGYL
WIND GAP
WASHINGTON
RUSH
FRANKLIN
ELDRED
PANSFORD
LEHIGHTON
WEISSPORT
PARRYVILLE
SUMMIT HILL
PLAINFIELD
COALDALE
LOWER TOWAMENSING
MAHONING
LOWER MOUNT BETHEL
SCHUYLKILL
BOWMANSTOWN
PALMERTON
TAMAQUA
BUSHKILL
EAST PENN
MOORE
LEHIGH
CHAPMAN
WALNUTPORT
SLATINGTON
STOCKERTOWN
WALKER
WEST PENN
UPPER NAZARETH
NAZARETH
TATAMY
FORKS
BATH
WASHINGTON
HEIDELBERG
ALLEN
PALMER
EAST ALLEN
LOWER NAZARETH
NEW RINGGOLD
EAST BRUNSWICK
NORTHAMPTON
WILSON
WEST EASTON
EASTON
LYNN
NORTH WHITEHALL
COPLAY
HANOVER
HANOVER
BETHLEHEM
GLENDON
WHITEHALL
CATASAUQUA
LOWHILL
BETHLEHEM
FREEMANSBURG
WILLIAMS
ALBANY
SOUTH WHITEHALL
BETHLEHEM
WEISENBERG
FOUNTAIN HILL
ALLENTOWN
ALLENTOWN
LOWER SAUCON
RIEGELSVILLE
SALISBURY
HELLERTOWN
LENHARTSVILLE
GREENWICH
DURHAM
WINDSOR
UPPER MACUNGIE
SALISBURY
BRIDGETON
HAMBURG
LOWER MACUNGIE
EMMAUS
UPPER SAUCON
SPRINGFIELD
NOCKAMIXON
KUTZTOWN
MAXATAWNY
MACUNGIE
ALBURTIS
COOPERSBURG
PERRY
RICHMOND
TOPTON
UPPER MILFORD
LONGSWAMP
LYONS
TINICUM
RICHLANDTOWN
RICHLAND
HAYCOCK
MAIDENCREEK
FLEETWOOD
LOWER MILFORD
ONTELAUNEE
ROCKLAND
HEREFORD
MILFORD
QUAKERTOWN
BEDMINSTER
RUSCOMBMANOR
DISTRICT
UPPER HANOVER
EAST ROCKHILL
PLUMSTEAD
BERN
MUHLENBERG
ALSACE
OLEY
PIKE
WASHINGTON
TRUMBAUERSVILLE
WESTROCKHILL

Reschenthaler 2 Congressional Map - District 12

0 5 10 20 Miles

Counties

Municipalities

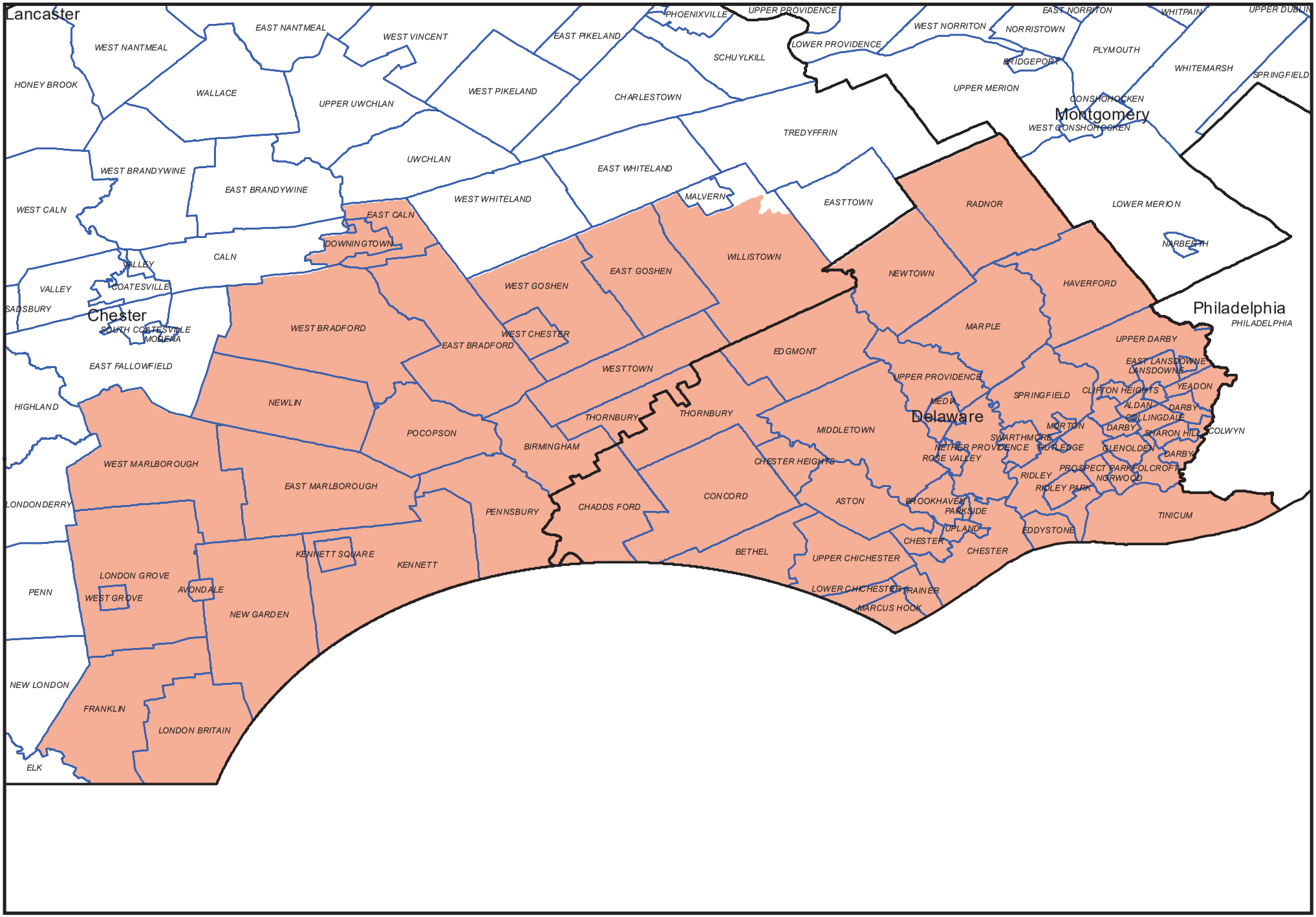


Reschenthaler 2 Congressional Map - District 13

0 3.25 6.5 13 Miles

Counties

Municipalities

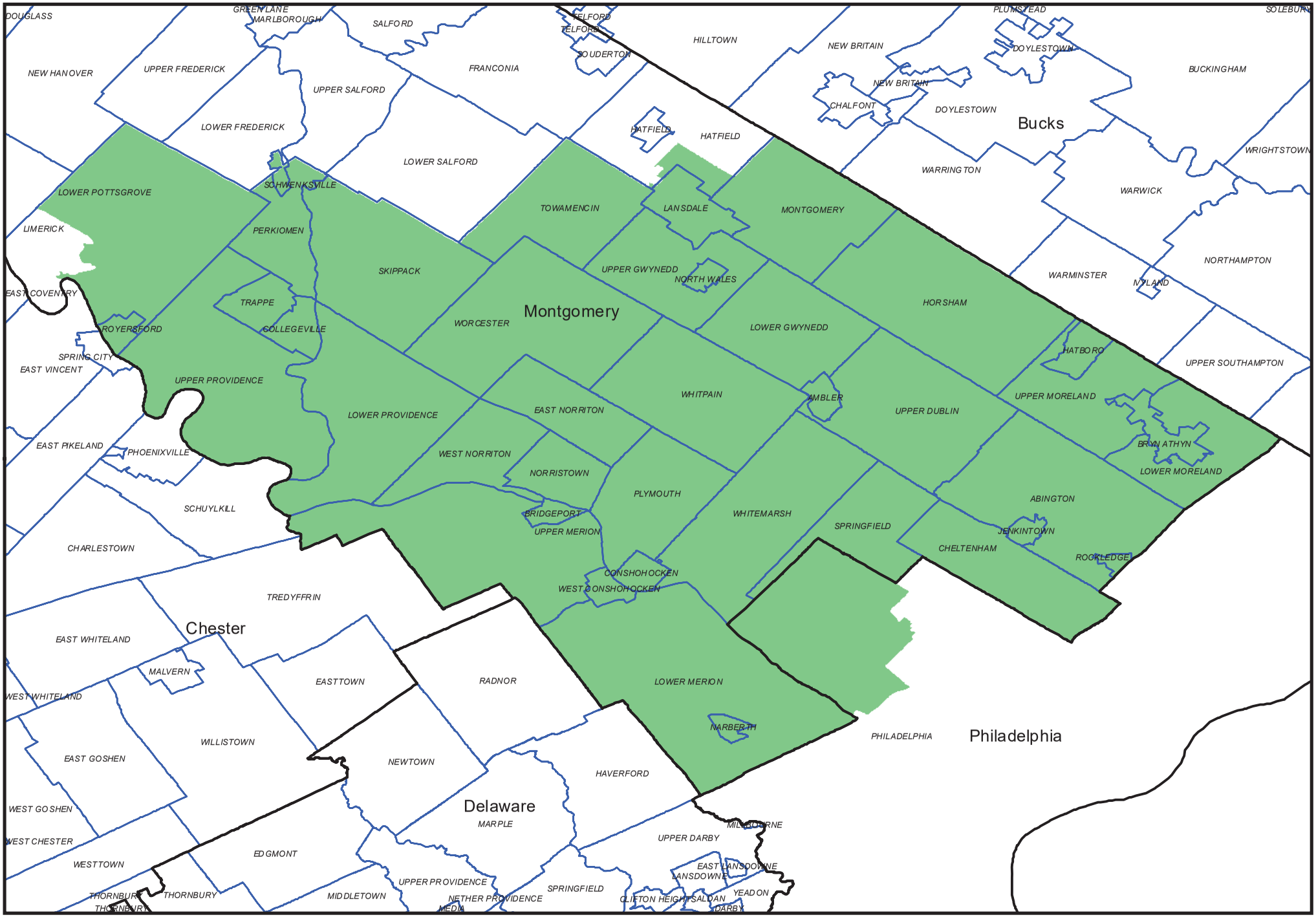


Reschenthaler 2 Congressional Map - District 14

0 2.75 5.5 11 Miles

Counties

Municipalities

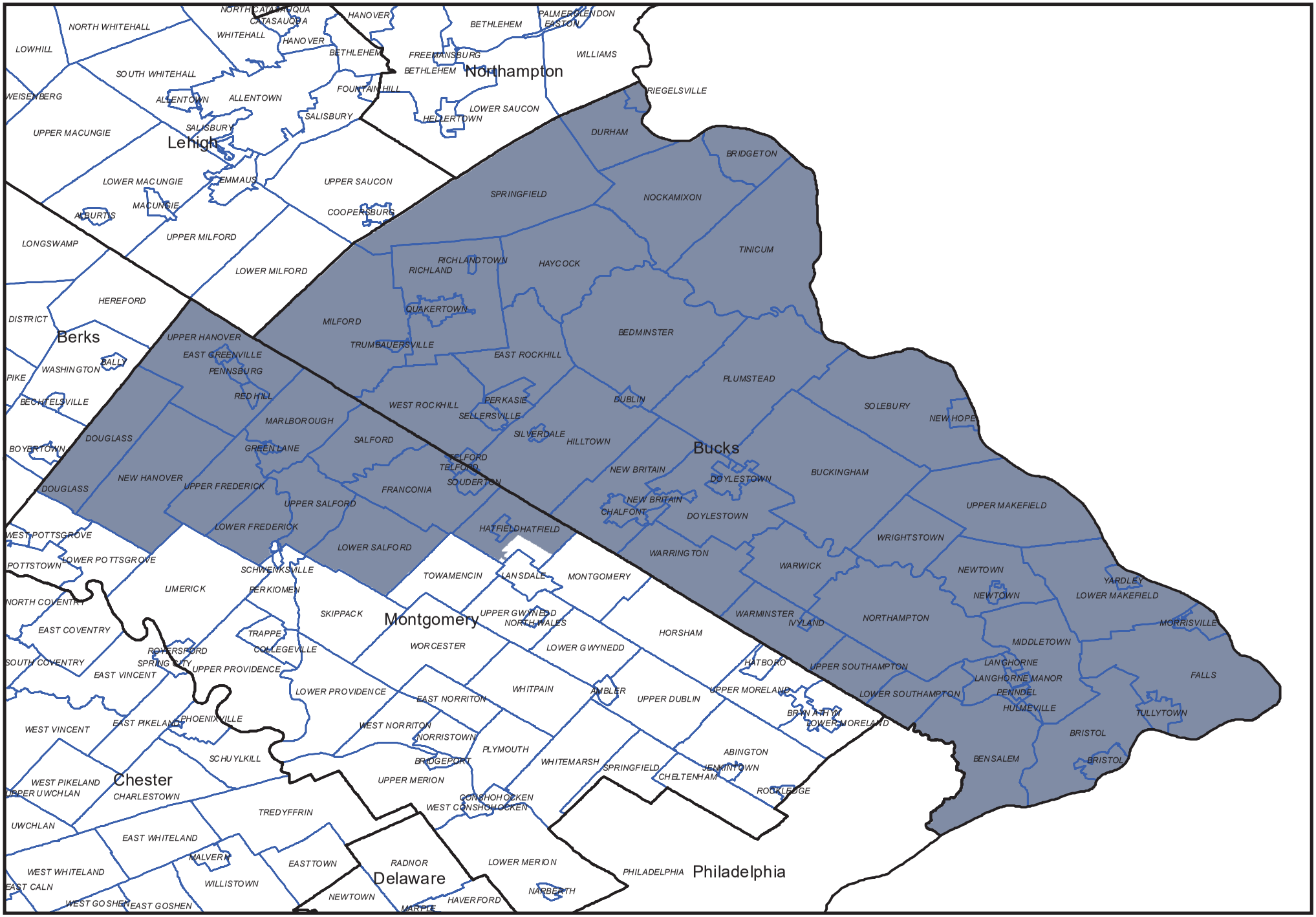


Reschenthaler 2 Congressional Map - District 15

0 4.75 9.5 19 Miles

Counties

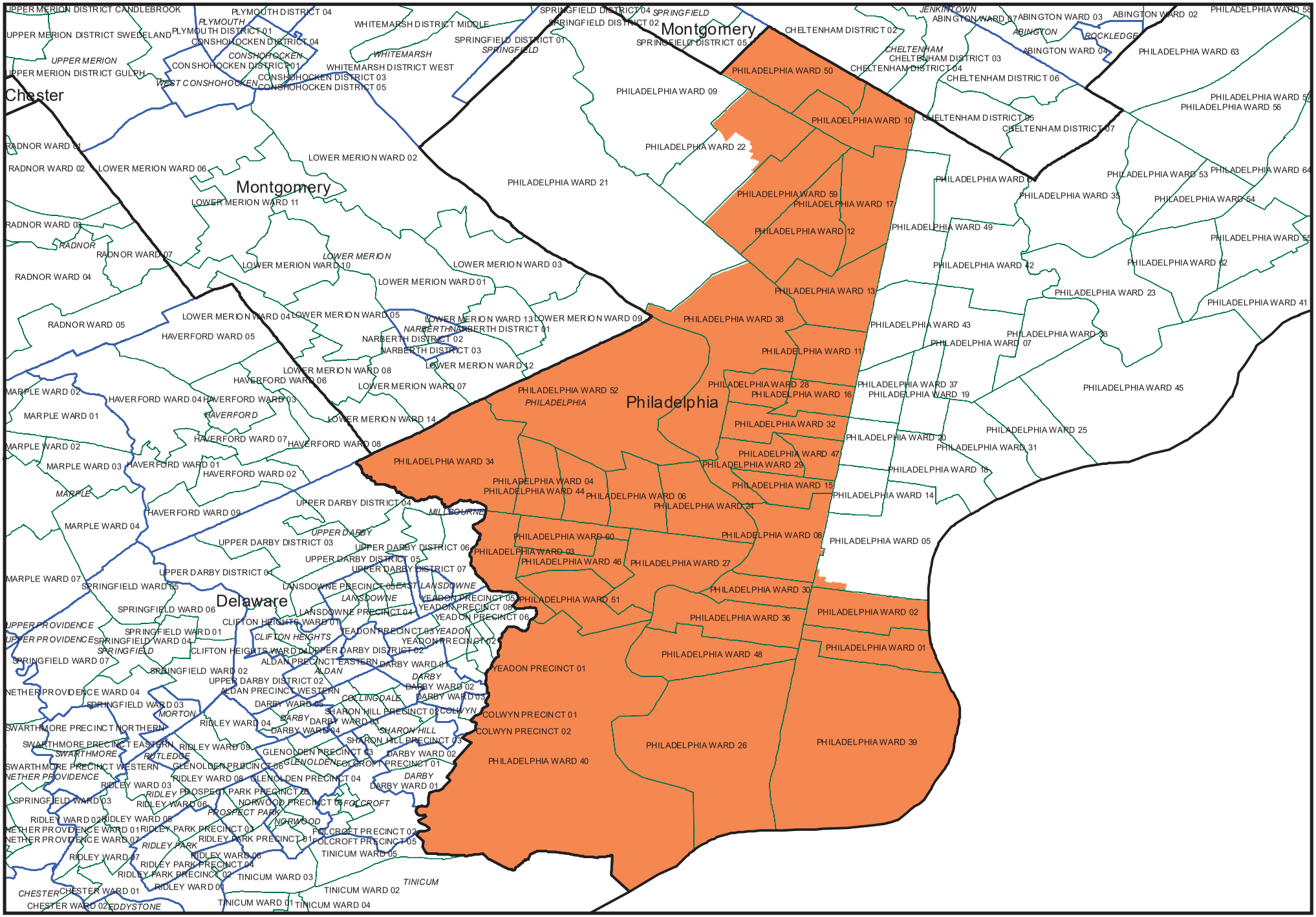
Municipalities



Reschenthaler 2 Congressional Map - District 16

0 1.5 3 6 Miles

Counties
Municipalities
Wards



Reschenthaler 2 Congressional Map - District 17

0 1.5 3 6 Miles

Counties
Municipalities
Wards

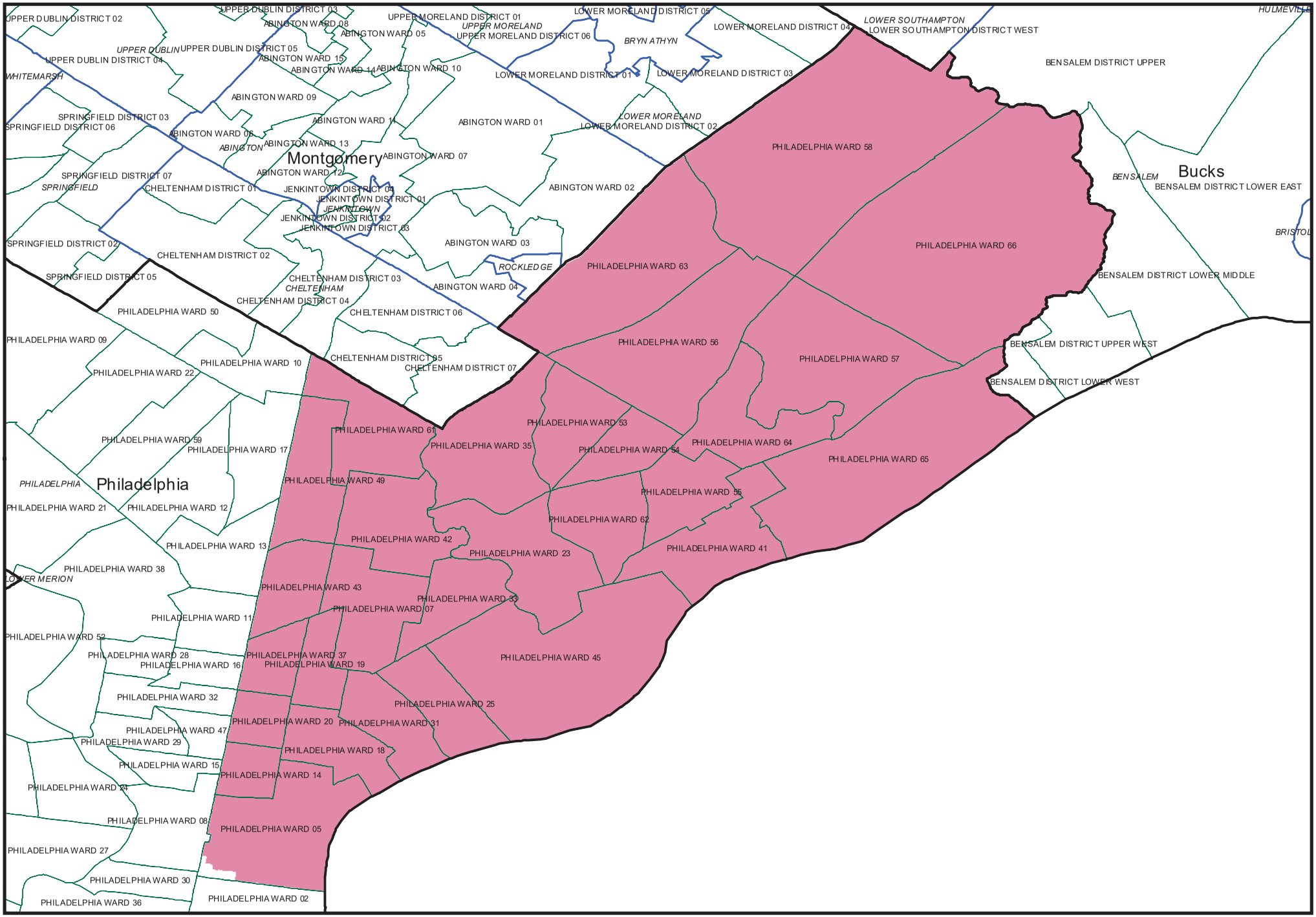


Exhibit C

Pennsylvania Report

Thomas L. Brunell, Ph.D.

I am a Professor of Political Science at the University of Texas at Dallas. I received a Ph.D. in Political Science from the University of California, Irvine in 1997. Currently I serve as the program head for the Political Science program and I have previously served as Senior Associate Dean for the School of Economic, Political, and Policy Sciences here at the University of Texas at Dallas. Last year, I was appointed by the Director of the U.S. Census Bureau to serve a three-year term on the Census Scientific Advisory Committee. My teaching and research interests revolve around American elections. I study redistricting, representation, political parties and the U.S. Congress. I teach classes on Election Law, Redistricting and Racial politics, Campaigns and Elections, and Congress. I have published a book on redistricting and dozens of peer-reviewed articles in the top journals in our field on redistricting, the Voting Rights Act, elections, and representation. I have served as an expert witness in redistricting related litigation often over the last 20 years, testifying in state and federal courts around the country.

I was asked by counsel to evaluate two proposed congressional maps for Pennsylvania. I refer to these two maps as Reschenthaler 1 and Reschenthaler 2. I will compare several metrics for these two maps to the benchmark map (the current map being used). I will look at traditional redistricting criteria (Altman 1998), to evaluate these two maps. In particular, I examine: equal population, compactness, contiguity, preserving communities of interest, and compliance with the Voting Rights Act. I also analyze the underlying partisanship of these three maps. I conclude that both Reschenthaler 1 and Reschenthaler 2 maps follow traditional districting principles and are appropriate for use.

Equal Population

Since the *Baker v. Carr* and *Wesberry v. Sanders* Supreme Court decisions in the early 1960's, congressional districts are required to be equal in population within a state. The total population of Pennsylvania in the 2020 census was 13,002,700. This entitled the state to 17 seats in the House of Representatives. The "ideal population" of a district is 764,864.7, so we would expect all the districts to be either 764,864 or 764,865. Table 1 below contains the total population data for the three maps. The current map is obviously not going to have the correct number of people in each district – it was drawn based on the last census and it has 18 districts. Both Reschenthaler 1 and Reschenthaler 2 maps are correctly populated.

Table 1. Total Population

District	Current Map	Reschenthaler 1	Reschenthaler 2
1	733,287	764,865	764,865
2	735,975	764,865	764,865
3	755,657	764,865	764,865
4	753,461	764,864	764,864
5	731,971	764,865	764,865
6	754,363	764,865	764,865
7	747,001	764,865	764,865
8	712,250	764,865	764,865
9	704,105	764,865	764,865
10	759,337	764,865	764,865
11	749,796	764,865	764,865
12	687,049	764,865	764,865
13	691,973	764,864	764,864
14	688,747	764,864	764,864
15	669,389	764,864	764,864
16	686,431	764,865	764,865
17	737,757	764,864	764,864
18	704,151		

Contiguity

Contiguity means that districts must be comprised of a single whole piece – there cannot be small separate parts that are called a single district. So someone should be able to drive to all parts of a district without ever leaving the district. Reschenthaler 1 and Reschenthaler 2 have 17 contiguous districts.

Compactness

Compactness of districts is another measure of interest when comparing potential maps. Oftentimes electoral districts are drawn with interesting shapes. Compactness tries to quantify the shapes of each individual districts. The Reock compactness score is a ratio of the area of a district to the area of the smallest circumscribing circle around the district. The closer the ratio is to 1, the more compact the district (lower scores are less compact). The Polsby Popper measure takes the perimeter of a district, creates a circle with the same perimeter and then creates the similar ratio. So, again, the higher the score, the more compact the district. Table 2 shows the compactness scores for all three maps. The current map is reasonably compact as are both Reschenthaler maps.

Table 2. Compactness

	Current Map		Reschenthaler 1		Reschenthaler 2	
District	Reock	Polsby-Popper	Reock	Polsby-Popper	Reock	Polsby-Popper
1	0.43	0.46	0.36	0.4	0.36	0.4
2	0.37	0.47	0.41	0.28	0.41	0.28
3	0.43	0.36	0.43	0.25	0.43	0.25
4	0.41	0.31	0.44	0.32	0.44	0.32
5	0.44	0.38	0.65	0.44	0.65	0.44
6	0.45	0.3	0.52	0.46	0.52	0.46
7	0.41	0.42	0.47	0.38	0.47	0.38
8	0.49	0.28	0.42	0.27	0.42	0.27
9	0.55	0.25	0.53	0.4	0.53	0.4
10	0.49	0.29	0.36	0.29	0.36	0.29
11	0.45	0.37	0.36	0.37	0.36	0.37
12	0.43	0.28	0.34	0.27	0.32	0.22
13	0.41	0.26	0.58	0.48	0.41	0.35
14	0.54	0.33	0.45	0.38	0.45	0.38
15	0.67	0.42	0.39	0.4	0.39	0.4
16	0.32	0.39	0.34	0.33	0.34	0.33
17	0.51	0.28	0.34	0.45	0.34	0.45
18	0.46	0.18				
Average	**0.459**	**0.335**	**0.435**	**0.363**	**0.424**	**0.352**

***Note: Calculated using ESRI Redistricting**

Political Subdivision Splits

Ideally, electoral districts are created to put people like-minded people with similar interests and backgrounds and who live near one another in the same district. Communities of interest can mean many different things, and one person's idea of a community that should be preserved can differ from another person's idea. What this means in practice is that map-makers try to preserve existing boundaries, namely city and county boundaries (Engstrom 2001; Herbert et al 2000). In Pennsylvania, there are also wards and places that can be preserved as well. In the tables below, I examine the extent to which each of the three maps are able to keep these various geographic entities in the same congressional district. Some cities and counties must be split into multiple districts due to the sheer size (Philadelphia, e.g.). Other municipalities and counties get split due to the equal population criterion. There are two metrics of interest: splits and segments. A split is if a county in in more than one district. A segment is the number of districts that a county appears in. So, for instance, every map below splits Philadelphia County, so that counts as one split. However, the current map has four districts in Philadelphia County (four segments), while Reschenthaler 1 and 2 have just three segments for the county.

Table 3. County Splits and Segments

Reschenthaler 1		**Reschenthaler 2**	
County	**Districts**	**County**	**District**
Adams	6,8	Adams	6,8
Allegheny	2,3	Allegheny	2,3
Berks	9,12	Berks	9,12
Cambria	4,5	Cambria	4,5
Chester	12,13	Chester	12,13
Dauphin	7,8,9	Dauphin	7,8,9
Lackawanna	7,10	Lackawanna	7,10
Mifflin	5,6	Mifflin	5,6
Monroe	10,11	Monroe	10,11
Montgomery	12,14,15	Montgomery	12,14,15
Philadelphia	14,16,17	Philadelphia	14,16,17
Venango	1,5	Venango	1,5
Washington	2,4	Washington	2,4
Splits: 13	**Segments: 29**	**Splits: 13**	**Segments: 29**

Table 4. County Splits and Segments, Continued

Current Map	
County	**Districts**
Allegheny	17,18
Berks	4,6,9
Butler	15,16,17
Cambria	13,15
Centre	12,15
Chester	5,6
Cumberland	10,13
Luzerne	8,9
Monroe	7,8
Montgomery	1,3,4,5
Northumberland	9,12
Philadelphia	2,3,4,5
Westmoreland	13,14
York	10,11
Splits: 13	**Segments: 30**

The Reschenthaler maps have the same number of county splits as the current map and fewer segments.

Table 5. City, Incorporated Towns, Boroughs, and Township Splits and Segments

Reschenthaler 1	Districts	Reschenthaler 2	Districts
Carbondale city	7,10	Carbondale city	7,10
Carbondale township	7,10	Carbondale township	7,10
Derry township	5,6	Derry township	5,6
Derry township	8,9	Derry township	8,9
East Bradford township	12,13	Hatfield township	14,15
Hatfield township	14,15	Limerick township	12,14
Limerick township	12,14	Menallen township	6,8
Menallen township	6,8	North Strabane township	2,4
North Strabane township	2,4	Philadelphia city	14,16,17
Philadelphia city	14,16,17	Pine township	2,3
Pine township	2,3	Plum township	1,5
Plum township	1,5	Pocono township	10,11
Pocono township	10,11	Spring township	9,12
Spring township	9,12	Summerhill township	4,5
Summerhill township	4,5	West Hanover township	7,8
West Hanover township	7,8	Willistown township	12,13
Splits: 16	**Segments: 33**	**Splits: 16**	**Segments: 33**

Table 6. City, Incorporated Towns, Boroughs, and Township Splits and Segments, Continued

Current Map	Districts
Birmingham township	5,6
Cranberry township	16,17
District township	4,9
East Taylor township	13,15
Exeter township	6,9
Franconia township	1,4
Halfmoon township	12,15
Hazle township	8,9
Horsham township	1,4
Jefferson township	15,16
Lower Merion township	4,5
North Middleton township	10,13
Penn Hills township	17,18
Philadelphia city	2,3,5
Smithfield township	7,8
South Fayette township	17,18
Unity township	13,14
Upper Mahanoy township	9,12
York township	10,11
Splits: 19	**Segments: 39**

In terms of cities and townships, the Reschenthaler maps both split fewer municipalities and have fewer segments than the current map.

Table 7. Split Wards and Segments

Reschenthaler 1	Districts	Reschenthaler 2	Districts
CARBONDALE WARD 04	7,10	CARBONDALE WARD 04	7,10
PHILADELPHIA WARD 05	16,17	PHILADELPHIA WARD 05	16,17
PHILADELPHIA WARD 22	14,16	PHILADELPHIA WARD 22	14,16
CARBONDALE DISTRICT NORTHWEST	7,10	CARBONDALE DISTRICT NORTHWEST	7,10
CARBONDALE DISTRICT SOUTH	7,10	CARBONDALE DISTRICT SOUTH	7,10
DERRY DISTRICT SOUTH	5,6	DERRY DISTRICT SOUTH	5,6
DERRY PRECINCT 06	8,9	DERRY PRECINCT 06	8,9
DERRY PRECINCT 11	8,9	DERRY PRECINCT 11	8,9
EAST BRADFORD DISTRICT NORTH	12,13	HATFIELD DISTRICT 05	14,15
EAST BRADFORD DISTRICT SOUTH	12,13	LIMERICK DISTRICT 03	12,14
HATFIELD DISTRICT 05	14,15	NORTH STRABANE DISTRICT 08	2,4
LIMERICK DISTRICT 03	12,14	PINE DISTRICT 01	2,3
NORTH STRABANE DISTRICT 08	2,4	PINE DISTRICT 05	2,3
PINE DISTRICT 01	2,3	POCONO DISTRICT 03	10,11
PINE DISTRICT 05	2,3	POCONO DISTRICT 04	10,11
POCONO DISTRICT 03	10,11	SPRING DISTRICT 10	9,12
POCONO DISTRICT 04	10,11	SPRING DISTRICT 11	9,12
SPRING DISTRICT 10	9,12	SPRING DISTRICT 12	9,12
SPRING DISTRICT 11	9,12	SUMMERHILL DISTRICT SOUTH	4,5
SPRING DISTRICT 12	9,12	WEST HANOVER DISTRICT 01	7,8
SUMMERHILL DISTRICT SOUTH	4,5	WEST HANOVER DISTRICT 02	7,8
WEST HANOVER DISTRICT 01	7,8	WEST HANOVER DISTRICT 04	7,8
WEST HANOVER DISTRICT 02	7,8		
WEST HANOVER DISTRICT 04	7,8		
WEST HANOVER DISTRICT 07	7,8		
Splits: 25	**Segments: 50**	**Splits: 24**	**Segments: 48**

Table 8. Split Wards and Segments, Continued

Current Map	Districts
PHILADELPHIA WARD 03	3,5
PHILADELPHIA WARD 05	2,3
PHILADELPHIA WARD 51	3,5
PHILADELPHIA WARD 52	3,4
CRANBERRY DISTRICT EAST	16,17
CRANBERRY DISTRICT WEST	16,17
HORSHAM DISTRICT 02	1,4
HORSHAM DISTRICT 04	1,4
LOWER MERION WARD 06	4,5
LOWER MERION WARD 09	3,4
LOWER MERION WARD 11	4,5
LOWER MERION WARD 12	4,5
NORTH MIDDLETON PRECINCT 03 (CD 13)	10,13
PENN HILLS WARD 05	17,18
YORK WARD 05	10,11
Splits: 15	**Segments: 30**

Split wards are the last geographic entity of interest. The current map splits 15 wards with 30 total segments. Reschenthaler 1 splits 25 wards with 50 segments, and Reschenthaler 2 splits 24 wards with 48 segments.

Partisanship

Next, I examine the likely partisan breakdown of the three maps that have been the focus of my analysis. To do this I use the results of the 2016 and 2020 presidential elections as the basis for determining the likely partisanship of each district. Why these two elections? They are both high profile elections with well-funded candidates. Both of the elections were relatively close and the Republican carried Pennsylvania in 2016 and the Democrat carried the state in 2020. I averaged the vote percentage for the Democrat for each district across these two elections and then subtracted 50% from each one. Thus, if the result is zero, that means the Democrat averaged 50 percent, so the district is very competitive. Positive numbers indicate a Democratic advantage, and negative number indicate a Republican advantage. If a district is five percent or more in favor of Democrats (Republicans), I called it a Democratic (Republican) district. If a district is less than plus or minus five percent, I categorized it as a toss-up district. The results are presented in the table below. I have color-coded the partisan districts in the traditional fashion – blue for Democrats, red for Republicans. Toss-up districts have no coloring.

Table 9. Partisan Voting Index (2016 and 2020 Presidential Elections)

District*	Current	Reschenthaler 1	Reschenthaler 2
1	2%	-11%	-11%
2	23%	-2%	-2%
3	42%	14%	14%
4	11%	-16%	-16%
5	15%	-18%	-18%
6	6%	-19%	-19%
7	2%	-14%	-14%
8	-4%	-8%	-8%
9	-17%	-11%	-11%
10	-3%	-12%	-12%
11	-12%	2%	2%
12	-19%	2%	2%
13	-23%	12%	11%
14	-14%	17%	17%
15	-22%	0%	0%
16	-10%	41%	41%
17	0%	23%	23%
18	15%		
Total	**7R, 6D, 5T**	**8R, 5D, 4T**	**8R, 5D, 4T**

***Note: the Reschenthaler maps number districts differently from the benchmark map, so comparisons of specific districts across maps is inappropriate as they encompass different geographic areas.**

The current map, using this partisan index, has seven Republican leaning districts, six Democrat, and five toss-ups. The two Reschenthaler maps both break eight Republican, five Democrat, and four toss-ups. There is a substantial amount of similarity across these maps. They all have seven or eight red districts, five or six blue districts, and four or five toss-ups. All three maps have enough toss-up districts that the majority of the state's congressional delegation may be decided by the political tides and the quality of the candidates and campaigns in each election.

Mean Median Differences

One other method of detecting partisanship in electoral maps is the mean median difference. This simple method takes the mean (average) vote percentage for one party across all the districts and compares it to the median of the same set of vote percentages (McDonald and Best 2015). If the Democratic average vote percentage is 55 percent and the Democratic median vote percentage in the same election is 50 percent, there is a 5 percent difference that favors the Republicans (if the mean is less than the median for Democratic percent, then it indicates a favorability for the Republicans). The logic is straightforward – usually when one party is "packed" into a handful of districts they are

at a disadvantage and this will inflate the average vote percentage for that party, while the median of a distribution will be unaffected (recall that the median of distribution is simply the middle item of the vote percentages when they are ranked from lowest to highest). The closer the mean and median are to one another the less skewness or bias there is in the plan. In Table 10 below I show the mean median differences for the three maps across all the presidential, senatorial, and gubernatorial elections in Pennsylvania for the last decade. I also added three other statewide elections from 2020 – the logic being Pennsylvania made two important changes to their elections beginning in 2020 – eliminated straight-party voting and instituted no excuse vote-by-mail. While there are no "bright lines" for when a difference becomes "significant" all of these scores are reasonably low. Positive scores indicate a tilt towards Republicans, and a negative score indicates a tilt toward the Democrats. All three maps average less than two over the elections included in this analysis.

Table 10. Mean Median Differences

Election	Reschenthaler 1	Reschenthaler 2	Current Map
2012 President	3.3	3.3	3.7
2016 President	2.8	2.8	2.7
2020 President	1.4	1.4	0.8
2014 Governor	3.8	3.8	4.3
2018 Governor	0	0	0.3
2012 Senator	3.3	3.4	1.9
2016 Senator	2.5	2.8	0.1
2018 Senator	0.2	0.2	2.5
2020 Attorney General	0.9	0.8	-1.9
2020 Auditor	1.2	1.2	-1.0
2020 Treasurer	1.1	1.1	-0.8
Average	**1.86**	**1.89**	**1.15**

Did the 2018 Map Make a Difference in Partisan Outcomes?

It is worth noting that reconstituting the 2018 votes for Congress in Pennsylvania by the 2012 map results in a 9-9 seat split, which is the same outcome as the map put into place in 2018. The data below show this result.

Table 11. 2018 Votes for U.S. Representatives in Pennsylvania Reconstituted to the 2012 Map

District	Democratic Votes	Republican Votes	Winner
1	203,718	39,216	D
2	278,311	23,266	D
3	113,202	145,323	R
4	121,222	161,073	R
5	99,776	150,725	R
6	175,262	139,745	D

District	Democratic Votes	Republican Votes	Winner
7	178,968	154,320	D
8	159,061	171,926	R
9	78,010	158,955	R
10	88,759	160,617	R
11	114,249	145,294	R
12	141,319	155,848	R
13	191,106	77,353	D
14	225,892	23,542	D
15	132,786	130,988	D
16	129,908	131,148	R
17	129,629	109,045	D
18	153,404	127,839	D

Racial Bloc Voting Analysis

In order to assess whether or not Pennsylvania is required to draw majority African American districts, I conducted some racial bloc voting analysis. Prongs two and three of the Gingles test (*Thornburg v. Gingles* 1986) involve whether African Americans vote as a bloc and whether white voters vote as a bloc and generally vote to defeat the preferred candidate of the racial minority group. The data used for this analysis includes 2020 census data on the racial makeup of Philadelphia County merged with election data from several different elections that feature a white Republican against a Black Democrat in the general election. The first election is the 2012 presidential election in which Barack Obama beat Mitt Romney 52 to 48%. The second one is the 2018 House election for District 3 in which Dwight Evans beat Bryan Leib with 93.4 percent of the vote. The third election is the State Supreme Court election in 2017 where Sallie Updyke Mundy beat Dwayne Woodruff 52 to 48 percent.

Homogeneous Precincts

The first and most straightforward method for detecting racially polarized voting is to look at just those precincts or blocks that are composed almost entirely of one race or the other (Brace et al 1995).

Election	Black Vote for Black Candidate	White Vote for Black Candidate
2012 Presidential	97.73%	63.17%
2018 House	97.32%	68.41%
2017 St Supreme Court	96.71%	55.65%

The data show that a majority of both Black and white voters in Philadelphia County supported the African American Democrat in all three elections. This indicates the absence of racially polarized voting.

Ecological Regression

The next method allows us to use all blocks, not just the homogeneous ones. We regress the percent of the vote from the block for the Black candidate on the percent of the block comprised by Blacks (Grofman 1992).

Election	Constant	Black Percent	N
2012 Presidential	0.620	0.363	14,532
2018 House	0.702	.275	14,532
2017 St Supreme Court	0.574	.395	14,320

All of the coefficients in the three regressions are statistically significant. The constant terms is an estimate of the proportion of the white voters who voted for the Black candidate. In terms of percentages, they are 62% in 2012, 70.2% in 2018, and 57.4% in 2017. The estimate for the proportion of Black voters voting for the Black candidate is calculated by adding the constant term to the coefficient for Black Percent of the geographic unit. For the 2012 Presidential election, 62.0 plus 36.3 equals 98.3 percent. In the 2018 3rd CD House election, 70.2 plus 27.5 equals 97.7 percent. In the 2017 Supreme Court Justice election, 57.4 plus 39.5 equals 96.5 percent. These results support the conclusion that racially polarized voting is not present in Pennsylvania County.

At this point it is important to make sure that we are not simply just looking at party effects. Since we just looked at general elections, it is possible that racial bloc voting still exists and would be detectable in the Democratic primary in Philadelphia. In order to test this proposition, I have the data from the 2015 Democratic Primary for the Philadelphia Mayoral election. There were six candidates in this contest with three African Americans. James Kenney and Lynne Abraham are both white; Nelson Diaz is Hispanic; Milton Street, Anthony Williams, and Doug Oliver are African American. I group the votes as for an African American candidate or not.

The Black homogeneous precincts voted for a Black candidate at a rate of 47.9 percent. White voters voted for a Black candidate at a rate of 7.3 percent. A majority of both groups favored a non-Black candidate in this instance. The estimates from the ecological regression are similar: 0.6 percent of Whites voted for a Black candidate, while 48.0 percent of Black voters voted for a Black candidate. Again, the data indicate that the two racially groups are not polarized in their voting behavior.

Conclusion

The Reschenthaler maps are both suitable for use in Pennsylvania as congressional districts. Both maps comply with traditional redistricting criteria. Based on a reasonable degree of professional certainty, I hold all of the foregoing opinions.

1/24/2022

Thomas Brunell Date

References

Altman, M. 1998. "Traditional Districting Principles: Judicial Myths vs. Reality." *Social Science History*, 22(2), 159–200.

Brace, K., Handley, L., Niemi, R.G. and Stanley, H.W., 1995. Minority turnout and the creation of majority-minority districts. *American Politics Quarterly*, *23*(2), pp.190-203.

Chen, Jowei. 2017. "The Impact of Political Geography on Wisconsin Redistricting: An Analysis of Wisconsin's Act 43 Assembly Districting Plan." Election Law Journal. Dec 2017.443-452.

Engstrom, R. L. 2001. "The political thicket, electoral reform, and minority voting rights". In M. E. Rush, & R. L. Engstrom (Eds.), *Fair and effective representation?: Debating electoral reforms and minority rights* (pp. 3-67). London: Rowman and Littlefield.

Grofman, B., 1992. The use of ecological regression to estimate racial bloc voting. *USF Law Review*, *27*, p.593.

Herbert, J. G., Verrilli, D. B., Smith, P. M., & Hirsch, S. 2000. *The realists' guide to redistricting: Avoiding the legal pitfalls*. Chicago: American Bar Association

McDonald, M.D. and Best, R.E., 2015. Unfair partisan gerrymanders in politics and law: A diagnostic applied to six cases. *Election Law Journal*, *14*(4), pp.312-330.

Polsby, Daniel; Popper, Robert. 1991. "The Third Criterion: Compactness as a Procedural Safeguard Against Partisan Gerrymandering". *Yale Law & Policy Review*. 9: 301–353.

Reock, Ernest. 1961. "A Note: Measuring Compactness as a Requirement of Legislative Apportionment". *Midwest Journal of Political Science*. 5 (1): 70–74.