

Effects of Road Characteristics, Land Cover, and Topography on Roadkill
Patterns Across a Rural-Urban Gradient in Southwest Virginia

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ABSTRACT

Roads are one of the most recognizable artifacts of human habitation and development. They cross various landscapes and expand with the increasing density of human settlements. While these structures are vital in facilitating vehicular transportation, they can also have unintended negative consequences for natural ecosystems, such as road-related wildlife mortality. To examine the negative impacts of roads on wildlife at a local level, I quantified the frequency and patterns of road mortality across a yearlong study period in a study area within Montgomery and Giles Counties in southwest Virginia. I also examined relationships between roadkill patterns and several land and road variables, hoping to close a current literature gap by focusing specifically on small and meso-mammals weighing less than 15kg. I recorded the location and species of carcasses found along predetermined routes, including roads with variable speed limits, road infrastructure, and adjacent land cover. I used government-provided data sets, satellite imagery, and field verification to characterize our study routes. I recorded 294 carcasses and identified 221, of which 84% were small or meso-mammals, including 11 taxa. The most frequent roadkill taxa were tree squirrels (*Sciurus* sp.), opossums (*Didelphis virginiana*), striped skunks (*Mephitis mephitis*), and raccoons (*Procyon lotor*). I found three roadkill hotspots, all along a major highway, and a high frequency of roadkill in spring, autumn, and early winter. High posted speed limits, the presence of artificial road lighting, and high proportions of forest and early successional growth cover (often present in pastures) were associated with an increased frequency of wildlife-vehicle collisions.

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GENERAL AUDIENCE ABSTRACT

Roads are one of the most recognizable artifacts of human habitation and development. They cross various landscapes and expand with the increasing density of human settlements. While these structures are vital in facilitating automobile transportation, they can also have unintended negative consequences for natural ecosystems, such as roadkill. To examine the negative impacts of roads on local wildlife, I studied the frequency, patterns, and causes of road mortality across a year-long study period. I also examined relationships between frequent roadkill hotspots and several land and road variables in a Montgomery and Giles Counties study area in southwest Virginia. My project focused on small and medium-sized mammals because they are rarely considered in other roadkill studies. I collected field data on the location and species of carcasses observed on surveys along predetermined routes, including roads with variable speed limits, road infrastructure, and adjacent land cover. I used government-provided data sets, imagery, and field verification to characterize study routes. I recorded 294 carcasses and identified 221, 84% of which were small and medium-sized mammals. Roadkill frequency was highest in spring, autumn, and late winter. I found that high posted speed limits, the presence of artificial lighting, high forest cover, and high early successional growth cover (such as shrubbery and small trees in pastures) were associated with a higher frequency of wildlife-vehicle collisions.

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Introduction

Roads are one of the most recognizable artifacts of human habitation and development. They cross various landscapes and are expanding with the increasing density of human settlements. Roads are so pervasive that approximately 20% of earth's land is within 1km of a road (Ibisch et al. 2016). While these structures are vital in facilitating vehicular transportation, they can also have unintended negative consequences for natural ecosystems (Forman and Alexander 1998, Fahrig and Rytwinski 2009). Most importantly, roads are significant sources of wildlife mortality due to wildlife-vehicle collisions (WVCs) (Forman et al. 2003, Schwartz et al. 2020), and in some cases, can reduce or even eliminate local wildlife populations (Forman et al. 2003, Fahrig and Rytwinski 2009).

Road ecology examines the relationship between roads and natural ecosystems (Forman et al. 2003, Coffin 2007). This discipline is relatively new, originating from Forman and Alexander's (1998) paper, *Roads and Their Major Ecological Effects*. Researchers engaged in forms of the discipline earlier than 1998 (e.g., Adams and Geis 1983), but without the label of road ecology (Forman et al. 2003). Despite its youth as a discipline, road ecology has attracted much interest in recent years in response to increasing threats posed by habitat fragmentation and the apparent rise in roadkill frequency (Pagany 2020).

In many studies, road ecologists have found correlations between environmental and road-related factors and roadkill incidence (e.g., Akrim et al. 2019, Clevenger et al. 2015, Hobday and Minstrell 2008, Kreling et al. 2019, Matos et al. 2012, Medrano-Vizcaíno and Espinosa 2021, Seo et al. 2015, Smith-Patten and Patten 2008, Stapleton et al. 2019, Sutherland et al. 2010, Vance et al. 2018), showing that WVCs are distributed in somewhat predictable

ways. The location and frequency of WVCs appear to be affected by surrounding landscapes, traffic (including volume or speed), and road infrastructure, among other factors (Pagany 2020). However, researchers have yet to agree on the degree and even direction of influence exerted by these factors (Gunson et al. 2011). For example, streetlights can attract or repel animals from the roads where they provide light (Rich and Longcore 2006). Another factor not well understood is the influence of urban development (Pagany 2020). Kreling et al. (2019) found that raccoons flourished in urban landscapes, whereas other more secretive species were less likely to reside near human development. The disagreement about the impacts of environmental factors or road infrastructure may point to differences relating to the animal species studied, site differences, or the complexity of interconnectedness among the variables (Clevenger et al. 2015). In any case, this highlights the need for further study in this area. In particular, few conclusions have been drawn about the overall impact of such variables on WVCs involving small mammals ($\leq 5\text{kg}$) (Stoddart, 1979) and meso-mammals (5–15kg) (Roemer et al. 2009) owing mainly to a lack of research focused on these size classes (Pagany 2020).

Animal size and reproduction rate may be an important factor in how animals respond to road characteristics. Fahrig and Rytwinski (2009) found that large animal abundance is typically negatively affected by roads, medium animal abundance is negatively impacted or displayed no effect, and small animal abundance often had neutral or even positive interactions with roads. Negative interactions derived from road-related disturbances and mortality, while positive interactions were often related to a decrease in predators for prey animals. Roads also positively impacted animals that scavenged on roadkill but could avoid vehicles, such as vultures. The authors noted that animals with low reproductive rates and large territory sizes, generally associated with large animals, experienced greater negative impacts from roads. However, this

trend can vary among species and landscape. For example, despite their status as large mammals, white-tailed deer populations in southwest Virginia (including our study area) are probably not substantially affected by WVCs because of sheer abundance. Overall, while animal size may be an indicator of the effect of roads on animals, there are variations among species within size groups, making species-specific research essential.

In this study, I included all animals encountered, but expected small and medium-sized mammals to be well-represented due to their abundance in southwest Virginia and previous informal observations of roadkill. To quantify the impacts of WVCs on animals, focusing on small and meso-mammals, I explored relationships between landscape, road-related variables, roadkill frequency, and spatial patterns across a rural-urban gradient in southwestern Virginia. My primary objectives were to (1) characterize the taxonomic profile of the roadkill in the study area, (2) quantify the effects of selected environmental and road-related variables on wildlife-vehicle collisions, and (3) identify and explain roadkill hotspots (high-density areas) within the study area.

Methods

Study Area

I selected a study area (Figure 1) within Montgomery and Giles Counties of Virginia that represents a gradient across rural and urban landscapes, and contains various cover types, development levels, and road infrastructure. The main urban area is Blacksburg, a university town (home of Virginia Tech) of about 45,000 people (Town of Blacksburg Virginia 2023). The town is set in the Valley and Ridge province of southwestern Virginia, just west of the Blue Ridge Mountains. Elevations in the study area range from about 578m to 784m. My field survey

routes crossed through and around Blacksburg, extending across the adjacent forested and agricultural areas, as well as into the town of Christiansburg to the south. Forested land, deciduous and mixed with pine, is abundant, especially on ridges and slopes in the study area, which included part of the George Washington and Jefferson National Forest. Farmland and development dominate the valleys. Agricultural areas within the study area support livestock production, pastures, and hay rather than truck crops.

The study area included roads with variable annual average daily traffic (AADT), traffic speeds, and variable land cover (Figures 1 and 2). To ensure a diversity of traffic volumes and speeds within the study area's roads, I used the Jenks natural breaks method (ESRI, n.d.) to categorize traffic volume and traffic speed for each candidate road. The Jenks natural breaks method has often been used to divide classes of geographical information into sensible classes (Chen et al. 2013). I then selected roads that were both representative of the study area and sufficiently diverse in road characteristics. These roads included:

1. Peppers Ferry Road (VA 114) lies predominantly within Montgomery County but reaches into Pulaski County at its western terminus. It is a moderately trafficked route at 10,000 to 16,000 AADT. The road is bordered by a mixture of forest and agricultural land and terminates in Christiansburg, Virginia.
2. Merrimac Road (VA 657), also within Montgomery County, connects Prices Fork Road with South Main Street just south of Blacksburg, Virginia. The road's adjacent areas include forest, residential single- and multi-family housing, and agricultural lands. The traffic volume on Merrimac Road is low at 1,700 AADT.
3. The segment of South Main Street (VA 460 Bus.) used in the study extends from the eastern terminus of Merrimac Road north to Highway 460. It lies entirely within

Montgomery County and passes through light urban development. The traffic volume on this road is moderate (14,000–20,000 AADT).

4. Prices Fork Road (VA 659) connects Blacksburg to the Belview area of Montgomery County and passes through diverse land cover types, from heavy development to extensive agricultural lands and forests. The traffic volume of the section of the road used in the study varies from 5,300–21,000 AADT, indicating a moderate traffic volume.
5. Highway 460 is a multi-lane, median-separated roadway that traverses Virginia's southern third from Virginia Beach westward to West Virginia. Selected sections included in the study lie within Giles and Montgomery Counties and provide contrast with the other less trafficked roads in the study. The AADT of the relevant areas of Highway 460 ranges from 12,000 to 45,000, indicating moderate to very high use.

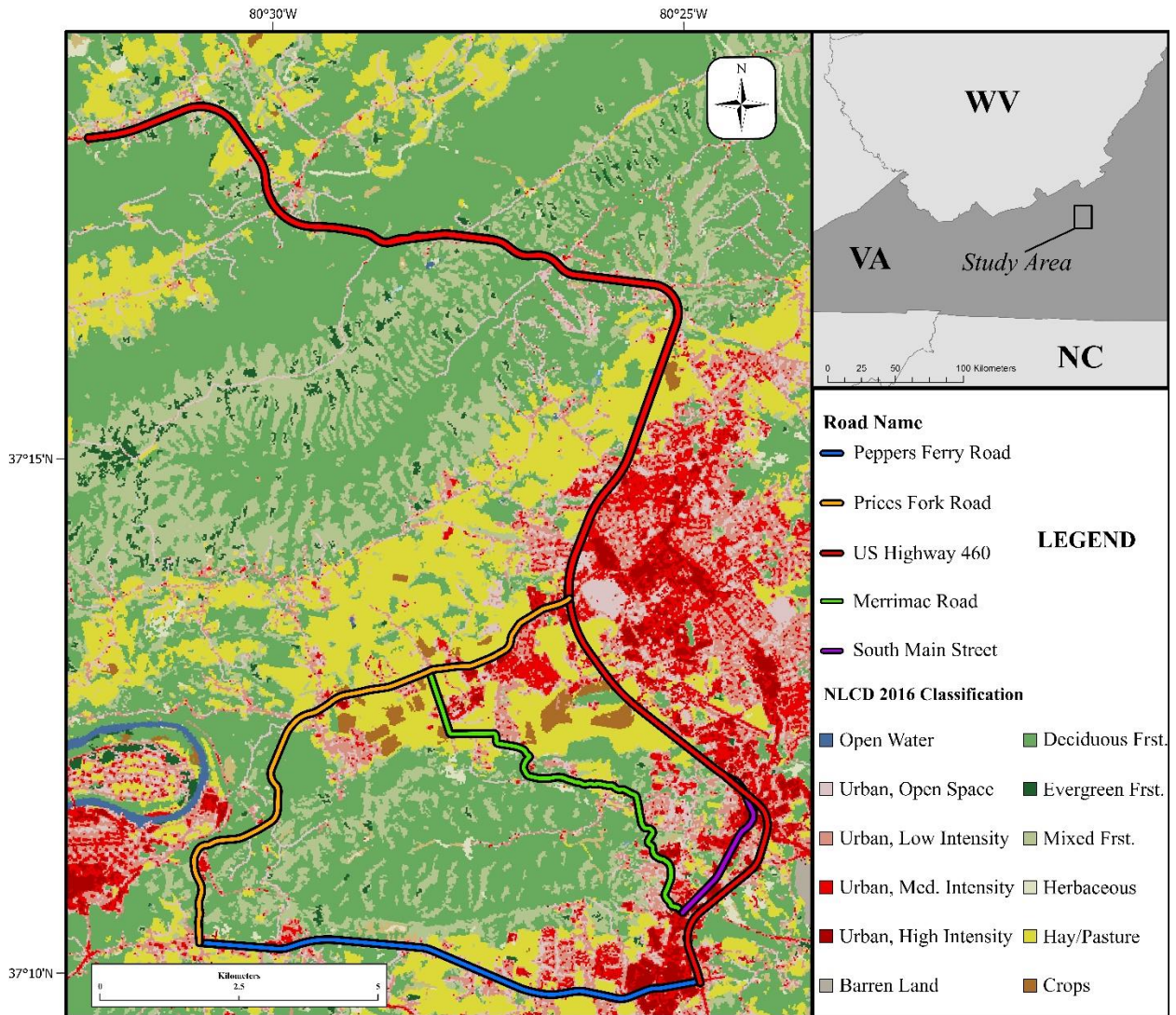


Figure 1. Roads analyzed and land cover within the study area represented using the National Land Cover Database (NLCD) 2019 raster pixels. Blacksburg, VA (approximate center coordinates, 37.23° N, 80.41° W) is the urban area of medium to high-intensity development (medium to dark red in the legend) occupying the eastern edge of the map.

Mortality Surveys

The 2-person observation team alternated between two routes for data collection, covering each route at least once weekly (excluding a few weeks with harsh weather) for one

year during daylight hours. The team traveled in the same direction when making observations for both routes (Figure 2). For Route A, a survey progressed east along Prices Fork Road, south on US Route 460, west along Peppers Ferry Road, and northeast along Prices Fork Road. Route B travel proceeded east along Prices Fork Road, north on US Route 460, then returned southward down the other side of the median-separated highway. Next, the route turned onto South Main Street and then up Merrimac Road where the route terminated at the starting position. The two routes overlapped by about 7km (Figure 2, purple), meaning that this section was surveyed twice as often as all the other road sections.

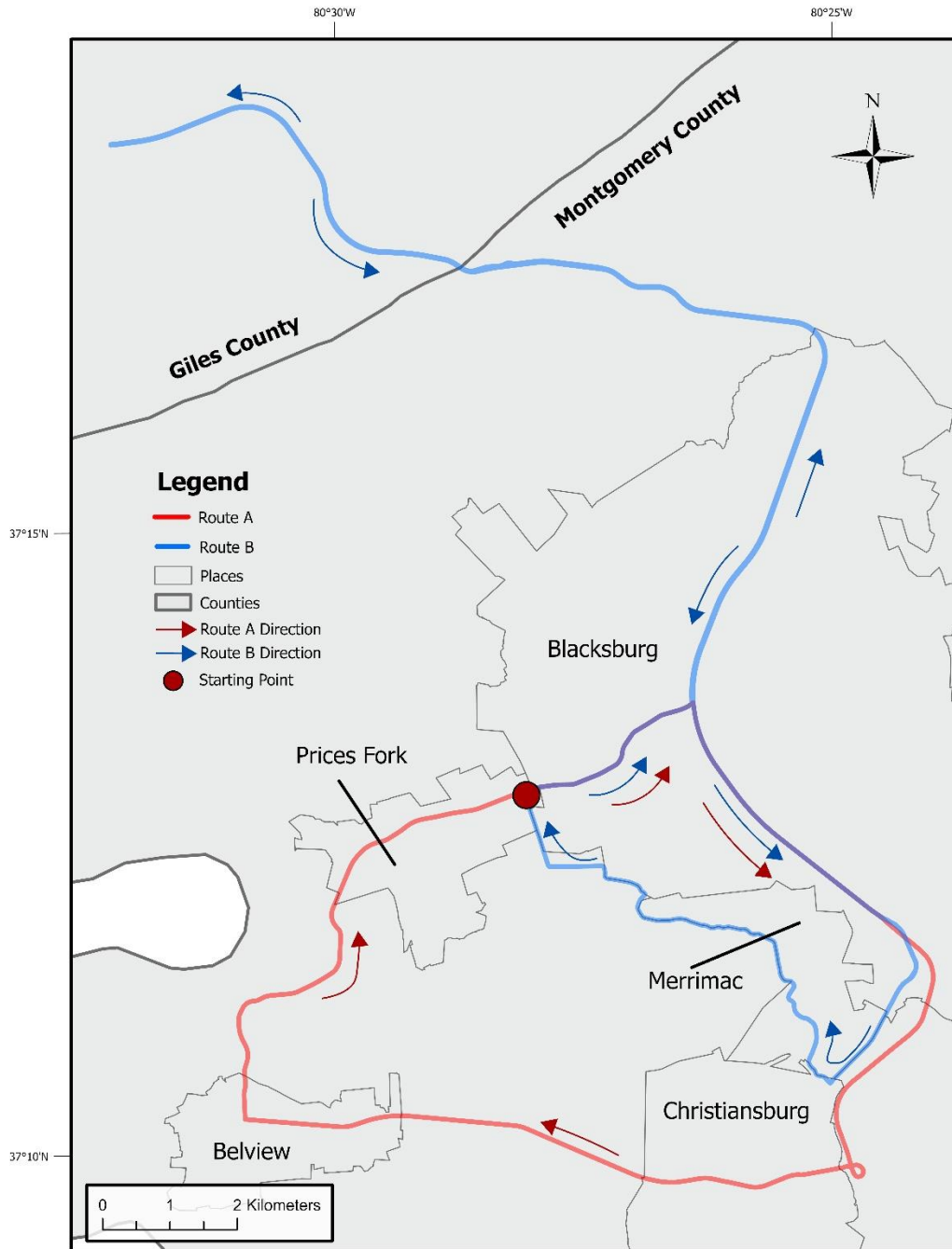


Figure 2. Route A (red) and Route B (blue) were the alternating paths taken to collect data. Purple roads show where the two routes overlap. Route A was 29.6 kilometers (about 18.39 mi) long, and Route B was 55.9 kilometers (about 34.73 mi). At the first intersection along both routes, Route B continues north and returns back going south, while Route A only goes south. Community names are labeled.

For each roadkill, the team recorded the location of the carcass as point data along with the date and taxon using ArcGIS Collector 20.2. Roadkill was identified to the lowest taxonomic level possible and if unrecognizable, it was marked as ‘unidentified.’ The GPS error was set to 20 meters at 95% confidence, a value with a good balance of accuracy and elapsed calculation time. The observers proceeded via automobile moving as slowly as possible to facilitate identification of roadkill and collection of location data, but personnel remained within the vehicle for safety. To avoid duplicate counting, each newly detected point was immediately compared to previously collected points on the virtual map. The new point was omitted if a point already existed in the database at that exact spot and corresponded to the same carcass identity. After gaining field experience, the team began to record the relative road position of the carcass (i.e., right or left side) to reduce the chance of missing or duplicating.

Spatial Analysis

This study examined aspects of the built environment and various field variables obtained from multiple sources, including VDOT, remotely sensed data, and aerial imagery (Table 1). Clearly visible features, such as light posts, were visually verified in the field.

Table 1. Environmental variables and associated hypotheses examined in relation to roadkill incidence.

Variable	Hypothesized Impact On WVCs	Data Source, Year
Light posts	Increases	Environment Systems Research Institute (ESRI) (2022)
Wildland-Urban Interface (WUI)	Increases	United States Geological Survey (USGS) (2020) and Radeloff et al. (2005)
Human population (population per census block)	Increases	United States Census Bureau (USCB) (2022)
Traffic volume (average annual daily traffic)	Increases	Virginia Department of Transportation (VDOT) (2022)
Traffic speed (miles per hour)	Increases	VDOT (2022)
Forest land cover (%)	Increases	National Land Cover Database NLCD (2019)
Urban land cover (%)	Decreases	NLCD (2019)
Early successional land cover (%)	Increases	NLCD (2019)
Elevation (meters)	Decreases	USGS (2022)
Terrain Ruggedness Index (TRI)	Decreases	USGS (2022) and Riley et al. (1999)

Field data in ArcGIS Collector was uploaded to an established map in ArcGIS Online, then downloaded to ArcGIS Pro to identify relationships between mapped environmental variables and roadkill point data. The roads used as study areas were divided into equal-length segments (n=169), each 0.333 kilometers long and 60 meters across (30 meters on each side of the center line of the road) (Figure 3). The purpose of dividing the study area into segments was to provide a dependent variable for the GLM: without segments, there would be no meaningful y-variable with which to compare independent variables. Many other road ecology studies also adopt this method (e.g., Kreling et al. 2019, Plante et al. 2019, Seo et al. 2015, Stapleton et al. 2019, Sutherland et al. 2010). A length of 0.333 kilometers proved to maintain a high number of segments, while preserving a meaningful area within each segment (i.e., the areas were effective for finding averages of the independent variables that were representative of each location). The dependent variable was determined by counting the number of roadkill points within each

All other data were in raster format or transformed into a raster grid. Specifically, elevation, land cover, and the Terrain Ruggedness Index (TRI) were in raster format by default. The remainder of the independent variables, for example, traffic volume and traffic speed, were transformed from vector data to raster data. The purpose of this transformation was to have all continuous data in a format that could easily be analyzed by ArcGIS Pro. All raster grids were projected to the Universal Transverse Mercator Zone 17 projection and resampled such that the cell size was 10 by 10 meters using the nearest-neighbor method.

Some of the independent variables are worthy of further elaboration. Wildlife-Urban Interface (WUI), Terrain Ruggedness Index (TRI), urban land cover, early successional land cover, and forest land cover required less commonly used techniques. Following Radeloff et al. (2005), WUI was calculated as census blocks with a housing density greater than 6.17 houses per km squared and vegetation cover greater than 50% per census block. I adopted this definition for this study, but only at the census block group level. Census blocks are the smallest geographical unit used by the United States Census Bureau, while census block *groups* are an assembly of similar blocks, making them the next largest geographical unit. The block level was inappropriate for use because many in the study area were small and irregularly shaped, which could have led to non-representative density calculations. In contrast, the census block group level provided area sizes that were much more consistent and representative. I calculated TRI using an open-source tool, System for Automated Geoscientific Analyses (SAGA, Riley et al. 1999). SAGA calculates TRI using a Digital Elevation Model (DEM), which then becomes the basis for determining terrain ruggedness along the roads in the study area.

I calculated three land cover types (urban, forest, and early successional) using the 2019 NLCD. Urban pixels were defined as those that met the criteria for low, medium, and high

intensity developed land by the NLCD, whereas forest pixels were defined as those that met the requirements for deciduous, evergreen, and mixed forests. Early successional land was defined as hay, pasture, herbaceous, and cropland pixels. Early successional land would be dominated by herbaceous plants (e.g., grasses and many weeds) or crops, but also include some woody plants (e.g., shrubs and trees), though many fewer than in forested lands.

To avoid counting land cover pixels from the road, the values for land pixels were based on the area 30–100 meters out from the center line of the road. The maximum 100-meter buffer was determined by the maximum length that the buffers could expand to before overlapping with other road buffers. Given the chosen wildlife focus, the buffer size for land cover was proportionally small compared to other studies (e.g., Nieszala and Klich, 2021). Using these metrics, new raster grids were created using the Reclassify tool in ArcGIS Pro, where 1 met the criteria, and 0 did not.

After the variables were rasterized, the cell values were either dichotomous (ones and zeros) or continuous. To get a representative number for each independent variable per road segment, I took the average of each raster cell within a road segment for all continuous variables. Since dichotomous variables cannot have a meaningful average, I used the majority pixel for each segment instead of the mean. However, the land cover was calculated as a percent coverage with a value for forest, early succession, or urban between 0 and 1. Thus, a value of 0.44 for urban land cover would indicate that 44% of the pixels in the range (30–100 meters) of the road segment were classified as urban. I chose this calculation because nearly every segment had at least one forest, early successional, or urban land pixel in its range.

Once all variables had been assigned countable numerical values, I created a Zero-Inflated Poisson Generalized Linear Model in Python with the ‘statsmodels’ module (Seabold

and Perktold, 2010). The independent variables were the averages of pixels or majority of pixels within each road segment for each variable mentioned above (Table 1), while the dependent variable was the count of carcasses within each road segment. The zero-inflated regression accounted for the large number of zero values in the dependent variable data (i.e., road segments where no carcasses were found). Each independent variable average was standardized using z-score. This means that I substituted the actual value of each independent variable with their corresponding z-score, an index that indicates the distance a value is from the mean of a variable. This produces a more desirable output by keeping GLM coefficients at single digits and also allows comparison of coefficient strengths to other variables.

I also ran tests of statistical comparison between the observed dataset and five randomly generated datasets. The representative values for the observed and random datasets were gathered by averaging the values of continuous variables within a 500-meter radius around each roadkill point ($n = 294$), while dichotomous variables were labeled either '1' or '0' depending on the presence or absence of variables, respectively. The random point sets were generated using the 'Create Random Points' tool within ArcGIS Pro. Random points were generated only within areas where observed points could be found. Each random set contained 298 points, which is close in sample size to the number of points in the original data sets (final observed data set contains 294 points). I used a 500-meter radius based on a study of land cover effects on meso-carnivores (Nieszala and Klich 2021), the dominant size class in the dataset. The same radius was used to calculate the number of carcasses of the most frequent taxa that fell within locations dominated by forest, early successional, and urban land cover.

I then compared each variable of the observed data set to the corresponding variable of each random data set using Mann-Whitney U tests for each continuous variable and chi-squared

tests for each dichotomous variable. I performed species-specific statistics for the regression, but not for comparison tests due to insufficient sample sizes.

Results

I recorded 294 incidents of WVCs over approximately one year (1/23/2022–12/9/2022) involving 45 surveys across both study routes. The greatest number of roadkills occurred during autumn, late winter, and spring, whereas summer and early winter presented the fewest (Figure 4). In total, identifiable carcasses were assigned to 11 taxa. Some records were only identifiable to the genus level, and 73 records (24.8%) were unidentifiable due to degraded conditions that made them unrecognizable from the vehicle (Figure 5). Among carcasses identified to at least the genus level, the most frequently encountered included tree squirrels (*Sciurus* spp.), opossums (*Didelphis virginiana*), striped skunks (*Mephitis mephitis*), and raccoons (*Procyon lotor*).

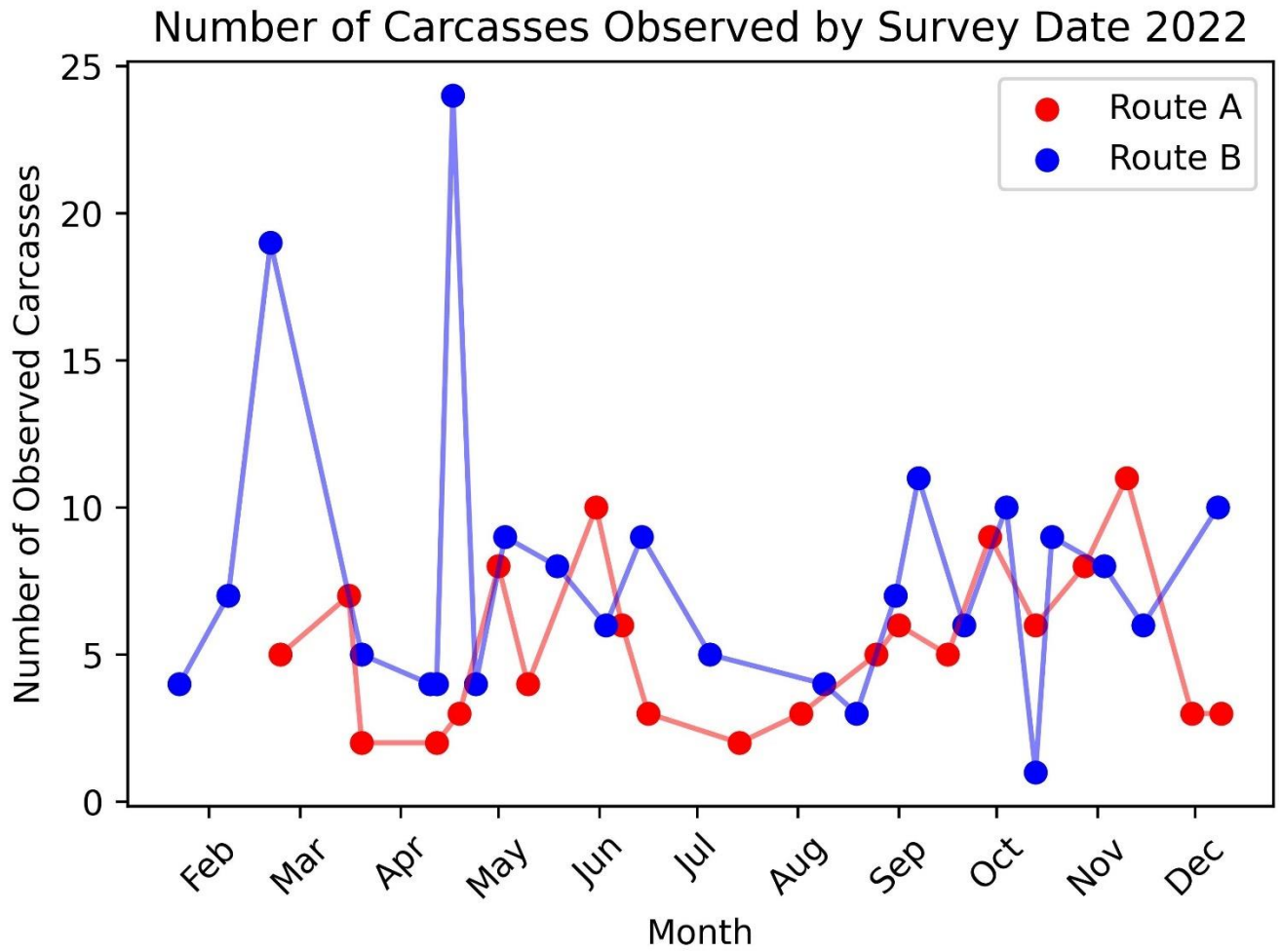


Figure 4. Number of carcasses found in each survey during the study period (2022). The blue line represents observations from route B, the red line observations from route A.

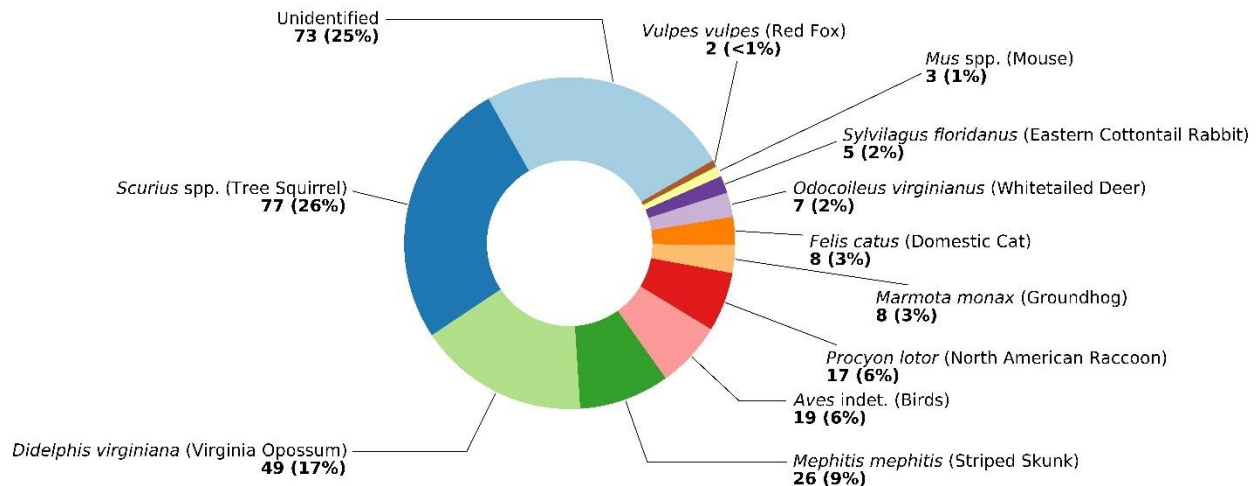


Figure 5. Total number of recorded WVCs per taxon. Percent of total shown in parentheses.

A Zero-Inflated Poisson Generalized Linear Model revealed that four independent variables were significantly correlated with WVCs of the “All Animals” group (Table 2 and Figure 6). Variables dependent on topography (elevation and TRI) showed little correlation with WVC occurrence, but results indicated positive correlations between WVCs and some road characteristics, as well as some land cover types: high carcass counts were recorded in areas with high posted speed limits, forest cover, early successional cover (hay, pasture, and herbaceous land cover), and light posts when all animal carcasses were included in the GLM.

Results differed for species-specific analysis, likely due to a combination of variable sample sizes, randomness, and species behavior. Squirrel and opossum roadkills were high in areas with high posted speed limits and lower in areas with high forest cover, but the standard error for forest cover variable was quite high, possibly negating the relationship between this factor and WVCs. Carcass counts for opossums were lower in urbanized areas. Curiously, opossum carcasses occurred more often near artificial light sources rather than far from them. Raccoons and skunks had fewer carcasses near urban environments, and raccoons specifically

had much lower carcass counts near wildland-urban interface. Skunk carcasses were found less often near light sources. All of these results (aside from those related to speed limit) have a considerably high standard error. Raccoon and skunk carcasses had smaller sample sizes making it difficult to draw conclusions from GLM results (Table 3 and Figure 7). For a simple comparison of landcover type to species carcass counts, squirrels and raccoons were associated with areas of high forest cover, whereas opossums and skunks were often found near early successional cover such as agricultural land, which in these locations is often pasture (Figure 8).

The map of roadkill locations (Figure 6) identified three “hotspot” locations, all located on Highway 460 and representing low-development areas within or around Blacksburg and Christiansburg. A lack of roadkill points emerged for west Prices Fork Road and nearly all of Merrimac Road. Hotspot maps placed over a land cover map of the study area offer insights on each of the four most common species (Figure 7).

Table 2. Results for the zero-inflated Poisson generalized linear model for all animals ($n = 294$). The coefficients scale with the effect with the variable, as the independent variables are standardized. A positive coefficient represents a positive relationship with WVC frequency, whereas a negative coefficient represents an inverse relationship. Variables representing light posts and WUI are dichotomous; all other variables are treated as continuous.

Variable (All animals)	Coefficient	Standard Error	p-value
Light posts	0.354	0.172	0.039
Wildland-Urban Interface (WUI)	-0.313	0.165	0.057
Human population (population per census block)	0.004	0.071	0.959
Traffic volume (average annual daily traffic)	-0.061	0.111	0.581
Traffic speed (miles per hour)	0.589	0.105	<0.001
Forest land cover (%)	1.488	0.270	<0.001
Urban land cover (%)	0.231	0.333	0.487
Early successional land cover (%)	0.462	0.084	<0.001
Elevation (meters)	-0.084	0.075	0.265
Terrain Ruggedness Index (TRI)	0.002	0.238	0.994

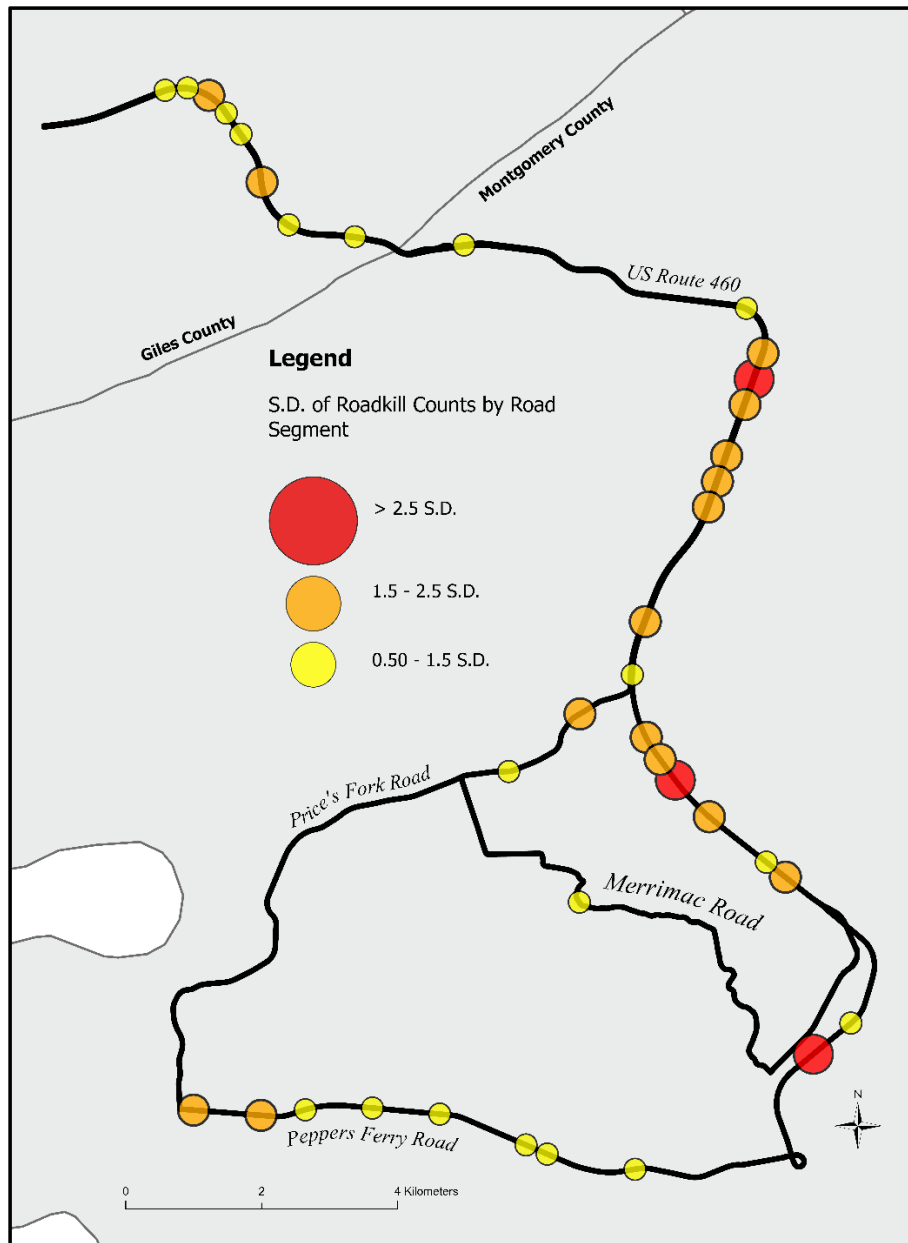


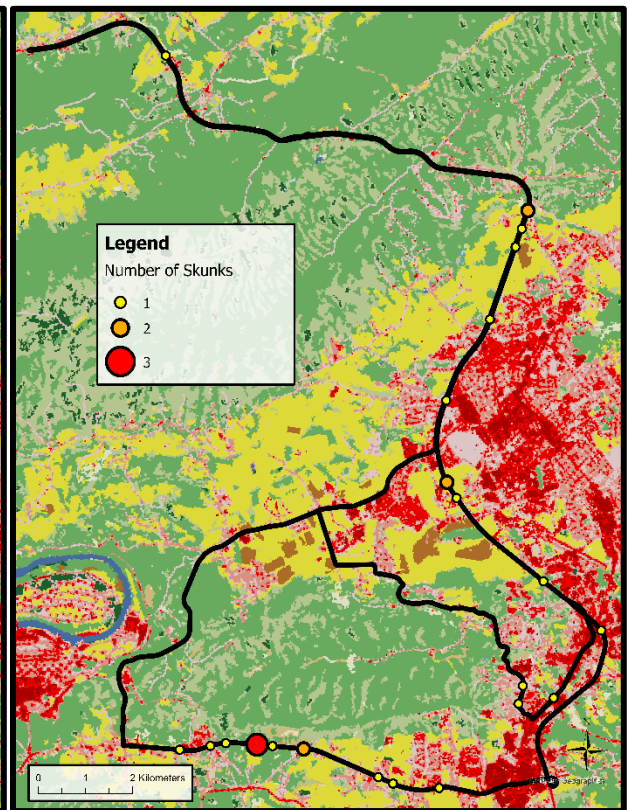
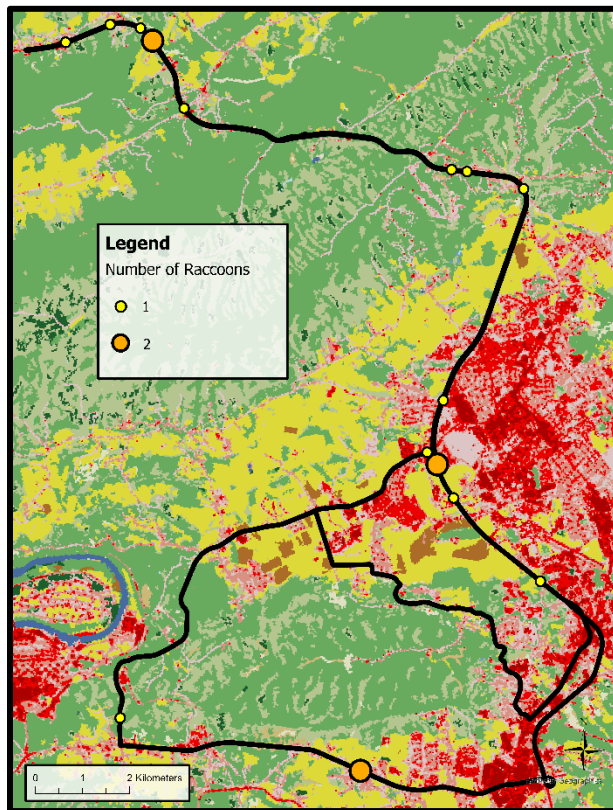
Figure 6. Graduated symbol map depicting the number of roadkill (all animals) incidences for each road segment by standard deviation. Red large circles show the highest levels of roadkill (those about 2.5 standard deviations), smaller circles show lower numbers, and segments below 0.5 standard deviations are omitted. Standard deviation indicates the numerical distance from the mean.

Table 3. Results for the zero-inflated Poisson generalized linear model for the four most common taxa in this study. The coefficients scale with the effect with the variable because the independent variables are standardized. A positive coefficient represents a positive relationship with WVC frequency, whereas a negative coefficient represents an inverse relationship. From top-left to bottom-right: tree squirrel (*Sciurus spp.*) (n = 77), opossum (*Didelphis virginiana*) (n = 49), striped skunk (*Mephitis mephitis*) (n = 26), and raccoon (*Procyon lotor*) (n = 17). Variables representing light posts and WUI are dichotomous; all other variables are treated as continuous.

Variable (Squirrel)	Coefficient	Standard Error	p-value	Variable (Opossum)	Coefficient	Standard Error	p-value
Light posts	-0.201	0.413	0.627	Light posts	1.027	0.369	0.005
Wildland-Urban Interface (WUI)	0.004	0.348	0.992	Wildland-Urban Interface (WUI)	0.470	0.382	0.219
Human population (population per census block)	0.066	0.168	0.696	Human population (population per census block)	0.0619	0.140	0.658
Traffic volume (average annual daily traffic)	-0.433	0.256	0.090	Traffic volume (average annual daily traffic)	-0.204	0.232	0.378
Traffic speed (miles per hour)	0.547	0.209	0.009	Traffic speed (miles per hour)	0.509	0.271	0.019
Forest land cover (%)	-2.745	0.691	<0.001	Forest land cover (%)	-0.841	1.215	0.183
Urban land cover (%)	-1.054	0.644	0.102	Urban land cover (%)	-2.760	0.813	0.001
Early successional land cover (%)	-0.120	0.184	0.514	Early successional land cover (%)	-0.081	0.202	0.688
Elevation (meters)	0.087	0.183	0.634	Elevation (meters)	0.007	0.143	0.962
Terrain Ruggedness Index (TRI)	0.239	0.216	0.267	Terrain Ruggedness Index (TRI)	0.002	0.238	0.994

Variable (Skunk)	Coefficient	Standard Error	p-value
Light posts	-1.822	0.922	0.048
Wildland-Urban Interface (WUI)	-1.366	0.734	0.063
Human population (population per census block)	0.097	0.346	0.775
Traffic volume (average annual daily traffic)	0.271	0.553	0.624
Traffic speed (miles per hour)	0.9174	0.573	0.109
Forest land cover (%)	-1.6171	1.215	0.183
Urban land cover (%)	-2.756	1.250	0.028
Early successional land cover (%)	-0.265	0.379	0.485
Elevation (meters)	-0.2316	0.281	0.410
Terrain Ruggedness Index (TRI)	0.694	0.351	0.048

Variable (Raccoon)	Coefficient	Standard Error	p-value
Light posts	-0.017	0.491	0.973
Wildland-Urban Interface (WUI)	-1.722	0.589	0.003
Human population (population per census block)	0.158	0.235	0.503
Traffic volume (average annual daily traffic)	-0.549	0.402	0.172
Traffic speed (miles per hour)	0.701	0.337	0.063
Forest land cover (%)	-0.605	0.848	0.475
Urban land cover (%)	-1.807	0.894	0.043
Early successional land cover (%)	-0.148	0.307	0.630
Elevation (meters)	0.023	0.306	0.941
Terrain Ruggedness Index (TRI)	-0.216	0.337	0.521



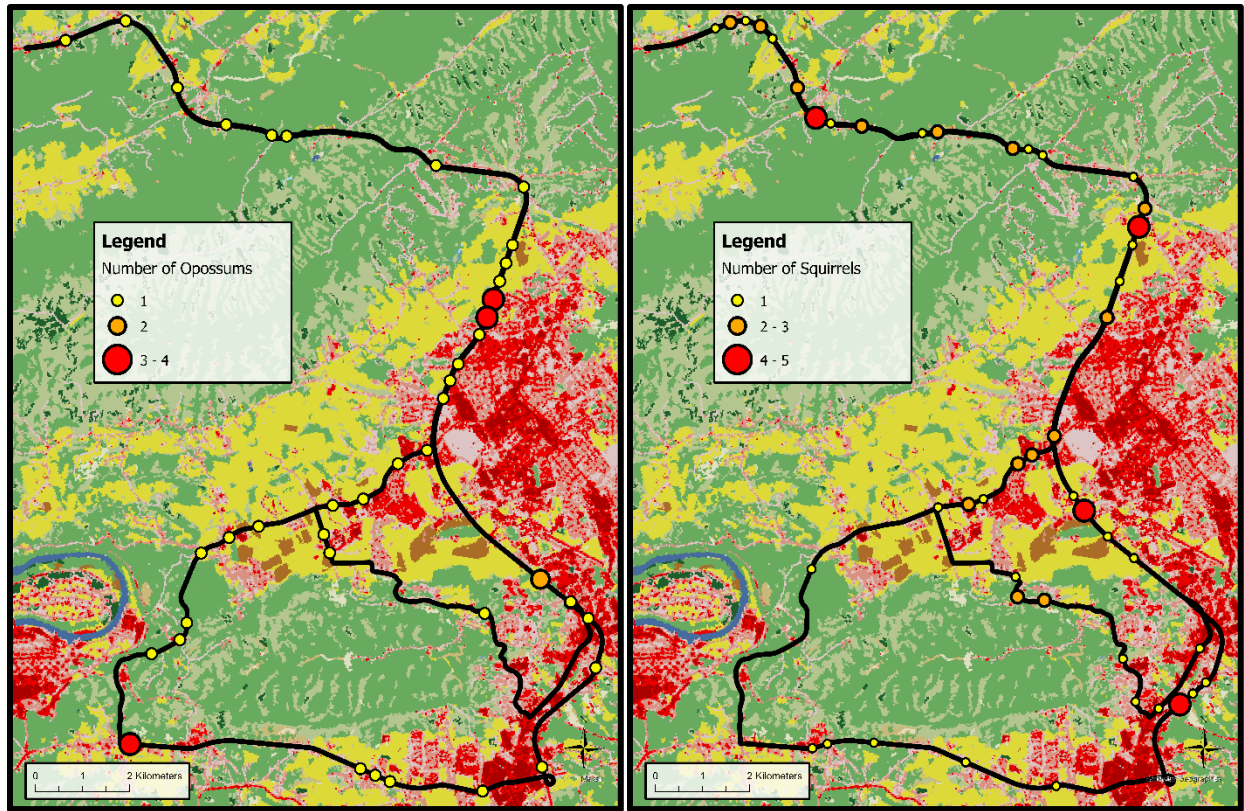


Figure 7. Graduated symbol (larger circles = higher numbers) maps depicting the number of roadkill incidences for each road segment. From upper left to lower right are raccoons (*Procyon lotor*), striped skunks (*Mephitis mephitis*), opossums (*Didelphis virginiana*), and squirrels (*Sciurus* spp.). Red shows the highest levels of roadkill while segments with zero recorded carcasses of the mapped species were omitted.

A test of the distribution of the observed variables for randomness revealed that traffic speed, traffic volume (AADT), early successional land cover, and urban land cover were often statistically different compared to random data sets (four out of five times or more) (Table 4). Other variables were rarely or never statistically different, meaning that no statistically significant differences between that variable and the randomly generated corresponding variable occurred (e.g., observed elevation versus randomly generated elevation).

Table 4. Results of Mann-Whitney U Tests performed on the four consistently statistically different variables for all tests. Variables that were rarely or never statistically different were omitted.

Test #	Variable	Mann-Whitney U Statistic	P-value
1	Traffic Speed (mph)	53098	<0.001
	Traffic Volume (AADT)	49308	0.008
	Early Successional Land Cover (%)	52325	<0.001
	Urban Land Cover (%)	25532	<0.001
2	Traffic Speed (mph)	50699	<0.001
	Traffic Volume (AADT)	48565	0.022
	Early Successional Land Cover (%)	48262	0.032
	Urban Land Cover (%)	26091	<0.001
3	Traffic Speed (mph)	50954	<0.001
	Traffic Volume (AADT)	48740	0.018
	Early Successional Land Cover (%)	47677	0.063
	Urban Land Cover (%)	26357	<0.001
4	Traffic Speed (mph)	52463	<0.001
	Traffic Volume (AADT)	48141	0.037
	Early Successional Land Cover (%)	52372	<0.001
	Urban Land Cover (%)	29148	<0.001
5	Traffic Speed (mph)	54456	<0.001
	Traffic Volume (AADT)	51875	<0.001
	Early Successional Land Cover (%)	48996	0.013
	Urban Land Cover (%)	27891	<0.001

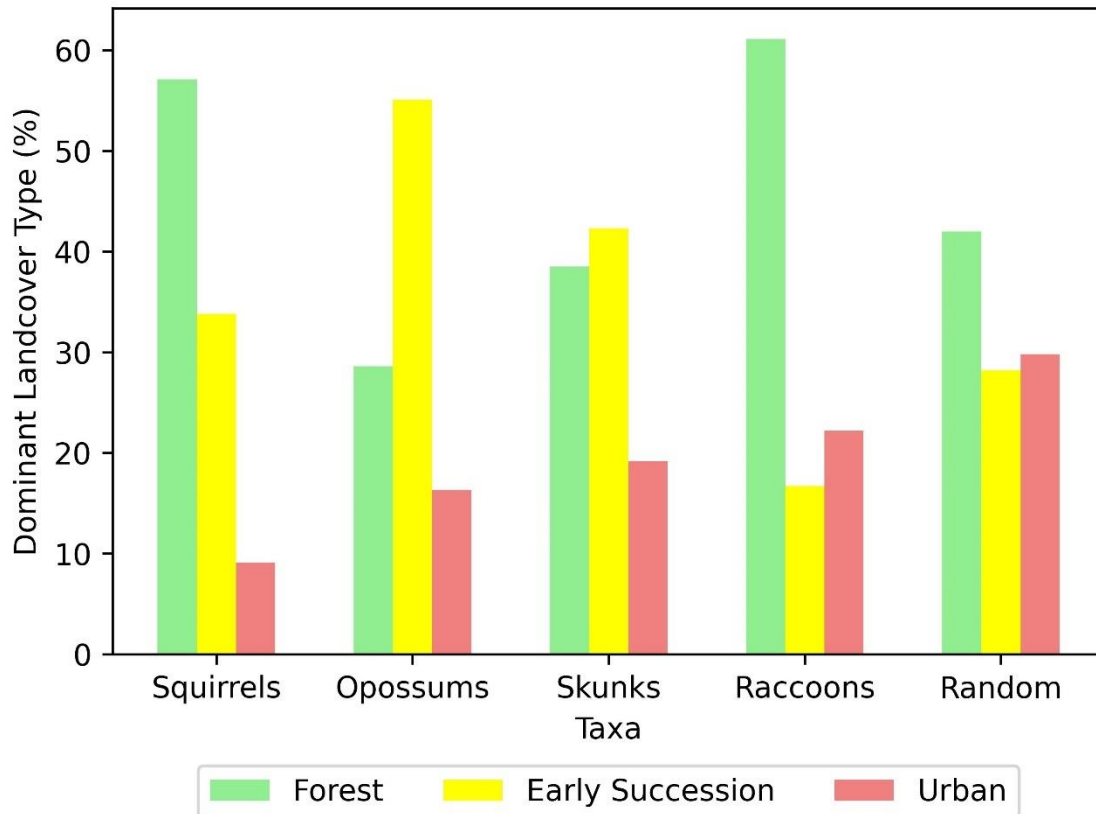


Figure 8. The percentage of carcasses that fall within areas dominated by forest, early successional, and urban land cover (e.g., approximately 56% of squirrel carcasses occurred in areas where the majority land cover type was forest). The ‘Random’ category uses randomly generated points equal to the number of squirrels, opossums, skunks, and raccoons (n = 171) for comparison.

Discussion

Taxonomic variation

Small mammals, defined by *Ecology of Small Mammals* as weighing approximately 5kg or less (Stoddart 1979), and meso-mammals, those that weigh approximately 5–15kg (Roemer et al. 2009), dominated my roadkill data set. Roadkill studies often ignore smaller roadkill

constituents to focus on larger animals, such as deer and predator species, that do more damage to automobiles or are rare and possibly threatened (Pagany 2020). I considered eight of the 11 identifiable roadkill taxa to fit the definition of small or meso-mammals. This analysis discounted birds, white-tailed deer, and non-native house cats to focus on small and meso-mammals including red foxes (*Vulpes vulpes*), mice, raccoons, opossums, skunks, rabbits (*Sylvilagus* spp.), tree squirrels, and groundhogs (*Marmota monax*), all with average adult weight ranges under the somewhat arbitrary 15kg/33 lbs. cutoff (VA-DWR n.d.). Overall, 84% of identifiable carcasses represented these two size classes. This result was perhaps unsurprising, given that small and medium-sized taxa are typically the mammals that suffer the most casualties, according to several roadkill studies (e.g., Chen and Koprowski 2019, Medrano-Vizcaíno and Espinosa 2021, Seo et al. 2015, Smith-Patten and Patten 2008). This trend may be due to smaller mammals simply occupying a larger percentage of all mammals (Merritt 2010).

Opossums and tree squirrels were especially abundant in the tally, representing 57% of the identifiable taxa. Both species are abundant in southwest Virginia and display behaviors that put them at risk when crossing a road. While known to be quick, squirrels often freeze on or dart across the road when a car approaches, so that drivers often cannot avoid them. This is a behavioral response to the squirrels' perceived threat (Arthur 2016). Conversely, opossums move slowly with a running speed of only about 7.4 kilometers per hour (4.6 mph) (Saunders 1988). This prevents them from crossing the road as fast as other mammals, increasing their risk of being involved in a WVC. Their sluggish traveling speed likely contributed to their high mortality rate on highways with high speed limits in this study (Table 2).

Limitations

1. Underestimation of Road Mortality

Vehicle-based observations of roadkill frequently produce undercounts of the actual number of carcasses compared with surveys carried out on foot. Undercounting can occur due to several possible causes: the speed of a surveillance vehicle is much higher than a surveyor on foot, injured animals may move to the road's less visible shoulder before expiring and be more easily missed by vehicle-based observers, scavengers may move or remove partial or entire carcasses such that the faster vehicle-based observers may miss them (Barrientos et al. 2018, Ogletree and Mead 2020, Schwartz et al. 2018, Slater 2002, Teixeira et al. 2013). The number of missed carcasses is difficult to gauge, so not surprisingly studies differ greatly in undercounting estimates. For instance, Ogletree and Mead (2020) found that ~ 40% of roadkill is missed during vehicle-based surveys, but Slater (2002) found that actual counts can be up to 16 times greater than vehicle-based observations. Despite known underestimates, vehicle-based observation is significantly safer and more efficient than walking, allowing coverage of a much larger study area. Roads selected for this study are especially unsafe for foot travel, having little to no berm or sidewalks and many blind corners, curves, and hills that would decrease reaction times for drivers to avoid pedestrians.

The vast majority of the 'Unidentified' category were likely composed of small and meso-mammals owing to the tendency of smaller animals to be easily obliterated by vehicles. In addition, research has demonstrated that observers are more likely to misidentify or not notice small carcasses compared to larger ones (Barrientos et al. 2018, Teixeira et al. 2013). Vehicle-based surveys tend to amplify this effect. Despite exercising great care, there was surely underreporting error in my surveys and most or all of it was likely in the small and medium-sized animals that I focused on. Thus, the number of small and meso-mammal carcasses on the roads

were likely higher than recorded and most or all of the unidentified animals were probably small species with little left to identify.

2. Low Sample Sizes and Time Span

Due to limitations on time, this study only gathered data over approximately a year. This led to a smaller sample size compared to other studies. Additionally, it is difficult to comment on temporal trends in the data due to the short time span of the study.

3. Other Variables Not Studied

There are other variables present in the study area that were not accounted for in the regression analyses (such as driver viewsheds). These variables could potentially impact the regression results if accounted for, which could reveal other important interactions between wildlife and roads. Adding variables could also influence independent variables already considered in the study.

WVCs and Environmental Factors

This survey showed that most carcasses were found on roads with a high posted speed limit (55 miles per hour and above). Both drivers and road-crossing animals must find it difficult to avoid collisions when the vehicles are traveling at relatively high speeds. The GLM coefficient for this variable was positive and statistically significant, indicating that speed limit is an important variable in estimating WVCs. In the species-specific analysis, squirrels and opossums, the two most frequent taxa, died on roads more often as speed limit increased, a result consistent with the overall trend. These results are in keeping with findings from many other studies (Akrim et al. 2019, Pagany 2020, Stapleton et al. 2019, Valero et al. 2015), although at least one study found the opposite (Murphy and Xia 2016). I speculate that if the sample size for raccoons and

skunks were higher, they would also have shown a positive relationship between WVCs with speed limit.

Artificial roadside lighting, which has a limited presence in road ecology literature, also appeared to influence WVCs involving opossums, which were found more often in areas near roadside light sources than in areas without lights. This finding may relate to collinearity between the light sources' locations and variables not considered in this study, such as habitat fragmentation or resource availability. For instance, lights may be more likely to be found in places with high levels of habitat fragmentation due to forest clearing for roads and buildings, that may also affect the frequency of WVCs. Another possibility is that this result shows that opossums are attracted to artificial lights, but the relationship between lights and mammals remains poorly understood (Rich and Longcore 2006). Given the modest sample size, the generalized linear model's coefficient for this variable is also somewhat weak and thus may not be as influential as other variables. There are not sufficient species-specific data to statistically assess the impact of light sources on mammal species, but the apparent significance with opossums here suggests that further research in this area is warranted.

This analysis showed that adjoining land cover type affected the distribution of WVCs for certain species (Table 2), a finding consistent with several studies of WVCs involving mammals (Murphy and Xia 2016, Pagany 2020, Seo et al. 2015). The most likely explanation for this connection is that WVCs will occur at locations that provide habitat, protection, food, and other resources compatible with the needs of species of interest. Taxon-specific regressions found results contradictory to simple comparisons between land cover and carcass locations (Table 3), leading me to interpret that the relatively low sample sizes and corresponding high standard errors in these regressions produced spurious regression results. I consider it more likely that the

simple comparison between carcasses and land cover is a more truthful representation of the relationship between land cover and WVCs for these species (Figure 7). These comparisons (Figures 6 and 7) showed that squirrel and raccoon carcasses were located more often in locations with a majority of surrounding forest cover compared to early successional or urban cover, whereas skunk and opossum carcasses were most often found near early successional cover (Figure 5). This is not surprising, as raccoons and tree squirrels strongly prefer forest habitats for nesting and food (Boggess 1994, Jackson 1994b). In contrast, skunks often are abundant where pasture lands border forest edge habitats (Knight 1994). Opossum roadkills displayed ties to pasture and early successional land in this analysis, although they are known to occupy a diverse range of habitat types, including both forest and pasture (Jackson 1994a). The roadkill pattern for opossums may show traffic speed to be a better predictor than land cover, considering the slow movement of opossums attempting to cross roads. Other factors not analyzed in this study, such as proximity to bodies of water, may also affect species distribution.

None of these four taxa were frequently represented in heavily urbanized areas. However, all were present to some extent. Most of the analyzed taxa (excluding squirrels) had ‘urban’ averages close to that of the random dataset, which may reflect that urban landscapes may simply reflect the smaller percentage of urban areas compared to forest or early successional vegetation. The modest sample sizes of some species may be muddling the relationship between WVCs and heavily urbanized areas, except to say that these species are present in them.

Some field variables expected to be statistically significant were not, the most obvious of these being traffic volume. Many studies, including Pagany’s (2020) meta-analysis that synthesized the results of several studies, found a positive correlation between traffic volume and WVC rate (Arnold et al., 2018; Valero et al., 2015; Vance et al., 2018). In this study, I suspect the

variation in traffic volume was too small to result in a significant correlation. For example, only a short segment (<1km) of the study area reached above 40,000 ADDT.

Seasonal Variation of WVCs

WVCs (all taxa) occurred more often in autumn, spring, and late winter, a result potentially linked to seasonal variation in mammal activity. Three of the most frequent taxa in this study (opossums, skunks, and raccoons) mate during February and March, possibly explaining the high rate of roadkill during these months, especially because males may travel more often or farther seeking potential mates (Boggess 1994, Knight 1994, Jackson 1994a). The young of these mammals are born in spring, likely contributing to the high levels of roadkill later in the spring and early summer among inexperienced young-of-the-year. Many of these species ramp up activity during autumn as they search for food and prepare for winter (Jackson 1994a, b); this increase in local movement probably accounts for some of the spike in roadkill in October. Most of the species in this study do not hibernate in winter, but many do decrease activity to conserve energy during winter weather and harsh cold (Kanda et al. 2006), which could account for some of the decrease in carcass count during winter. The decrease in carcass count during the summer is more difficult to account for, as many species do not decrease activity during the summer months. One possibility is that overgrown foliage made it more difficult to detect carcasses during the summer months, and thus the decrease would be in error. This idea may be supported by our observation that many carcasses were found on the edge or berm of the road during mortality surveys. Additionally, as the area is home to a college campus, a sharp decrease in traffic is expected during the summer when courses and students are substantially reduced. Decreased summer traffic could contribute to our lower carcass counts. Finally, it is important to note that this study yielded only one year of data, so would not account

for yearly variations in climate or resources. A future study collecting data over multiple years would better explain how climate and resource variation affects roadkill patterns.

Roadkill Hotspots

Three major roadkill hotspots emerged in the study area (Figure 6); not surprisingly, all were situated along the highest-speed road, US Route 460, thus offering strong support for the hypothesis that high-speed roads enhance WVC occurrence. The patterns shown by this study (hotspots and other higher-incidence sites) indicated that animals commonly use selected paths to cross roads to access resources. A significant factor contributing to these hotspots on high posted-speed-limit roads is that drivers may not have sufficient time to maneuver vehicles out of the paths of animals when traveling at high speeds. This danger is enhanced at night when drivers have limited vision and nocturnal animals, like raccoons, opossums, and skunks, are most active.

Conclusion

This study presents an analysis of data representing the location and species of roadkill in the study area across a year, and the relationship of these patterns with features of the roads and landscape. Thus, this thesis documents spatiotemporal patterns of WVCs in a Valley and Ridge setting of southwest Virginia. WVCs cause problems for wildlife, the most significant being road-related mortality. Certainly, humans also are affected by WVCs as drivers can have accidents trying to avoid collisions with wildlife of any size.

This research contributes to road ecology literature by addressing gaps in research on WVCs involving small and meso-mammals, an area of sparse research in the discipline. My investigation of the impacts of urban landscapes and speed limits on the distribution of WVC events also speaks to the ongoing debate on that topic in road ecology. More roadkill was

associated with roads with light posts, high speed limits, and high proportions of adjacent forest and early successional habitats, which are commonplace in the Valley and Ridge Province. Three hotspots of WVC occurrence emerged within the study area along US Route 460, a high-speed road with an abundance of desirable habitat for key taxa in this study. Meanwhile, topographic variables (such as elevation or TRI) correlated little with WVC occurrence in this study area, possibly indicating that topography surrounding a road is not a critical factor in WVC frequency in this geographic area. However, sample sizes of some taxa were insufficient to draw out statistical evidence.

These findings may represent a pattern across similar rural-urban gradients in Virginia's Valley and Ridge, though more studies are required to extrapolate them. However, these data are sufficient to inform drivers in the study area about road sections at high risk of WVCs, potentially through signage if road managers were interested and willing. VDOT may benefit from the information in this study by using it to identify high-risk locations along roads in Virginia. In addition, these data and findings may contribute to future meta-analyses that attempt to define relationships between road-related variables and WVC occurrence associated with small and mid-sized mammals in the larger mid-Atlantic mountain region.

I recommend further research on the relationship between roads and small and meso-mammals, especially across rural-urban gradients, to build on this study and clarify the ways that environmental variables affect animals crossing roads. For future studies, investigating the effect of vegetation or forest in the median of four-lane roads may be informative, as that variable may have played a role in the results of this study, with regard to the multi-lane, high-speed roads. It would also be interesting to study the effect of road curvature and drivers' viewsheds on WVCs, although I observed its high variability firsthand. Lastly, I found that using a generalized linear

model based off road segments yielded the best results in this study, so it may also be effective in future studies. Roadkill studies should also devise field survey methods that will provide large sample sizes for taxa of interest to increase statistically significant results.

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Appendix A

Raw Data

Table A1: 294 roadkill points recorded over the year-long study period. All data was automatically generated by ArcCollector excluding ‘Taxa’ and ‘Relative Position.’ For ‘Relative Position,’ a blank indicates that we did not collect position, an ‘R’ indicates the right side, ‘M’ indicates the middle of the road, and ‘L’ indicates the left side. Carcass numbers 40, 43, 114, and 290 were removed after data collection for containing errors. Variations in significant figures are based on the type of phone used when collecting data.

OID_	Phone Type	Lat	Long	Elevation	GenusSpeci	Dateofreco	Relative_P
1	Samsung SM-G986U	37.2208	-80.4385	594.987	Unidentified	1/23/2022	
2	Samsung SM-G986U	37.2856	-80.4610	642.517	Cat	1/23/2022	
3	Samsung SM-G986U	37.2850	-80.4557	654.417	Red Fox	1/23/2022	
4	Samsung SM-G986U	37.2784	-80.4313	667.517	Raccoon	1/23/2022	
5	iPhone13,2	37.2200	-80.4380	618.949	Unidentified	2/7/2022	
6	iPhone13,2	37.3048	-80.5084	576.756	Unidentified	2/7/2022	
7	iPhone13,2	37.3023	-80.5334	571.433	Cat	2/7/2022	
8	iPhone13,2	37.3067	-80.5128	578.227	Unidentified	2/7/2022	
9	iPhone13,2	37.2856	-80.4617	676.582	Cat	2/7/2022	
10	iPhone13,2	37.2674	-80.4205	641.687	Squirrel	2/7/2022	
11	iPhone13,2	37.2632	-80.4224	638.487	Skunk	2/7/2022	
12	iPhone13,2	37.2065	-80.4655	612.004	Opossum	2/20/2022	
13	iPhone13,2	37.1776	-80.4206	633.007	Skunk	2/20/2022	
14	iPhone13,2	37.1781	-80.4111	622.338	Unidentified	2/20/2022	
15	iPhone13,2	37.2018	-80.4153	638.440	Opossum	2/20/2022	
16	iPhone13,2	37.2102	-80.4283	628.106	Unidentified	2/20/2022	
17	iPhone13,2	37.2142	-80.4329	617.042	Unidentified	2/20/2022	
18	iPhone13,2	37.2176	-80.4360	612.419	Skunk	2/20/2022	
19	iPhone13,2	37.2422	-80.4348	628.137	Opossum	2/20/2022	
20	iPhone13,2	37.2632	-80.4224	640.309	Opossum	2/20/2022	
21	iPhone13,2	37.2544	-80.4264	634.168	Unidentified	2/20/2022	
22	iPhone13,2	37.2529	-80.4268	632.391	Unidentified	2/20/2022	
23	iPhone13,2	37.2813	-80.4427	761.979	Unidentified	2/20/2022	

24	iPhone13,2	37.2872	-80.4864	714.662	Squirrel	2/20/2022
25	iPhone13,2	37.2859	-80.4661	682.629	Bird	2/20/2022
26	iPhone13,2	37.2776	-80.4227	647.719	Unidentified	2/20/2022
27	iPhone13,2	37.2735	-80.4183	621.302	Raccoon	2/20/2022
28	iPhone13,2	37.2663	-80.4210	640.586	Unidentified	2/20/2022
29	iPhone13,2	37.2544	-80.4264	633.142	Opossum	2/20/2022
30	iPhone13,2	37.2352	-80.4389	634.627	Unidentified	2/20/2022
31	iPhone13,2	37.1979	-80.4418	633.735	Squirrel	2/23/2022
32	iPhone13,2	37.2051	-80.4628	611.112	Bird	2/23/2022
33	iPhone13,2	37.2098	-80.4900	617.664	Opossum	2/23/2022
34	iPhone13,2	37.1676	-80.4619	620.778	Squirrel	2/23/2022
35	iPhone13,2	37.1784	-80.4108	628.609	Unidentified	2/23/2022
36	Samsung SM-G986U	37.1706	-80.4726	576.660	Skunk	3/16/2022
37	Samsung SM-G986U	37.1631	-80.4410	600.950	Skunk	3/16/2022
38	Samsung SM-G986U	37.1625	-80.4280	585.850	Opossum	3/16/2022
39	Samsung SM-G986U	37.1786	-80.4104	591.080	Unidentified	3/16/2022
41	Samsung SM-G986U	37.2019	-80.4154	604.910	Opossum	3/16/2022
42	Samsung SM-G986U	37.2201	-80.4380	586.610	Skunk	3/16/2022
44	Samsung SM-G986U	37.2143	-80.4721	584.430	Unidentified	3/16/2022
45	Samsung SM-G986U	37.1788	-80.4101	597.960	Squirrel	3/20/2022
46	Samsung SM-G986U	37.2021	-80.4158	609.610	Skunk	3/20/2022
47	Samsung SM-G986U	37.2391	-80.4367	592.210	Opossum	3/20/2022
48	Samsung SM-G986U	37.2700	-80.4190	609.830	Skunk	3/20/2022
49	Samsung SM-G986U	37.2935	-80.5013	601.140	Cat	3/20/2022
50	Samsung SM-G986U	37.2873	-80.4929	616.160	Deer	3/20/2022
51	Samsung SM-G986U	37.2670	-80.4208	603.530	Rabbit	3/20/2022
52	iPhone XR	37.2948	-80.5016	636.778	Opossum	4/10/2022
53	iPhone XR	37.2565	-80.4254	631.282	Squirrel	4/10/2022
54	iPhone XR	37.2516	-80.4277	632.911	Opossum	4/10/2022
55	iPhone XR	37.2156	-80.4681	613.896	Squirrel	4/10/2022
56	iPhone XR	37.1998	-80.4499	604.744	Unidentified	4/12/2022

57	iPhone XR	37.2177	-80.4558	629.262	Unidentified	4/12/2022
58	iPhone XR	37.2067	-80.4969	616.328	Unidentified	4/12/2022
59	iPhone XR	37.1717	-80.4926	630.372	Skunk	4/12/2022
60	iPhone XR	37.1786	-80.4105	628.111	Squirrel	4/12/2022
61	iPhone XR	37.2009	-80.4138	635.460	Raccoon	4/12/2022
62	iPhone XR	37.2653	-80.4212	640.274	Squirrel	4/17/2022
63	iPhone XR	37.2701	-80.4190	636.498	Skunk	4/17/2022
64	iPhone XR	37.2873	-80.4875	704.077	Squirrel	4/17/2022
65	iPhone XR	37.2957	-80.5017	632.336	Bird	4/17/2022
66	iPhone XR	37.3048	-80.5085	581.287	Squirrel	4/17/2022
67	iPhone XR	37.3068	-80.5129	572.047	Opossum	4/17/2022
68	iPhone XR	37.3067	-80.5176	574.844	Squirrel	4/17/2022
69	iPhone XR	37.3032	-80.5290	563.788	Opossum	4/17/2022
70	iPhone XR	37.3024	-80.5326	567.243	Cat	4/17/2022
71	iPhone XR	37.3035	-80.5272	571.881	Raccoon	4/17/2022
72	iPhone XR	37.3044	-80.5243	577.868	Cat	4/17/2022
73	iPhone XR	37.3063	-80.5183	581.876	Squirrel	4/17/2022
74	iPhone XR	37.2885	-80.4969	638.222	Squirrel	4/17/2022
75	iPhone XR	37.2763	-80.4198	619.767	Unidentified	4/17/2022
76	iPhone XR	37.2668	-80.4208	632.287	Squirrel	4/17/2022
77	iPhone XR	37.2589	-80.4244	634.240	Deer	4/17/2022
78	iPhone XR	37.2534	-80.4269	629.173	Opossum	4/17/2022
79	iPhone XR	37.2294	-80.4408	623.362	Unidentified	4/17/2022
80	iPhone XR	37.2265	-80.4419	633.482	Opossum	4/17/2022
81	iPhone XR	37.2172	-80.4571	629.661	Squirrel	4/17/2022
82	iPhone XR	37.2059	-80.4217	641.714	Squirrel	4/17/2022
83	iPhone XR	37.2103	-80.4285	624.135	Squirrel	4/17/2022
84	iPhone XR	37.2157	-80.4343	606.786	Unidentified	4/17/2022
85	iPhone XR	37.2280	-80.4405	622.974	Squirrel	4/17/2022
86	iPhone XR	37.2256	-80.4443	633.106	Squirrel	4/19/2022
87	iPhone XR	37.1706	-80.5027	617.522	Unidentified	4/19/2022
88	iPhone XR	37.1786	-80.4104	627.334	Unidentified	4/19/2022
89	iPhone XR	37.2505	-80.4280	628.965	Squirrel	4/24/2022
90	iPhone XR	37.2701	-80.4190	624.269	Squirrel	4/24/2022
91	iPhone XR	37.2893	-80.4979	628.899	Squirrel	4/24/2022
92	iPhone XR	37.2671	-80.4206	634.372	Squirrel	4/24/2022
93	iPhone XR	37.2231	-80.4502	631.303	Rabbit	5/1/2022
94	iPhone XR	37.2161	-80.4628	625.601	Squirrel	5/1/2022
95	iPhone XR	37.2136	-80.4746	617.679	Rabbit	5/1/2022
96	iPhone XR	37.2121	-80.4827	621.006	Opossum	5/1/2022
97	iPhone XR	37.1716	-80.4933	626.467	Squirrel	5/1/2022
98	iPhone XR	37.1784	-80.4107	625.460	Unidentified	5/1/2022
99	iPhone XR	37.2105	-80.4286	630.459	Unidentified	5/1/2022

100	iPhone XR	37.2169	-80.4354	610.776	Raccoon	5/1/2022
101	iPhone XR	37.2522	-80.4272	631.995	Unidentified	5/3/2022
102	iPhone XR	37.2652	-80.4212	639.686	Unidentified	5/3/2022
103	iPhone XR	37.2702	-80.4190	633.657	Squirrel	5/3/2022
104	iPhone XR	37.2860	-80.4679	690.461	Squirrel	5/3/2022
105	iPhone XR	37.2892	-80.4978	637.596	Squirrel	5/3/2022
106	iPhone XR	37.2729	-80.4183	621.677	Unidentified	5/3/2022
107	iPhone XR	37.2668	-80.4208	636.567	Unidentified	5/3/2022
108	iPhone XR	37.2538	-80.4267	636.881	Opossum	5/3/2022
109	iPhone XR	37.2364	-80.4383	633.128	Opossum	5/3/2022
110	Samsung SM-G986U	37.1758	-80.4147	593.990	Unidentified	5/10/2022
111	Samsung SM-G986U	37.1786	-80.4104	578.870	Squirrel	5/10/2022
112	Samsung SM-G986U	37.2103	-80.4284	595.420	Unidentified	5/10/2022
113	Samsung SM-G986U	37.2163	-80.4348	580.690	Unidentified	5/10/2022
116	Samsung SM-G986U	37.2700	-80.4191	604.130	Unidentified	5/19/2022
117	Samsung SM-G986U	37.3053	-80.5091	546.960	Squirrel	5/19/2022
118	Samsung SM-G986U	37.3066	-80.5177	540.850	Raccoon	5/19/2022
119	Samsung SM-G986U	37.2851	-80.4741	691.780	Opossum	5/19/2022
120	Samsung SM-G986U	37.2647	-80.4217	604.040	Unidentified	5/19/2022
122	Samsung SM-G986U	37.2159	-80.4647	590.690	Opossum	5/19/2022
123	Samsung SM-G986U	37.2096	-80.4667	577.460	Opossum	5/19/2022
124	Samsung SM-G986U	37.1868	-80.4242	575.100	Squirrel	5/19/2022
125	iPhone13,2	37.2031	-80.4992	607.987	Squirrel	5/31/2022
126	iPhone13,2	37.1909	-80.5017	605.440	Bird	5/31/2022
127	iPhone13,2	37.1715	-80.4843	653.489	Skunk	5/31/2022
128	iPhone13,2	37.1690	-80.4658	611.249	Unidentified	5/31/2022
129	iPhone13,2	37.1630	-80.4412	632.523	Unidentified	5/31/2022
130	iPhone13,2	37.1775	-80.4121	630.867	Squirrel	5/31/2022
131	iPhone13,2	37.2010	-80.4140	640.733	Bird	5/31/2022
132	iPhone13,2	37.2032	-80.4175	640.594	Unidentified	5/31/2022
133	iPhone13,2	37.2103	-80.4285	627.146	Unidentified	5/31/2022
134	iPhone13,2	37.2152	-80.4339	614.299	Squirrel	5/31/2022
135	iPhone13,2	37.1775	-80.4121	631.162	Bird	6/3/2022

136	iPhone13,2	37.2155	-80.4341	617.979	Squirrel	6/3/2022
137	iPhone13,2	37.2516	-80.4274	635.619	Opossum	6/3/2022
138	iPhone13,2	37.3009	-80.5050	606.133	Unidentified	6/3/2022
139	iPhone13,2	37.2824	-80.4455	752.665	Squirrel	6/3/2022
140	iPhone13,2	37.2535	-80.4268	638.214	Unidentified	6/3/2022
141	iPhone13,2	37.2066	-80.4970	618.311	Opossum	6/8/2022
142	iPhone13,2	37.1705	-80.5012	615.356	Unidentified	6/8/2022
143	iPhone13,2	37.1715	-80.4846	658.409	Skunk	6/8/2022
144	iPhone13,2	37.1632	-80.4392	639.348	Squirrel	6/8/2022
145	iPhone13,2	37.1823	-80.4047	629.050	Groundhog	6/8/2022
146	iPhone13,2	37.1955	-80.4056	652.458	Bird	6/8/2022
147	iPhone13,2	37.2301	-80.4404	633.166	Bird	6/14/2022
148	iPhone13,2	37.2344	-80.4390	637.050	Bird	6/14/2022
149	iPhone13,2	37.2861	-80.4664	693.062	Squirrel	6/14/2022
150	iPhone13,2	37.3001	-80.5045	610.784	Deer	6/14/2022
151	iPhone13,2	37.2874	-80.4917	676.599	Bird	6/14/2022
152	iPhone13,2	37.2786	-80.4327	713.763	Deer	6/14/2022
153	iPhone13,2	37.2254	-80.4454	645.952	Squirrel	6/14/2022
154	iPhone13,2	37.2005	-80.4496	607.450	Squirrel	6/14/2022
155	iPhone13,2	37.1782	-80.4212	631.723	Squirrel	6/14/2022
156	iPhone13,2	37.1719	-80.4910	638.589	Unidentified	6/16/2022
157	iPhone13,2	37.1715	-80.4844	657.234	Skunk	6/16/2022
158	iPhone13,2	37.1956	-80.4057	652.245	Bird	6/16/2022
159	iPhone12,1	37.2585	-80.4243	635.939	Groundhog	7/5/2022
160	iPhone12,1	37.2776	-80.4221	642.988	Squirrel	7/5/2022
161	iPhone12,1	37.2953	-80.5016	638.636	Squirrel	7/5/2022
162	iPhone12,1	37.2761	-80.4196	623.318	Opossum	7/5/2022
163	iPhone12,1	37.2511	-80.4280	634.337	Opossum	7/5/2022
164	iPhone12,1	37.2158	-80.4344	617.055	Squirrel	7/5/2022
165	iPhone14,5	37.1645	-80.4128	631.751	Unidentified	7/14/2022
166	iPhone14,5	37.2154	-80.4340	614.278	Unidentified	7/14/2022
167	iPhone14,5	37.1660	-80.4571	625.358	Bird	8/2/2022
168	iPhone14,5	37.1797	-80.4086	630.376	Squirrel	8/2/2022
169	iPhone14,5	37.1853	-80.4022	629.993	Opossum	8/2/2022
170	iPhone14,5	37.2800	-80.4409	750.660	Opossum	8/9/2022
171	iPhone14,5	37.2949	-80.5016	635.624	Bird	8/9/2022
172	iPhone14,5	37.1979	-80.4474	613.341	Unidentified	8/9/2022
173	iPhone14,5	37.1768	-80.4169	635.032	Squirrel	8/9/2022
174	iPhone13,2	37.2521	-80.4272	629.931	Skunk	8/19/2022
175	iPhone13,2	37.3068	-80.5170	574.920	Unidentified	8/19/2022
176	iPhone13,2	37.2668	-80.4208	636.174	Squirrel	8/19/2022
177	iPhone14,5	37.1714	-80.5149	584.056	Opossum	8/25/2022
178	iPhone14,5	37.1714	-80.4948	623.290	Skunk	8/25/2022

179	iPhone14,5	37.1652	-80.4549	617.120	Unidentified	8/25/2022
180	iPhone14,5	37.1788	-80.4101	625.938	Unidentified	8/25/2022
181	iPhone14,5	37.1948	-80.4045	649.001	Opossum	8/25/2022
182	iPhone13,2	37.2523	-80.4271	628.425	Squirrel	8/31/2022
183	iPhone13,2	37.2576	-80.4247	632.897	Unidentified	8/31/2022
184	iPhone13,2	37.2814	-80.4429	757.098	Squirrel	8/31/2022
185	iPhone13,2	37.2825	-80.4482	736.791	Squirrel	8/31/2022
186	iPhone13,2	37.2791	-80.4377	737.362	Raccoon	8/31/2022
187	iPhone13,2	37.1795	-80.4135	638.598	Skunk	8/31/2022
188	iPhone13,2	37.2036	-80.4181	638.971	Unidentified	8/31/2022
189	iPhone14,5	37.1714	-80.5147	588.323	Opossum	9/1/2022
190	iPhone14,5	37.1706	-80.5030	616.386	Unspecified	9/1/2022
191	iPhone14,5	37.2034	-80.4178	635.661	Unidentified	9/1/2022
192	iPhone13,2	37.2347	-80.4388	635.491	Skunk	9/7/2022
193	iPhone13,2	37.2576	-80.4247	631.516	Unidentified	9/7/2022
194	iPhone13,2	37.3067	-80.5123	576.705	Squirrel	9/7/2022
195	iPhone13,2	37.3053	-80.5216	582.439	Squirrel	9/7/2022
196	iPhone13,2	37.3068	-80.5153	570.832	Mouse	9/7/2022
197	iPhone13,2	37.3052	-80.5094	577.659	Squirrel	9/7/2022
198	iPhone13,2	37.2672	-80.4206	640.340	Red Fox	9/7/2022
199	iPhone13,2	37.2601	-80.4239	637.206	Opossum	9/7/2022
200	iPhone13,2	37.2005	-80.4496	604.363	Groundhog	9/7/2022
201	iPhone13,2	37.1967	-80.4336	644.936	Unidentified	9/7/2022
202	iPhone13,2	37.1975	-80.4080	648.741	Unidentified	9/7/2022
203	iPhone14,5	37.1714	-80.5147	589.083	Opossum	9/16/2022
204	iPhone14,5	37.1712	-80.4804	649.899	Unidentified	9/16/2022
205	iPhone14,5	37.1675	-80.4616	615.913	Bird	9/16/2022
206	iPhone14,5	37.1770	-80.4129	631.710	Unidentified	9/16/2022
207	iPhone14,5	37.1940	-80.4034	645.821	Groundhog	9/16/2022
208	iPhone13,2	37.2872	-80.4865	705.580	Unidentified	9/21/2022
209	iPhone13,2	37.2951	-80.5016	634.489	Squirrel	9/21/2022
210	iPhone13,2	37.2839	-80.4525	707.543	Bird	9/21/2022
211	iPhone13,2	37.2671	-80.4207	640.459	Unidentified	9/21/2022
212	iPhone13,2	37.2559	-80.4257	637.803	Opossum	9/21/2022
213	iPhone13,2	37.1975	-80.4081	650.398	Opossum	9/21/2022
214	iPhone14,5	37.1714	-80.5145	588.810	Opossum	9/29/2022
215	iPhone14,5	37.1709	-80.5082	602.814	Unidentified	9/29/2022
216	iPhone14,5	37.1705	-80.4985	612.054	Badger	9/29/2022
217	iPhone14,5	37.1645	-80.4530	614.995	Skunk	9/29/2022
218	iPhone14,5	37.1650	-80.4146	629.479	Opossum	9/29/2022
219	iPhone14,5	37.1787	-80.4102	628.168	Squirrel	9/29/2022
220	iPhone14,5	37.1821	-80.4049	621.598	Squirrel	9/29/2022
221	iPhone14,5	37.1967	-80.4074	650.139	Unidentified	9/29/2022

222	iPhone14,5	37.2209	-80.4386	625.553	Rabbit	9/29/2022	
223	iPhone14,5	37.2360	-80.4382	633.048	Raccoon	10/4/2022	
224	iPhone14,5	37.2576	-80.4247	631.532	Unidentified	10/4/2022	
225	iPhone14,5	37.2858	-80.4707	707.469	Bird	10/4/2022	
226	iPhone14,5	37.2872	-80.4865	709.695	Squirrel	10/4/2022	
227	iPhone14,5	37.3052	-80.5092	579.058	Deer	10/4/2022	
228	iPhone14,5	37.3003	-80.5047	601.122	Cat	10/4/2022	
229	iPhone14,5	37.2164	-80.4596	626.251	Cat	10/4/2022	
230	iPhone14,5	37.2086	-80.4663	614.929	Groundhog	10/4/2022	
231	iPhone14,5	37.1995	-80.4500	602.822	Squirrel	10/4/2022	
232	iPhone14,5	37.1963	-80.4317	638.748	Mouse	10/4/2022	
233	iPhone14,5	37.1714	-80.4828	658.715	Squirrel	10/13/2022	
234	iPhone14,5	37.1662	-80.4578	623.144	Raccoon	10/13/2022	
235	iPhone14,5	37.1647	-80.4534	615.709	Skunk	10/13/2022	
236	iPhone14,5	37.1925	-80.4017	649.890	Skunk	10/13/2022	
237	iPhone14,5	37.2160	-80.4345	619.111	Mouse	10/13/2022	
238	iPhone14,5	37.2240	-80.4399	636.354	Raccoon	10/13/2022	
239	iPhone14,5	37.2289	-80.4405	633.448	Squirrel	10/13/2022	
240	iPhone13,2	37.3037	-80.5074	589.043	Raccoon	10/18/2022	
241	iPhone13,2	37.3003	-80.5047	606.836	Skunk	10/18/2022	
242	iPhone13,2	37.2902	-80.4995	630.392	Raccoon	10/18/2022	R
243	iPhone13,2	37.2664	-80.4210	641.369	Squirrel	10/18/2022	R
244	iPhone13,2	37.1957	-80.4293	632.012	Possum	10/18/2022	L
245	iPhone13,2	37.1826	-80.4203	653.089	Skunk	10/18/2022	R
246	iPhone13,2	37.1876	-80.4070	658.796	Squirrel	10/18/2022	M
247	iPhone13,2	37.2158	-80.4344	617.834	Squirrel	10/18/2022	M
248	iPhone13,2	37.2240	-80.4399	633.833	Raccoon	10/18/2022	R
249	iPhone13,2	37.1714	-80.5145	590.826	Rabbit	10/28/2022	R
250	iPhone13,2	37.1706	-80.5027	617.818	Skunk	10/28/2022	R
251	iPhone13,2	37.1706	-80.4979	615.703	Squirrel	10/28/2022	R
252	iPhone13,2	37.1712	-80.4800	659.642	Skunk	10/28/2022	M
253	iPhone13,2	37.1706	-80.4728	623.265	Skunk	10/28/2022	R
254	iPhone13,2	37.1662	-80.4578	625.876	Raccoon	10/28/2022	R
255	iPhone13,2	37.1646	-80.4533	622.235	Opossum	10/28/2022	M
256	iPhone13,2	37.2159	-80.4345	619.541	Unidentified	10/28/2022	M
257	Samsung SM-G986U	37.2855	-80.4793	710.940	Opossum	11/3/2022	R
258	Samsung SM-G986U	37.2874	-80.4890	667.530	Opossum	11/3/2022	R
259	Samsung SM-G986U	37.3040	-80.5076	562.260	Raccoon	11/3/2022	m
260	Samsung SM-G986U	37.3051	-80.5222	555.770	Groundhog	11/3/2022	m

261	Samsung SM-G986U	37.2858	-80.4675	667.710	Squirrel	11/3/2022	m
262	Samsung SM-G986U	37.2631	-80.4225	614.890	Deer	11/3/2022	m
263	Samsung SM-G986U	37.2491	-80.4289	612.650	Opossum	11/3/2022	r
264	Samsung SM-G986U	37.2158	-80.4344	588.160	Unidentified	11/3/2022	l
265	iPhone14,5	37.2258	-80.4435	635.063	Raccoon	11/10/2022	r
266	iPhone14,5	37.2160	-80.4616	626.746	Squirrel	11/10/2022	r
267	iPhone14,5	37.1949	-80.4999	592.521	Bird	11/10/2022	
268	iPhone14,5	37.1884	-80.5080	615.763	Opossum	11/10/2022	
269	iPhone14,5	37.1709	-80.5071	604.039	Unidentified	11/10/2022	
270	iPhone14,5	37.1707	-80.5040	614.142	Unidentified	11/10/2022	
271	iPhone14,5	37.1715	-80.4940	619.365	Deer	11/10/2022	
272	iPhone14,5	37.1707	-80.4741	622.945	Bird	11/10/2022	
273	iPhone14,5	37.1662	-80.4578	614.842	Opossum	11/10/2022	
274	iPhone14,5	37.1647	-80.4534	610.913	Opossum	11/10/2022	
275	iPhone14,5	37.1640	-80.4127	622.850	Unidentified	11/10/2022	
276	iPhone13,2	37.2587	-80.4242	629.507	Possum	11/15/2022	
277	iPhone13,2	37.2879	-80.4949	649.874	Squirrel	11/15/2022	
278	iPhone13,2	37.3058	-80.5099	571.503	Squirrel	11/15/2022	R
279	iPhone13,2	37.2234	-80.4498	626.353	Possum	11/15/2022	L
280	iPhone13,2	37.2172	-80.4572	620.303	Possum	11/15/2022	R
281	iPhone13,2	37.2053	-80.4649	605.249	Bird	11/15/2022	R
282	Samsung SM-G986U	37.2236	-80.4494	605.150	Squirrel	11/30/2022	R
283	Samsung SM-G986U	37.1777	-80.5160	546.790	Raccoon	11/30/2022	M
284	Samsung SM-G986U	37.1646	-80.4534	582.300	Unidentified	11/30/2022	R
285	iPhone13,2	37.2690	-80.4195	635.085	Skunk	12/8/2022	R
286	iPhone13,2	37.2827	-80.4483	734.228	Squirrel	12/8/2022	R
287	iPhone13,2	37.2858	-80.4709	703.507	Squirrel	12/8/2022	M
288	iPhone13,2	37.2881	-80.4954	649.381	Squirrel	12/8/2022	L
289	iPhone13,2	37.2929	-80.5011	628.207	Unidentified	12/8/2022	L
291	iPhone13,2	37.3062	-80.5108	576.126	Raccoon	12/8/2022	L
292	iPhone13,2	37.2235	-80.4495	632.305	Squirrel	12/8/2022	M
293	iPhone13,2	37.2024	-80.4500	619.028	Squirrel	12/8/2022	L
294	iPhone13,2	37.1979	-80.4422	630.219	Squirrels	12/8/2022	R
295	iPhone13,2	37.2163	-80.4348	611.211	Squirrels	12/8/2022	M
296	iPhone14,5	37.1946	-80.4999	594.746	Possum	12/9/2022	R
297	iPhone14,5	37.1908	-80.5018	605.295	Possum	12/9/2022	R
298	iPhone14,5	37.1633	-80.4492	621.013	Unidentified	12/9/2022	

Table A2: All roadkill points recorded over the year-long study period (n = 294) as well as five randomly generated sets of points (298 in each). Independent variable values are displayed to the right of each ID. Set A contains observed values, while sets B through F contain values derived from randomly generated points within the study area. Carcass numbers 40, 43, 114, and 290 were removed from set A after data collection for containing errors. ‘Speed’ is posted speed limit, ‘AADT’ is annual average daily traffic (the average daily traffic over a year), ‘TRI’ is Terrain Roughness Index, ‘Pop’ is population, ‘Urban’ is the percentage of urban land cover, ‘Forest’ is the percentage of forest cover, ‘EarlySuccession’ is early successional land cover (mostly pasture), ‘Elevation’ is elevation meters, ‘WUI’ is the presence or absence of wildland-urban interface, and ‘Lights’ is the presence or absence of lights.

ID	Speed	AADT	TRI	Pop	Urban	Forest	EarlySuccession	Elevation	WUI	Lights	Set
1	65	39000	0.43	1645	0.181	0.000	0.619	624.528	0	0	A
2	55	11369	1.01	1696	0.010	0.873	0.007	681.088	1	0	A
3	55	13127	1.38	1886	0.002	0.976	0.000	690.171	1	0	A
4	55	6848	1.52	1081	0.010	0.754	0.005	696.232	1	0	A
5	65	39000	0.39	1645	0.170	0.000	0.624	622.219	0	0	A
6	60	12000	2.61	1067	0.000	0.728	0.236	593.848	1	0	A
7	60	8074	1.99	1044	0.021	0.554	0.189	581.610	1	0	A
8	60	8800	2.07	1067	0.012	0.658	0.170	588.275	1	0	A
9	55	11608	0.98	1696	0.009	0.868	0.009	681.258	1	0	A
10	65	13819	0.63	1081	0.086	0.029	0.696	644.247	1	0	A
11	65	16000	0.77	1081	0.000	0.132	0.863	640.403	1	0	A
12	45	1700	0.51	1540	0.150	0.000	0.605	616.321	1	0	A
13	35	8776	0.83	1306	0.390	0.026	0.026	637.786	1	0	A
14	65	26160	1.31	1311	0.177	0.332	0.196	624.065	1	1	A
15	65	39000	0.87	1347	0.205	0.357	0.205	641.106	0	1	A
16	65	39000	0.55	1347	0.069	0.114	0.664	630.990	0	1	A
17	65	35262	0.42	704	0.130	0.161	0.442	620.995	0	1	A
18	65	39000	0.37	1645	0.169	0.053	0.429	616.634	0	0	A
19	65	13397	0.92	2500	0.330	0.079	0.093	633.375	0	0	A
20	65	16000	0.77	1081	0.000	0.132	0.866	640.264	1	0	A

21	65	10989	0.84	1315	0.107	0.095	0.562	641.395	1	0	A
22	65	10154	0.80	1315	0.132	0.144	0.432	639.124	1	0	A
23	55	9179	1.95	1886	0.024	0.705	0.024	767.669	1	0	A
24	55	9244	2.28	1067	0.002	0.981	0.005	709.961	1	0	A
25	55	15000	1.08	1886	0.005	0.866	0.017	690.783	1	0	A
26	55	8636	1.55	1886	0.012	0.567	0.060	648.108	1	0	A
27	55	12308	1.61	2183	0.019	0.647	0.185	640.352	1	0	A
28	65	16000	0.64	1081	0.051	0.046	0.814	644.229	1	0	A
29	65	11004	0.84	1081	0.102	0.092	0.566	641.214	1	0	A
30	65	11923	0.68	2500	0.339	0.026	0.152	633.679	0	0	A
31	35	928	1.71	1533	0.017	0.572	0.161	634.617	1	0	A
32	45	1700	0.72	1540	0.062	0.067	0.675	617.693	1	0	A
33	35	4572	0.55	1540	0.129	0.136	0.466	614.413	1	0	A
34	45	5776	0.82	1642	0.017	0.149	0.540	616.092	0	0	A
35	65	25733	1.34	1311	0.165	0.337	0.206	623.944	1	1	A
36	45	6565	1.38	1642	0.014	0.365	0.332	612.278	0	1	A
37	45	14000	0.79	2282	0.125	0.000	0.552	629.268	0	1	A
38	45	15973	0.56	1051	0.556	0.000	0.193	624.542	0	1	A
39	65	25606	1.35	1311	0.158	0.347	0.208	623.985	1	1	A
41	65	39000	0.86	1347	0.215	0.354	0.206	641.017	0	1	A
42	65	39000	0.39	1645	0.171	0.000	0.629	622.467	0	0	A
44	45	3699	0.51	1540	0.040	0.000	0.712	614.049	1	0	A
45	65	25380	1.35	1311	0.156	0.338	0.206	623.940	1	1	A
46	65	39000	0.82	1347	0.212	0.337	0.221	640.760	0	1	A
47	65	13347	0.84	2500	0.295	0.040	0.314	628.205	0	0	A
48	65	12004	0.96	1081	0.050	0.244	0.488	641.040	1	0	A
49	55	6345	2.10	1044	0.007	0.622	0.125	638.328	1	0	A
50	55	6216	1.77	1044	0.005	0.834	0.017	675.643	1	0	A
51	65	14544	0.63	1081	0.083	0.029	0.745	644.228	1	0	A
52	55	6850	1.97	1044	0.007	0.591	0.196	641.306	1	0	A
53	65	14063	0.84	1081	0.057	0.100	0.706	638.589	1	0	A
54	65	11360	0.82	1315	0.119	0.133	0.411	635.621	1	0	A
55	45	5917	0.40	2500	0.038	0.000	0.737	616.805	1	1	A
56	35	1700	1.59	1540	0.032	0.734	0.132	619.350	1	0	A
57	45	12771	0.59	1511	0.337	0.000	0.487	627.056	0	1	A
58	45	2861	0.91	1540	0.002	0.589	0.186	609.332	1	0	A
59	45	6794	1.65	1642	0.058	0.605	0.017	614.471	0	0	A
60	65	25660	1.35	1311	0.159	0.340	0.213	623.988	1	1	A
61	65	36814	0.92	1347	0.270	0.357	0.147	641.944	0	1	A
62	65	16000	0.63	1315	0.024	0.055	0.881	644.258	1	0	A
63	65	11971	0.97	1081	0.054	0.247	0.478	640.992	1	0	A
64	55	8577	2.04	1067	0.005	0.951	0.000	703.399	1	0	A
65	55	6755	1.81	1067	0.017	0.553	0.229	640.210	1	0	A

66	60	12000	2.61	1067	0.000	0.743	0.225	593.899	1	0	A
67	60	8628	2.05	1067	0.012	0.640	0.184	586.854	1	0	A
68	60	6158	1.39	1067	0.014	0.474	0.198	582.058	1	0	A
69	60	8098	2.00	1044	0.014	0.549	0.161	584.158	1	0	A
70	60	8102	1.99	1044	0.017	0.547	0.188	582.343	1	0	A
71	60	8233	1.93	1044	0.014	0.617	0.143	585.310	1	0	A
72	60	8323	1.72	1044	0.005	0.705	0.138	587.587	1	0	A
73	60	6205	1.33	1044	0.014	0.523	0.173	584.708	1	0	A
74	55	6890	1.72	1044	0.017	0.700	0.022	651.021	1	0	A
75	55	9496	1.74	1081	0.015	0.626	0.078	638.695	1	0	A
76	65	14588	0.63	1081	0.076	0.031	0.768	644.393	1	0	A
77	65	16000	0.84	1081	0.002	0.072	0.908	634.906	1	0	A
78	65	10488	0.81	1081	0.115	0.131	0.489	639.490	1	0	A
79	65	19780	0.77	2500	0.256	0.052	0.162	631.861	0	1	A
80	65	24244	0.66	2500	0.443	0.043	0.154	631.823	0	1	A
81	45	12249	0.61	1511	0.299	0.000	0.500	625.335	0	1	A
82	65	39000	0.53	1347	0.182	0.019	0.596	641.806	0	1	A
83	65	39000	0.54	1347	0.072	0.129	0.657	630.594	0	1	A
84	65	36603	0.38	1645	0.161	0.058	0.450	617.388	0	1	A
85	65	22131	0.62	2500	0.330	0.024	0.144	632.751	0	1	A
86	45	24404	0.68	2500	0.470	0.073	0.194	630.472	0	1	A
87	45	5884	1.03	1041	0.070	0.409	0.250	614.831	0	1	A
88	65	25706	1.35	1311	0.156	0.349	0.209	623.805	1	1	A
89	65	11105	0.86	1315	0.166	0.138	0.266	634.061	1	0	A
90	65	12000	0.96	1081	0.052	0.243	0.487	641.018	1	0	A
91	55	6268	1.83	1044	0.017	0.654	0.025	642.230	1	0	A
92	65	14212	0.63	1081	0.083	0.026	0.738	644.409	1	0	A
93	45	18204	0.65	2500	0.176	0.014	0.560	631.933	0	1	A
94	45	11484	0.49	2500	0.161	0.000	0.612	621.755	0	1	A
95	45	4182	0.56	1540	0.045	0.019	0.708	613.180	1	0	A
96	35	7097	0.68	1540	0.033	0.076	0.808	612.669	1	0	A
97	45	6675	1.61	1642	0.090	0.543	0.014	613.527	0	0	A
98	65	25820	1.34	1311	0.162	0.341	0.207	623.849	1	1	A
99	65	39000	0.54	1347	0.076	0.131	0.645	630.446	0	1	A
100	65	39000	0.38	1645	0.144	0.054	0.418	616.301	0	0	A
101	65	11423	0.80	1315	0.125	0.142	0.419	637.691	1	0	A
102	65	16000	0.63	1315	0.024	0.056	0.882	644.189	1	0	A
103	65	12015	1.00	1081	0.049	0.256	0.471	640.957	1	0	A
104	55	15000	1.39	1886	0.005	0.879	0.017	701.711	1	0	A
105	55	6315	1.80	1044	0.017	0.659	0.024	643.157	1	0	A
106	55	12687	1.55	2183	0.024	0.600	0.211	640.353	1	0	A
107	65	14722	0.63	1081	0.073	0.031	0.768	644.333	1	0	A
108	65	10646	0.81	1081	0.122	0.117	0.510	640.243	1	0	A

109	65	11295	0.71	2500	0.376	0.048	0.234	631.772	0	0	A
110	65	29519	1.16	1311	0.365	0.410	0.007	625.673	1	1	A
111	65	25581	1.35	1311	0.159	0.343	0.213	624.085	1	1	A
112	65	39000	0.55	1347	0.072	0.115	0.666	630.798	0	1	A
113	65	39000	0.38	1645	0.162	0.054	0.419	616.652	0	0	A
115	65	30777	1.50	1311	0.178	0.254	0.191	618.216	1	1	A
116	65	12007	0.94	1081	0.050	0.242	0.495	641.063	1	0	A
117	60	12000	2.61	1067	0.000	0.801	0.168	594.046	1	0	A
118	60	6186	1.38	1067	0.014	0.488	0.187	582.513	1	0	A
119	55	15000	2.20	1696	0.000	0.978	0.000	735.494	1	0	A
120	65	16000	0.67	1081	0.010	0.081	0.883	643.396	1	0	A
121	45	18404	0.66	2500	0.197	0.014	0.540	631.622	0	1	A
122	45	9426	0.40	2500	0.130	0.000	0.630	619.958	1	1	A
123	45	1700	0.50	1511	0.190	0.000	0.564	611.661	1	0	A
124	35	2491	1.27	1373	0.170	0.494	0.003	631.778	1	0	A
125	45	3443	1.40	1540	0.000	0.924	0.002	596.382	1	0	A
126	45	3387	1.77	1540	0.012	0.764	0.029	599.498	1	0	A
127	45	10000	1.92	1642	0.000	0.744	0.158	624.968	0	1	A
128	45	9625	1.04	1642	0.017	0.177	0.660	610.059	0	0	A
129	45	14000	0.80	2282	0.124	0.000	0.549	629.250	0	1	A
130	65	27259	1.29	1311	0.225	0.330	0.176	624.259	1	1	A
131	65	36805	0.93	1347	0.258	0.362	0.163	641.763	0	1	A
132	65	39000	0.64	1347	0.232	0.225	0.318	641.232	0	1	A
133	65	39000	0.54	1347	0.072	0.129	0.656	630.625	0	1	A
134	65	35332	0.39	1645	0.167	0.070	0.442	618.190	0	1	A
135	65	27202	1.29	1311	0.228	0.332	0.176	624.375	1	1	A
136	65	36065	0.38	1645	0.165	0.056	0.450	617.650	0	1	A
137	65	11310	0.82	1315	0.128	0.128	0.395	636.297	1	0	A
138	60	9841	2.22	1067	0.036	0.398	0.445	604.850	1	0	A
139	55	12539	2.09	1886	0.012	0.821	0.010	758.356	1	0	A
140	65	10516	0.81	1081	0.115	0.132	0.493	639.631	1	0	A
141	45	2880	0.93	1540	0.002	0.607	0.175	609.028	1	0	A
142	45	6265	1.04	1041	0.113	0.385	0.204	611.702	0	1	A
143	45	10000	1.92	1642	0.000	0.758	0.158	624.426	0	1	A
144	45	14000	0.76	1306	0.116	0.000	0.551	629.746	0	1	A
145	65	30642	1.49	1311	0.168	0.261	0.175	616.679	1	1	A
146	35	34388	0.72	1347	0.424	0.059	0.000	653.138	1	1	A
147	65	18613	0.76	2500	0.241	0.031	0.128	632.535	0	1	A
148	65	12063	0.66	920	0.337	0.024	0.075	634.422	0	0	A
149	55	15000	1.14	1886	0.005	0.878	0.017	694.396	1	0	A
150	55	9299	2.20	1044	0.031	0.435	0.416	612.497	1	0	A
151	55	6886	1.77	1044	0.005	0.849	0.017	682.188	1	0	A
152	55	6860	1.57	1081	0.010	0.752	0.007	703.145	1	0	A

153	45	21000	0.69	2500	0.434	0.070	0.247	630.099	0	1	A
154	35	1641	1.41	1540	0.034	0.601	0.251	617.734	1	0	A
155	35	7104	0.91	1306	0.314	0.090	0.012	637.843	1	0	A
156	45	7749	1.73	1642	0.022	0.734	0.029	616.558	0	0	A
157	45	10000	1.92	1642	0.000	0.749	0.158	624.813	0	1	A
158	35	34624	0.73	1347	0.419	0.064	0.000	653.059	1	1	A
159	65	15556	0.83	1315	0.014	0.071	0.876	635.763	1	0	A
160	55	8540	1.57	1886	0.010	0.567	0.067	646.897	1	0	A
161	55	6807	1.89	1067	0.010	0.578	0.215	640.893	1	0	A
162	55	9653	1.74	1081	0.015	0.630	0.083	638.271	1	0	A
163	65	11261	0.85	1081	0.129	0.134	0.358	634.379	1	0	A
164	65	37389	0.37	1645	0.161	0.056	0.445	617.130	0	1	A
165	45	23840	1.13	1311	0.234	0.174	0.231	626.643	1	1	A
166	65	35752	0.38	1645	0.168	0.058	0.448	617.817	0	1	A
167	45	3660	0.82	1642	0.065	0.036	0.372	615.711	0	1	A
168	65	25679	1.37	1311	0.170	0.280	0.256	623.791	1	1	A
169	65	26916	1.39	965	0.172	0.124	0.189	619.581	1	1	A
170	55	7241	1.92	1081	0.027	0.641	0.029	754.311	1	0	A
171	55	6831	1.95	1067	0.007	0.581	0.206	641.214	1	0	A
172	35	1480	1.91	1540	0.028	0.810	0.015	624.562	1	0	A
173	35	24533	0.77	1311	0.601	0.017	0.031	634.250	1	1	A
174	65	11444	0.80	1315	0.121	0.143	0.410	637.374	1	0	A
175	60	6214	1.42	1067	0.014	0.473	0.203	581.716	1	0	A
176	65	14728	0.63	1081	0.073	0.033	0.769	644.347	1	0	A
177	45	5678	1.00	1041	0.107	0.212	0.315	595.659	0	1	A
178	45	5871	1.49	1642	0.154	0.390	0.029	611.735	0	0	A
179	45	3747	0.81	1642	0.093	0.014	0.365	617.276	0	1	A
180	65	25472	1.35	1311	0.154	0.342	0.207	623.996	1	1	A
181	65	33352	0.67	1533	0.553	0.003	0.000	653.053	1	1	A
182	65	10923	0.80	1315	0.128	0.147	0.417	637.974	1	0	A
183	65	14581	0.82	1315	0.041	0.096	0.771	636.835	1	0	A
184	55	9371	1.97	1886	0.022	0.718	0.024	768.110	1	0	A
185	55	15000	2.00	1696	0.000	0.959	0.000	743.448	1	0	A
186	55	5794	1.71	1081	0.012	0.669	0.027	733.482	1	0	A
187	35	21692	1.04	1373	0.317	0.212	0.124	639.391	1	1	A
188	65	39000	0.58	1347	0.232	0.186	0.346	641.537	0	0	A
189	45	5681	1.00	1041	0.100	0.217	0.334	595.861	0	1	A
190	45	5867	1.03	1041	0.069	0.425	0.245	615.322	0	1	A
191	65	39000	0.60	1347	0.233	0.207	0.335	641.400	0	0	A
192	65	11992	0.67	920	0.351	0.024	0.105	634.121	0	0	A
193	65	14574	0.82	1315	0.041	0.099	0.764	636.900	1	0	A
194	60	9047	2.18	1067	0.012	0.698	0.162	588.040	1	0	A
195	60	8042	1.50	1044	0.000	0.760	0.132	590.159	1	0	A

196	60	7037	1.54	1067	0.014	0.492	0.216	583.206	1	0	A
197	60	12000	2.61	1067	0.000	0.808	0.158	595.129	1	0	A
198	65	13934	0.63	1081	0.085	0.028	0.709	644.332	1	0	A
199	65	16000	0.85	1081	0.000	0.120	0.876	634.254	1	0	A
200	35	1641	1.41	1540	0.034	0.598	0.249	617.788	1	0	A
201	35	1096	0.94	1533	0.012	0.357	0.434	649.699	1	0	A
202	65	40195	0.82	1347	0.384	0.158	0.002	650.467	0	1	A
203	45	5681	1.00	1041	0.100	0.218	0.338	595.844	0	1	A
204	45	10000	1.96	1642	0.000	0.713	0.060	626.990	0	1	A
205	45	5438	0.81	1642	0.017	0.147	0.534	616.277	0	0	A
206	65	28670	1.29	1311	0.274	0.370	0.112	624.245	1	1	A
207	65	33229	0.65	965	0.665	0.000	0.000	651.838	1	1	A
208	55	9104	2.25	1067	0.002	0.981	0.002	709.266	1	0	A
209	55	6861	1.92	1067	0.010	0.576	0.212	641.053	1	0	A
210	55	15000	1.69	1886	0.000	1.000	0.000	707.509	1	0	A
211	65	14212	0.63	1081	0.083	0.026	0.737	644.339	1	0	A
212	65	13726	0.85	1081	0.069	0.100	0.683	639.955	1	0	A
213	65	40184	0.82	1347	0.383	0.160	0.002	650.366	0	1	A
214	45	5683	1.01	1041	0.094	0.217	0.350	596.209	0	1	A
215	45	5238	1.13	1041	0.029	0.387	0.441	615.402	0	0	A
216	45	5565	1.22	1041	0.176	0.310	0.100	606.152	0	1	A
217	45	4184	0.80	1642	0.117	0.053	0.379	620.221	0	1	A
218	45	24476	0.93	1311	0.440	0.061	0.150	631.109	1	1	A
219	65	25510	1.35	1311	0.154	0.345	0.213	623.813	1	1	A
220	65	30639	1.49	1311	0.164	0.258	0.190	617.087	1	1	A
221	65	40982	0.77	1347	0.365	0.143	0.000	651.812	0	1	A
222	65	39000	0.44	1645	0.182	0.000	0.621	624.901	0	0	A
223	65	11285	0.70	920	0.394	0.029	0.209	632.668	0	0	A
224	65	14574	0.82	1315	0.041	0.098	0.770	636.829	1	0	A
225	55	15000	1.85	1886	0.005	0.916	0.007	721.522	1	0	A
226	55	9156	2.24	1067	0.002	0.981	0.002	709.077	1	0	A
227	60	12000	2.62	1067	0.000	0.795	0.169	594.950	1	0	A
228	55	9521	2.22	1044	0.031	0.422	0.432	609.584	1	0	A
229	45	12000	0.59	1511	0.218	0.000	0.512	623.772	0	1	A
230	45	1700	0.50	1511	0.217	0.000	0.512	612.763	1	0	A
231	35	1700	1.64	1540	0.031	0.774	0.092	620.091	1	0	A
232	35	1050	0.95	1533	0.012	0.451	0.308	648.759	1	0	A
233	45	10000	1.94	1642	0.000	0.723	0.142	626.677	0	1	A
234	45	3666	0.81	1642	0.055	0.038	0.398	615.494	0	1	A
235	45	3998	0.80	1642	0.120	0.043	0.368	619.351	0	1	A
236	65	33492	0.73	965	0.715	0.006	0.000	648.425	1	1	A
237	65	38110	0.37	1645	0.164	0.056	0.438	616.964	0	1	A
238	65	31034	0.51	1645	0.386	0.008	0.312	630.819	0	1	A

239	65	20612	0.69	2500	0.278	0.030	0.149	632.499	0	1	A
240	60	12000	2.62	1067	0.002	0.617	0.345	596.133	1	0	A
241	55	9546	2.21	1044	0.031	0.421	0.433	609.464	1	0	A
242	55	6011	2.02	1044	0.019	0.653	0.022	637.823	1	0	A
243	65	15665	0.64	1081	0.053	0.043	0.811	644.276	1	0	A
244	35	1058	1.15	1533	0.015	0.623	0.145	642.448	1	0	A
245	35	2599	0.70	1373	0.274	0.092	0.080	645.752	0	0	A
246	35	14203	1.15	965	0.430	0.054	0.023	645.956	1	0	A
247	65	37389	0.37	1645	0.161	0.056	0.445	617.130	0	1	A
248	65	31313	0.50	1645	0.379	0.005	0.324	630.710	0	1	A
249	45	5681	1.01	1041	0.094	0.221	0.342	596.181	0	1	A
250	45	5845	1.03	1041	0.069	0.414	0.244	614.926	0	1	A
251	45	4943	1.23	1041	0.185	0.247	0.107	606.544	0	1	A
252	45	10000	1.95	1642	0.000	0.712	0.053	626.657	0	1	A
253	45	6477	1.39	1642	0.014	0.376	0.321	612.498	0	1	A
254	45	3655	0.81	1642	0.057	0.038	0.396	615.529	0	1	A
255	45	4123	0.80	1642	0.119	0.048	0.376	619.716	0	1	A
256	65	37745	0.37	1645	0.164	0.056	0.436	617.032	0	1	A
257	55	12616	3.09	1696	0.000	0.966	0.002	752.384	1	0	A
258	55	7779	1.97	1067	0.005	0.904	0.014	695.580	1	0	A
259	60	12000	2.64	1067	0.000	0.651	0.321	595.332	1	0	A
260	60	8187	1.53	1044	0.000	0.758	0.142	589.981	1	0	A
261	55	15000	1.28	1886	0.005	0.876	0.017	696.948	1	0	A
262	65	16000	0.78	1081	0.000	0.141	0.859	639.830	1	0	A
263	65	11014	0.88	1081	0.301	0.146	0.086	634.706	1	0	A
264	65	37272	0.37	1645	0.162	0.056	0.443	617.167	0	1	A
265	45	24673	0.68	2500	0.466	0.070	0.182	630.934	0	1	A
266	45	12000	0.52	1511	0.186	0.000	0.594	622.399	0	1	A
267	45	5400	1.41	1540	0.000	0.933	0.019	585.795	1	0	A
268	45	5300	2.02	1540	0.007	0.906	0.010	599.524	1	0	A
269	45	5524	1.07	1041	0.026	0.406	0.406	617.703	0	0	A
270	45	6833	1.05	1041	0.053	0.460	0.259	616.971	0	1	A
271	45	6565	1.57	1642	0.125	0.470	0.019	612.656	0	0	A
272	45	5965	1.53	1642	0.014	0.405	0.249	614.709	0	1	A
273	45	3678	0.81	1642	0.057	0.038	0.393	615.528	0	1	A
274	45	3993	0.80	1642	0.118	0.045	0.374	619.455	0	1	A
275	45	23611	1.20	1311	0.215	0.197	0.244	626.995	1	1	A
276	65	15771	0.83	1315	0.007	0.069	0.895	635.599	1	0	A
277	55	6414	1.75	1044	0.015	0.768	0.022	662.009	1	0	A
278	60	12000	2.61	1067	0.000	0.815	0.139	594.081	1	0	A
279	45	18536	0.66	2500	0.211	0.017	0.533	631.391	0	1	A
280	45	12234	0.61	1511	0.290	0.002	0.508	625.206	0	1	A
281	45	1700	0.58	1540	0.075	0.050	0.721	618.565	1	0	A

282	45	18808	0.67	2500	0.237	0.019	0.506	631.030	0	1	A
283	45	5300	2.79	1041	0.002	0.846	0.057	585.369	1	0	A
284	45	4072	0.80	1642	0.116	0.045	0.371	619.547	0	1	A
285	65	11949	0.77	1081	0.081	0.176	0.551	642.273	1	0	A
286	55	15000	2.02	1886	0.000	0.978	0.000	740.279	1	0	A
287	55	15000	1.89	1886	0.005	0.920	0.007	723.340	1	0	A
288	55	6373	1.73	1044	0.017	0.759	0.022	659.262	1	0	A
289	55	6330	2.05	1044	0.012	0.625	0.095	636.421	1	0	A
291	60	11883	2.48	1067	0.002	0.794	0.129	592.960	1	0	A
292	45	18721	0.66	2500	0.222	0.019	0.512	631.162	0	1	A
293	35	1700	0.93	1511	0.035	0.333	0.471	617.110	1	0	A
294	35	908	1.75	1533	0.016	0.581	0.136	633.584	1	0	A
295	65	39000	0.38	1645	0.161	0.054	0.417	616.640	0	0	A
296	45	5400	1.42	1540	0.000	0.927	0.022	586.694	1	0	A
297	45	3398	1.76	1540	0.012	0.764	0.029	599.576	1	0	A
298	45	7509	0.73	1642	0.106	0.070	0.401	624.982	0	1	A
1	65	25084	1.40	1311	0.288	0.397	0.183	624.412	1	1	B
2	45	4092	0.84	1642	0.314	0.079	0.455	616.866	0	1	B
3	45	24639	0.87	1311	0.723	0.040	0.121	631.349	1	1	B
4	45	6004	1.61	1642	0.336	0.500	0.030	609.859	0	0	B
5	60	7217	2.02	1044	0.089	0.658	0.159	578.843	1	0	B
6	55	5392	2.00	1044	0.092	0.656	0.043	636.916	1	0	B
7	45	13882	0.55	1511	0.566	0.004	0.348	630.638	0	1	B
8	45	5300	1.84	1540	0.294	0.464	0.153	549.486	1	0	B
9	45	10000	2.01	1642	0.006	0.803	0.119	614.938	0	1	B
10	45	4986	1.08	1041	0.146	0.346	0.461	610.865	0	1	B
11	65	26923	1.47	1311	0.340	0.274	0.247	619.409	1	1	B
12	55	6459	1.88	1081	0.122	0.639	0.018	746.201	1	0	B
13	35	1047	1.02	1533	0.106	0.516	0.301	647.664	1	0	B
14	65	25713	1.32	1311	0.383	0.375	0.144	625.631	1	1	B
15	45	5300	2.31	1540	0.261	0.604	0.068	552.972	1	0	B
16	45	3669	0.81	1642	0.324	0.067	0.443	614.532	0	1	B
17	45	3477	1.56	1540	0.004	0.952	0.007	584.707	1	0	B
18	45	3887	1.54	1540	0.016	0.916	0.021	580.209	1	0	B
19	65	25490	1.42	1311	0.356	0.256	0.241	621.387	1	1	B
20	65	33589	0.82	1347	0.777	0.088	0.002	650.294	1	1	B
21	55	14466	2.39	1696	0.000	0.947	0.006	735.215	1	0	B
22	45	12000	0.64	1511	0.359	0.023	0.520	623.806	0	1	B
23	65	39571	0.84	1347	0.631	0.238	0.006	648.042	0	1	B
24	35	20117	1.13	965	0.742	0.115	0.036	643.365	1	1	B
25	60	7585	1.98	1044	0.089	0.622	0.181	586.572	1	0	B
26	55	11376	1.14	1886	0.025	0.900	0.006	684.103	1	0	B
27	65	38608	0.73	1347	0.455	0.278	0.166	641.861	0	1	B

28	65	25937	1.39	1311	0.317	0.398	0.168	624.129	1	1	B
29	45	13025	0.80	2282	0.473	0.028	0.371	625.548	0	1	B
30	55	6179	1.82	1044	0.054	0.775	0.021	666.508	1	0	B
31	65	16000	0.74	1081	0.028	0.168	0.800	641.911	1	0	B
32	65	18210	0.74	2500	0.542	0.057	0.102	632.231	0	1	B
33	35	13969	1.12	965	0.695	0.157	0.037	641.757	1	0	B
34	35	1004	1.59	1540	0.086	0.625	0.212	638.908	1	0	B
35	45	13278	0.58	1511	0.540	0.008	0.357	629.015	0	1	B
36	55	6316	1.84	1044	0.040	0.843	0.018	674.741	1	0	B
37	65	10252	0.78	1390	0.742	0.070	0.046	639.682	1	0	B
38	65	14890	0.65	920	0.643	0.017	0.065	634.297	0	0	B
39	45	5300	2.04	1540	0.164	0.703	0.051	579.500	1	0	B
40	35	1050	1.48	1540	0.072	0.601	0.262	641.147	1	0	B
41	55	12204	2.91	1696	0.003	0.965	0.001	748.414	1	0	B
42	45	5923	1.20	1041	0.101	0.412	0.452	617.531	0	0	B
43	45	25277	1.18	1311	0.465	0.232	0.183	626.836	1	1	B
44	65	12188	0.72	1081	0.161	0.102	0.656	643.245	1	0	B
45	65	18785	0.69	2500	0.529	0.044	0.094	632.712	0	1	B
46	65	9188	0.81	1315	0.403	0.115	0.356	637.447	1	0	B
47	55	5425	1.65	1081	0.113	0.697	0.021	717.471	1	0	B
48	35	5339	0.71	1540	0.104	0.073	0.790	612.137	1	0	B
49	35	23172	0.79	1311	0.771	0.066	0.045	633.458	1	1	B
50	45	19354	0.63	1311	0.889	0.000	0.062	630.666	1	1	B
51	45	8778	1.08	1642	0.083	0.223	0.620	609.484	0	0	B
52	65	11751	0.84	2500	0.578	0.101	0.223	630.253	0	0	B
53	65	15256	0.67	2500	0.619	0.031	0.056	634.264	0	0	B
54	55	6635	1.91	1044	0.027	0.869	0.014	681.641	1	0	B
55	45	4699	0.67	1540	0.124	0.025	0.804	612.283	1	0	B
56	65	13284	0.88	2500	0.650	0.075	0.166	631.429	0	0	B
57	45	4801	1.51	1540	0.036	0.906	0.020	587.681	1	0	B
58	65	24586	1.39	1311	0.390	0.253	0.214	623.189	1	1	B
59	45	14000	0.75	1306	0.404	0.000	0.477	629.388	0	1	B
60	45	12145	0.65	2500	0.367	0.025	0.511	624.154	0	1	B
61	45	5922	1.22	1041	0.291	0.422	0.182	608.284	0	1	B
62	45	14000	0.79	2282	0.446	0.010	0.423	627.378	0	1	B
63	65	35952	0.54	1347	0.188	0.130	0.620	629.985	0	1	B
64	65	33821	0.82	1533	0.736	0.104	0.018	651.011	1	1	B
65	55	8067	1.97	1886	0.095	0.699	0.017	761.385	1	0	B
66	55	6388	1.99	1067	0.064	0.615	0.181	638.232	1	0	B
67	65	24421	0.61	1645	0.606	0.029	0.143	632.071	0	1	B
68	55	5474	2.00	1044	0.080	0.630	0.084	637.943	1	0	B
69	55	6764	1.84	1067	0.070	0.539	0.272	637.806	1	0	B
70	55	10151	1.59	2183	0.095	0.632	0.145	640.494	1	0	B

71	45	8884	1.21	1642	0.063	0.293	0.567	607.030	0	1	B
72	65	35952	0.54	1347	0.245	0.135	0.558	630.053	0	1	B
73	35	5706	0.68	1540	0.165	0.152	0.626	612.268	1	0	B
74	55	11057	1.31	1696	0.015	0.936	0.000	686.746	1	0	B
75	65	31996	0.98	965	0.733	0.034	0.131	639.830	1	1	B
76	65	39000	0.37	1645	0.424	0.035	0.405	617.820	0	0	B
77	60	6988	1.54	1044	0.056	0.691	0.135	589.318	1	0	B
78	60	8053	2.00	1044	0.102	0.584	0.202	591.031	1	0	B
79	45	13668	0.55	1511	0.603	0.003	0.321	630.319	0	1	B
80	35	1000	1.72	1533	0.104	0.660	0.152	633.461	1	0	B
81	55	8313	2.36	1044	0.013	0.954	0.008	716.068	1	0	B
82	45	3771	0.81	1642	0.284	0.105	0.458	614.286	0	1	B
83	55	5729	1.61	1081	0.107	0.700	0.021	710.017	1	0	B
84	55	5442	1.72	1886	0.114	0.702	0.019	723.862	1	0	B
85	65	40071	0.83	1347	0.646	0.214	0.006	649.384	0	1	B
86	65	11231	0.69	2500	0.567	0.070	0.211	631.405	0	0	B
87	60	6341	1.48	1067	0.085	0.571	0.194	580.888	1	0	B
88	60	11238	2.52	1044	0.030	0.554	0.394	599.631	1	0	B
89	45	6710	1.68	1642	0.279	0.569	0.031	611.453	0	0	B
90	65	28827	0.85	1311	0.742	0.162	0.024	630.993	1	1	B
91	35	2516	1.01	1306	0.442	0.289	0.032	639.708	1	0	B
92	45	3297	1.81	1540	0.062	0.791	0.035	598.792	1	0	B
93	45	5206	1.83	1642	0.035	0.544	0.159	615.512	0	1	B
94	65	11933	0.82	2500	0.745	0.058	0.062	636.109	1	0	B
95	55	11920	2.97	1067	0.001	0.966	0.003	746.697	1	0	B
96	45	14992	0.63	1306	0.504	0.000	0.375	625.516	0	1	B
97	45	5168	1.13	1041	0.138	0.391	0.428	612.176	0	1	B
98	65	39000	0.41	704	0.321	0.014	0.554	620.772	0	0	B
99	35	1700	0.73	1511	0.319	0.045	0.503	619.774	1	0	B
100	55	8637	1.75	1886	0.111	0.666	0.074	647.233	1	0	B
101	45	5678	1.18	1041	0.294	0.313	0.316	600.111	0	1	B
102	60	7297	2.00	1044	0.083	0.706	0.119	583.061	1	0	B
103	65	11228	0.70	2500	0.549	0.081	0.212	631.076	0	0	B
104	35	2596	0.79	1373	0.556	0.125	0.087	644.297	0	0	B
105	55	6428	1.98	1067	0.068	0.609	0.186	638.230	1	0	B
106	55	14983	2.19	1696	0.013	0.941	0.007	736.895	1	0	B
107	65	24025	1.39	1311	0.286	0.360	0.208	624.169	1	1	B
108	35	1559	1.55	1540	0.092	0.702	0.162	621.286	1	0	B
109	65	16000	0.90	1081	0.003	0.193	0.800	634.479	1	0	B
110	55	11314	1.16	1696	0.024	0.904	0.006	683.527	1	0	B
111	60	7940	1.98	1044	0.108	0.542	0.232	585.847	1	0	B
112	45	5323	1.17	1041	0.157	0.473	0.292	617.381	0	1	B
113	35	2580	0.87	1373	0.574	0.127	0.074	643.791	0	0	B

114	60	7917	1.95	1067	0.074	0.631	0.185	585.137	1	0	B
115	45	14621	0.69	1306	0.468	0.000	0.410	627.218	0	1	B
116	65	18445	0.68	2500	0.531	0.041	0.089	632.916	0	1	B
117	55	6522	1.85	1067	0.027	0.861	0.018	677.385	1	0	B
118	45	2713	1.22	1540	0.066	0.770	0.079	603.097	1	0	B
119	45	7138	0.80	1642	0.409	0.041	0.380	623.604	0	1	B
120	55	14710	2.03	1696	0.013	0.923	0.000	741.752	1	0	B
121	35	21071	1.05	1373	0.399	0.286	0.200	637.596	1	1	B
122	35	6502	0.71	1540	0.137	0.135	0.693	611.663	1	0	B
123	45	5010	1.83	1642	0.037	0.539	0.156	615.807	0	1	B
124	55	6183	1.82	1044	0.055	0.762	0.025	664.832	1	0	B
125	45	15083	0.63	1306	0.492	0.000	0.392	625.223	0	1	B
126	45	14000	0.80	2282	0.454	0.010	0.412	627.173	0	1	B
127	55	6697	1.83	1067	0.072	0.525	0.290	637.861	1	0	B
128	35	7582	0.92	1306	0.575	0.144	0.071	637.431	1	0	B
129	65	39000	0.40	704	0.313	0.017	0.556	620.261	0	0	B
130	45	5300	2.06	1540	0.095	0.805	0.023	592.204	1	0	B
131	45	24538	0.69	2500	0.512	0.056	0.376	629.277	0	1	B
132	45	15433	0.59	1311	0.929	0.000	0.026	628.598	1	1	B
133	45	5300	2.63	1540	0.172	0.780	0.018	560.387	1	0	B
134	55	15000	1.97	1696	0.000	0.994	0.000	727.508	1	0	B
135	55	9097	2.03	1886	0.077	0.764	0.014	763.493	1	0	B
136	55	13133	2.67	1696	0.001	0.959	0.000	743.048	1	0	B
137	65	19996	0.74	2500	0.497	0.072	0.129	631.289	0	1	B
138	65	35111	0.85	1347	0.459	0.310	0.128	642.423	0	1	B
139	55	13744	2.11	1886	0.023	0.885	0.006	746.925	1	0	B
140	35	10166	1.10	1373	0.665	0.187	0.038	640.421	1	0	B
141	65	12258	1.23	1081	0.152	0.352	0.395	641.568	1	0	B
142	65	13305	0.88	2500	0.639	0.077	0.175	630.973	0	0	B
143	35	1700	0.87	1511	0.208	0.271	0.453	617.982	1	0	B
144	55	15000	1.88	1696	0.018	0.923	0.014	722.877	1	0	B
145	45	1700	0.80	1511	0.205	0.071	0.578	617.448	1	0	B
146	65	34579	0.91	1533	0.459	0.311	0.114	642.243	0	1	B
147	60	7265	1.99	1044	0.085	0.664	0.154	583.594	1	0	B
148	60	8041	2.00	1044	0.086	0.603	0.198	590.280	1	0	B
149	55	5694	1.93	1044	0.089	0.675	0.027	641.614	1	0	B
150	35	4297	0.64	1540	0.228	0.144	0.537	613.487	1	0	B
151	65	27508	0.77	1311	0.686	0.186	0.045	630.275	1	1	B
152	45	5300	1.95	1540	0.237	0.592	0.078	568.355	1	0	B
153	60	7136	1.97	1067	0.086	0.597	0.215	580.373	1	0	B
154	45	14053	0.74	1306	0.398	0.000	0.491	629.519	0	1	B
155	35	2451	0.88	1373	0.586	0.123	0.062	642.966	0	0	B
156	35	1700	0.99	1511	0.163	0.353	0.441	616.602	1	0	B

157	45	3686	0.83	1642	0.309	0.087	0.441	614.737	0	1	B
158	65	15533	0.87	1315	0.063	0.135	0.787	636.748	1	0	B
159	65	35942	0.52	704	0.210	0.149	0.577	628.776	0	1	B
160	45	5300	2.58	1041	0.150	0.816	0.014	564.011	1	0	B
161	60	11064	2.42	1067	0.024	0.782	0.138	590.449	1	0	B
162	35	2035	1.40	1533	0.344	0.414	0.045	628.393	1	0	B
163	45	18521	0.67	2500	0.399	0.045	0.506	630.671	0	1	B
164	45	4368	0.60	1540	0.147	0.016	0.777	612.105	1	0	B
165	45	1700	0.71	1540	0.186	0.099	0.624	616.991	1	0	B
166	65	26651	0.92	1311	0.548	0.311	0.057	627.866	1	1	B
167	60	10126	2.23	1044	0.063	0.431	0.466	605.959	1	0	B
168	65	12061	0.74	1081	0.167	0.122	0.632	643.416	1	0	B
169	45	5300	1.96	1540	0.296	0.483	0.140	548.566	1	0	B
170	45	6941	1.01	1642	0.112	0.195	0.606	610.680	0	0	B
171	55	15000	1.96	1696	0.000	0.999	0.000	723.507	1	0	B
172	35	31224	1.02	965	0.850	0.017	0.034	646.623	1	1	B
173	45	5779	1.08	1041	0.303	0.278	0.324	598.891	0	1	B
174	35	2184	1.23	1306	0.375	0.419	0.015	633.058	1	0	B
175	65	10375	0.82	1390	0.719	0.070	0.052	638.691	1	0	B
176	45	6266	1.12	1041	0.134	0.438	0.366	617.188	0	1	B
177	55	11903	1.11	1886	0.029	0.890	0.008	685.112	1	0	B
178	55	7596	2.05	1044	0.014	0.925	0.010	697.470	1	0	B
179	55	7573	2.03	1067	0.014	0.914	0.013	695.689	1	0	B
180	35	16357	1.09	1373	0.655	0.186	0.042	639.072	1	1	B
181	65	10317	0.80	1081	0.691	0.076	0.069	638.268	1	0	B
182	45	1700	0.47	1511	0.277	0.000	0.619	612.488	1	0	B
183	45	24672	1.29	1311	0.393	0.282	0.192	626.607	1	1	B
184	55	12137	2.94	1067	0.003	0.965	0.001	748.410	1	0	B
185	45	3731	0.82	1642	0.328	0.052	0.453	615.105	0	1	B
186	45	3362	1.64	1540	0.013	0.931	0.014	581.266	1	0	B
187	35	20530	0.78	1306	0.773	0.014	0.063	636.025	1	1	B
188	60	8156	1.87	1044	0.072	0.697	0.134	592.686	1	0	B
189	65	12522	1.34	1081	0.136	0.415	0.347	639.823	1	0	B
190	45	6030	2.02	1642	0.015	0.670	0.082	618.185	0	1	B
191	55	11913	2.95	1067	0.001	0.967	0.003	745.668	1	0	B
192	45	3406	1.68	1540	0.018	0.902	0.024	578.846	1	0	B
193	60	10771	2.40	1067	0.025	0.784	0.139	588.404	1	0	B
194	55	7040	1.56	1886	0.105	0.740	0.011	694.469	1	0	B
195	45	5300	1.99	1540	0.078	0.829	0.022	600.770	1	0	B
196	65	12073	0.78	1081	0.161	0.147	0.605	643.126	1	0	B
197	65	30822	1.06	965	0.688	0.061	0.134	636.358	1	1	B
198	45	10000	1.99	1642	0.034	0.829	0.081	614.148	0	0	B
199	45	1700	0.80	1540	0.188	0.077	0.588	616.968	1	0	B

200	45	2783	1.45	1540	0.004	0.913	0.018	593.699	1	0	B
201	45	19081	0.64	1311	0.877	0.000	0.067	630.885	1	1	B
202	45	6650	2.04	1041	0.133	0.596	0.201	596.820	1	1	B
203	65	24330	1.40	1311	0.288	0.364	0.204	624.101	1	1	B
204	65	21768	0.68	2500	0.524	0.047	0.122	631.775	0	1	B
205	35	20966	1.06	1373	0.368	0.313	0.197	637.153	1	1	B
206	35	19131	1.04	1373	0.392	0.334	0.153	637.790	1	1	B
207	55	6161	1.89	1081	0.122	0.655	0.021	741.380	1	0	B
208	65	25114	0.67	704	0.609	0.053	0.262	630.708	0	1	B
209	60	10512	2.36	1067	0.055	0.485	0.429	601.888	1	0	B
210	65	38857	0.86	1347	0.619	0.247	0.006	647.356	0	1	B
211	45	5300	2.00	1540	0.099	0.805	0.023	598.994	1	0	B
212	45	15252	0.61	1306	0.564	0.000	0.320	624.757	0	1	B
213	35	17722	1.09	1373	0.654	0.183	0.040	638.579	1	1	B
214	55	6880	1.89	1044	0.018	0.887	0.014	684.790	1	0	B
215	45	1700	0.58	1540	0.239	0.025	0.628	616.005	1	0	B
216	65	12225	1.01	1081	0.163	0.228	0.504	642.500	1	0	B
217	35	32720	0.71	1533	0.866	0.021	0.003	652.125	1	1	B
218	60	12000	2.50	1067	0.017	0.754	0.177	593.127	1	0	B
219	65	13528	0.66	1081	0.163	0.044	0.722	643.524	1	0	B
220	55	6472	1.85	1044	0.033	0.852	0.018	675.727	1	0	B
221	60	7218	1.54	1044	0.044	0.695	0.149	589.076	1	0	B
222	55	6751	2.00	1044	0.063	0.633	0.171	639.112	1	0	B
223	45	15133	0.63	1306	0.504	0.000	0.379	625.060	0	1	B
224	55	15000	1.82	1886	0.000	1.000	0.000	704.225	1	0	B
225	65	39000	0.53	1347	0.282	0.086	0.514	640.671	0	1	B
226	45	2783	1.04	1540	0.096	0.624	0.186	606.911	1	0	B
227	65	12071	0.91	1081	0.169	0.207	0.519	642.772	1	0	B
228	65	16000	0.73	1081	0.034	0.158	0.806	642.349	1	0	B
229	45	5039	0.40	1540	0.144	0.000	0.765	614.670	1	1	B
230	65	24668	0.60	1645	0.597	0.025	0.144	631.994	0	1	B
231	45	4059	0.86	1642	0.219	0.148	0.489	614.757	0	1	B
232	45	6363	1.54	1642	0.041	0.454	0.297	610.920	1	1	B
233	45	5504	1.75	1642	0.041	0.521	0.192	614.554	0	1	B
234	35	1599	1.64	1540	0.073	0.779	0.108	622.570	1	0	B
235	35	4681	0.62	1540	0.208	0.141	0.571	613.570	1	0	B
236	60	7270	2.00	1044	0.081	0.687	0.140	582.386	1	0	B
237	55	13906	1.31	1886	0.035	0.867	0.024	695.597	1	0	B
238	65	35647	0.96	1533	0.506	0.312	0.051	642.993	0	1	B
239	35	18835	1.02	1373	0.430	0.330	0.118	637.851	1	1	B
240	45	1700	0.73	1540	0.170	0.115	0.631	616.822	1	0	B
241	35	15117	0.83	1306	0.698	0.056	0.078	636.598	1	1	B
242	65	36427	0.94	1533	0.528	0.311	0.016	644.341	0	1	B

243	45	5300	2.30	1041	0.089	0.695	0.152	593.165	1	1	B
244	45	12974	0.62	1511	0.469	0.014	0.408	627.434	0	1	B
245	35	20676	0.78	1306	0.778	0.014	0.062	636.013	1	1	B
246	65	9393	0.80	1315	0.337	0.128	0.431	640.209	1	0	B
247	55	13046	2.67	1696	0.003	0.958	0.000	742.551	1	0	B
248	35	2559	0.95	1306	0.454	0.258	0.038	640.760	1	0	B
249	65	16000	0.75	1315	0.021	0.166	0.810	640.096	1	0	B
250	35	22080	1.13	965	0.764	0.095	0.036	643.486	1	1	B
251	65	16000	0.72	1081	0.068	0.116	0.808	643.130	1	0	B
252	60	8073	2.06	1044	0.076	0.656	0.155	594.642	1	0	B
253	45	15699	0.59	1311	0.925	0.000	0.036	628.909	1	1	B
254	45	3601	0.82	1642	0.329	0.055	0.445	614.821	0	1	B
255	55	14877	2.23	1696	0.008	0.943	0.006	737.100	1	0	B
256	65	11314	0.84	1081	0.194	0.062	0.685	638.130	1	0	B
257	45	19696	0.65	1311	0.868	0.000	0.069	631.088	1	1	B
258	45	19140	0.71	2500	0.426	0.059	0.478	629.859	0	1	B
259	55	11002	1.38	1696	0.014	0.938	0.000	688.403	1	0	B
260	65	39000	0.52	1533	0.332	0.086	0.474	642.377	0	1	B
261	45	4319	0.82	1642	0.337	0.042	0.463	620.759	0	1	B
262	55	5322	1.73	1081	0.119	0.692	0.025	725.103	1	0	B
263	55	15000	1.95	1696	0.000	1.000	0.000	723.656	1	0	B
264	55	15000	2.04	1886	0.017	0.938	0.007	733.519	1	0	B
265	65	25374	1.38	1311	0.308	0.397	0.177	624.926	1	1	B
266	55	15000	2.15	1696	0.014	0.940	0.007	735.096	1	0	B
267	45	5931	1.16	1041	0.311	0.318	0.281	597.933	0	1	B
268	35	8700	0.71	1540	0.098	0.101	0.772	611.912	1	0	B
269	55	11588	1.14	1696	0.025	0.900	0.006	683.430	1	0	B
270	35	995	1.55	1533	0.090	0.601	0.225	637.606	1	0	B
271	45	3531	1.75	1540	0.059	0.832	0.017	597.084	1	0	B
272	45	5703	1.19	1041	0.250	0.439	0.216	612.906	0	1	B
273	45	12898	0.80	2282	0.476	0.028	0.361	625.396	0	1	B
274	45	4256	1.55	1540	0.060	0.859	0.020	592.853	1	0	B
275	55	7241	1.93	1067	0.016	0.899	0.011	689.066	1	0	B
276	60	11473	2.45	1067	0.017	0.791	0.144	590.624	1	0	B
277	35	22064	0.79	1311	0.792	0.022	0.057	635.078	1	1	B
278	45	15546	0.57	2500	0.461	0.003	0.455	631.747	0	1	B
279	35	22543	0.98	1373	0.648	0.199	0.063	637.022	1	1	B
280	45	6824	0.42	2500	0.223	0.002	0.667	618.182	1	1	B
281	35	18684	1.02	1373	0.434	0.330	0.116	638.026	1	1	B
282	65	13958	0.65	920	0.660	0.015	0.083	634.175	0	0	B
283	45	5212	1.82	1642	0.035	0.541	0.164	615.552	0	1	B
284	45	18735	0.63	1311	0.894	0.000	0.061	630.597	1	1	B
285	45	5923	1.14	1041	0.130	0.436	0.380	617.960	0	1	B

286	45	15527	0.59	1311	0.946	0.000	0.017	627.852	1	1	B
287	45	16462	0.60	1051	0.723	0.000	0.181	624.973	1	1	B
288	35	1700	0.83	1511	0.320	0.141	0.411	620.247	1	0	B
289	35	1464	1.79	1540	0.088	0.796	0.072	626.830	1	0	B
290	45	5058	1.25	1041	0.348	0.401	0.123	607.194	0	1	B
291	65	14087	0.84	1081	0.120	0.073	0.764	637.163	1	0	B
292	35	4022	0.67	1540	0.242	0.147	0.518	613.087	1	0	B
293	45	5300	1.73	1540	0.323	0.431	0.135	550.795	1	0	B
294	35	2102	1.18	1306	0.394	0.392	0.015	634.252	1	0	B
295	35	1338	1.40	1533	0.313	0.493	0.086	636.085	1	0	B
296	45	5300	2.60	1041	0.144	0.828	0.006	567.987	1	0	B
297	65	11540	0.79	2500	0.562	0.104	0.223	630.460	0	0	B
298	65	33565	0.82	1533	0.746	0.103	0.012	650.901	1	1	B
1	65	25800	1.43	1202.6	0.247	0.184	0.237	620.910	1	1	C
2	65	31864	1.00	1002	0.488	0.023	0.130	639.247	1	1	C
3	65	9126	0.81	1221.6	0.341	0.084	0.338	637.656	1	0	C
4	35	1576	1.53	1534.1	0.065	0.521	0.166	621.093	1	0	C
5	65	39000	0.40	1164.3	0.250	0.015	0.553	620.091	0	0	C
6	35	1700	0.93	1526.2	0.203	0.184	0.399	620.719	1	0	C
7	35	2089	1.08	1359.9	0.319	0.267	0.019	637.410	1	0	C
8	60	7164	2.03	1055.8	0.053	0.376	0.176	577.786	1	0	C
9	65	12502	0.86	1762.3	0.566	0.055	0.079	634.315	1	0	C
10	45	5647	1.17	1106	0.188	0.347	0.237	613.640	0	1	C
11	55	9225	2.15	1056.4	0.054	0.401	0.377	610.948	1	0	C
12	45	6107	0.90	1642	0.114	0.115	0.606	614.094	0	0	C
13	55	7792	2.20	1055.6	0.010	0.744	0.013	705.681	1	0	C
14	35	1493	1.51	1529.7	0.226	0.385	0.086	631.982	1	0	C
15	45	4085	0.83	1695.4	0.244	0.055	0.478	616.878	0	1	C
16	45	12713	0.65	1991	0.336	0.015	0.468	626.148	0	1	C
17	45	1700	0.75	1523	0.216	0.022	0.549	618.694	1	0	C
18	55	15000	1.69	1786.9	0.018	0.721	0.023	712.691	1	0	C
19	65	21400	0.71	1801.1	0.379	0.045	0.131	631.342	0	1	C
20	45	3798	0.51	1647.2	0.109	0.000	0.762	613.281	1	0	C
21	65	12121	0.85	1427.9	0.130	0.147	0.557	642.852	1	0	C
22	65	23140	1.36	1283.6	0.190	0.203	0.225	625.336	1	1	C
23	65	35933	0.40	1162.7	0.266	0.113	0.397	619.425	0	1	C
24	45	14000	0.80	1878.1	0.368	0.011	0.385	626.614	0	1	C
25	65	13356	0.88	1754.5	0.541	0.057	0.137	632.127	0	0	C
26	65	24679	1.40	1296.4	0.179	0.244	0.192	624.064	1	1	C
27	45	1700	0.79	1524.7	0.180	0.043	0.572	617.918	1	0	C
28	65	32084	0.96	1155.2	0.533	0.004	0.021	646.652	1	1	C
29	55	6739	1.59	1495.1	0.072	0.604	0.008	696.541	1	0	C
30	65	33550	0.77	1086.3	0.598	0.004	0.029	646.522	1	1	C

31	45	6340	1.32	1041	0.221	0.263	0.281	597.510	0	1	C
32	55	5731	1.63	1484.5	0.084	0.558	0.018	711.680	1	0	C
33	65	39000	0.57	1322.9	0.171	0.070	0.633	636.823	0	1	C
34	35	22202	0.78	1327.3	0.491	0.012	0.056	634.837	1	1	C
35	65	39000	0.50	1432.2	0.267	0.072	0.455	642.081	0	1	C
36	65	36089	0.96	1441.2	0.408	0.249	0.027	643.692	0	1	C
37	65	10664	0.82	1618.4	0.617	0.026	0.048	637.748	1	0	C
38	35	19671	0.80	1328.4	0.495	0.011	0.064	636.440	1	1	C
39	65	39000	0.50	1434.5	0.269	0.071	0.456	642.223	0	1	C
40	45	3606	0.82	1651.9	0.261	0.045	0.447	614.894	0	1	C
41	65	35942	0.42	1171.6	0.257	0.140	0.379	620.438	0	1	C
42	65	24858	0.58	1573.5	0.422	0.017	0.131	632.052	0	1	C
43	55	5276	2.00	1053.9	0.078	0.502	0.062	636.049	1	0	C
44	45	2937	1.45	1550.6	0.003	0.736	0.008	592.252	1	0	C
45	45	4226	0.59	1540	0.121	0.012	0.779	612.121	1	0	C
46	45	4486	0.67	1540	0.109	0.013	0.792	612.208	1	0	C
47	45	18905	0.62	1295	0.680	0.000	0.056	630.443	1	1	C
48	65	10497	0.85	1205.8	0.196	0.060	0.605	639.606	1	0	C
49	35	2138	1.35	1451.1	0.286	0.299	0.038	629.412	1	0	C
50	55	11437	1.15	1789.5	0.020	0.720	0.006	683.531	1	0	C
51	35	3140	0.82	1545.4	0.154	0.277	0.359	610.704	1	0	C
52	45	3347	1.65	1550.5	0.011	0.733	0.018	580.141	1	0	C
53	60	9648	2.35	1057.4	0.029	0.605	0.147	588.787	1	0	C
54	45	5300	2.63	1294.2	0.122	0.635	0.016	562.092	1	0	C
55	65	36305	0.79	1428.3	0.375	0.245	0.133	642.151	0	1	C
56	60	8085	1.97	1054.7	0.078	0.462	0.207	589.894	1	0	C
57	60	7291	1.99	1054.2	0.065	0.490	0.171	585.711	1	0	C
58	45	5115	0.39	1679.9	0.111	0.000	0.740	614.441	1	1	C
59	65	31795	0.49	1250.4	0.306	0.015	0.438	628.539	0	1	C
60	65	32755	0.72	1218.8	0.617	0.000	0.000	649.501	1	1	C
61	45	24293	0.90	1311	0.541	0.044	0.133	631.147	1	1	C
62	55	7071	1.51	1516.1	0.090	0.578	0.010	691.749	1	0	C
63	35	4294	0.64	1540	0.180	0.115	0.538	613.477	1	0	C
64	55	14639	2.35	1632.2	0.000	0.760	0.006	739.937	1	0	C
65	45	6133	1.18	1139.3	0.212	0.341	0.204	608.884	0	1	C
66	55	15000	1.89	1795.4	0.000	0.791	0.000	710.760	1	0	C
67	35	1149	1.79	1536.1	0.093	0.499	0.116	627.656	1	0	C
68	65	13255	0.87	1638.6	0.545	0.054	0.135	632.875	0	0	C
69	65	13437	0.65	1237.2	0.132	0.035	0.725	643.752	1	0	C
70	45	4777	0.43	1582.5	0.165	0.000	0.667	613.096	1	1	C
71	65	27458	0.77	1310.4	0.621	0.103	0.027	631.328	1	1	C
72	35	5374	0.71	1540	0.083	0.058	0.791	612.179	1	0	C
73	65	38599	0.57	1432	0.318	0.122	0.332	642.264	0	0	C

74	55	12123	2.93	1327.6	0.000	0.770	0.001	746.793	1	0	C
75	65	23269	1.38	1284.6	0.188	0.208	0.224	624.794	1	1	C
76	45	5300	1.87	1475.9	0.229	0.379	0.141	550.563	1	0	C
77	65	13176	0.67	1728	0.506	0.016	0.103	633.691	0	0	C
78	65	39000	0.38	1212.3	0.291	0.025	0.476	618.517	0	0	C
79	55	8377	1.71	1551.7	0.104	0.487	0.066	651.881	1	0	C
80	60	8009	2.02	1055.7	0.063	0.490	0.195	588.155	1	0	C
81	45	17104	0.61	1283.8	0.701	0.000	0.056	630.102	1	1	C
82	65	29705	1.10	982.52	0.473	0.043	0.129	635.269	1	1	C
83	35	18557	1.08	1192.1	0.446	0.128	0.047	637.917	1	1	C
84	65	22682	1.38	1262.8	0.219	0.175	0.224	624.549	1	1	C
85	60	6825	1.57	1056	0.071	0.437	0.210	584.254	1	0	C
86	55	12911	1.22	1805.4	0.025	0.704	0.011	693.873	1	0	C
87	65	16000	0.77	1190.1	0.013	0.157	0.785	639.476	1	0	C
88	45	3964	0.63	1540	0.123	0.012	0.771	612.379	1	0	C
89	65	12331	1.32	1552	0.105	0.328	0.360	641.162	1	0	C
90	35	23265	1.01	1333.1	0.374	0.129	0.058	635.845	1	1	C
91	45	19903	0.75	1757.3	0.369	0.061	0.428	628.660	0	1	C
92	45	1700	0.64	1529	0.174	0.037	0.632	616.880	1	0	C
93	65	24476	1.41	1291.9	0.174	0.234	0.216	623.264	1	1	C
94	35	3129	0.85	1545.6	0.155	0.261	0.381	610.846	1	0	C
95	35	18440	1.08	1195.6	0.431	0.129	0.052	637.743	1	1	C
96	55	9901	1.59	1693.9	0.076	0.496	0.151	639.947	1	0	C
97	55	12314	2.86	1410.5	0.001	0.770	0.001	747.450	1	0	C
98	35	21312	1.06	1295.4	0.254	0.176	0.198	637.196	1	1	C
99	65	26941	1.16	994.29	0.446	0.055	0.135	631.741	1	1	C
100	35	2386	0.86	1344.1	0.442	0.093	0.074	644.071	0	0	C
101	35	5530	0.72	1540	0.084	0.069	0.773	611.892	1	0	C
102	55	12172	1.12	1786.6	0.024	0.713	0.011	684.504	1	0	C
103	55	5288	1.98	1054.5	0.085	0.481	0.082	635.202	1	0	C
104	65	26282	1.36	1049.3	0.395	0.145	0.146	623.563	1	1	C
105	55	7593	2.05	1056.5	0.011	0.735	0.010	697.096	1	0	C
106	65	27567	1.26	1320.5	0.284	0.247	0.082	624.979	1	1	C
107	65	10629	0.80	1567.1	0.639	0.026	0.027	638.747	1	0	C
108	55	15000	1.45	1799.9	0.025	0.706	0.024	702.533	1	0	C
109	35	1041	1.10	1536.7	0.086	0.364	0.367	648.758	1	0	C
110	45	6432	2.03	1642	0.010	0.547	0.086	618.457	0	1	C
111	45	4782	1.08	1041	0.125	0.262	0.433	607.973	0	1	C
112	55	15000	1.92	1794.1	0.000	0.791	0.000	713.946	1	0	C
113	45	10000	1.95	1642	0.004	0.601	0.114	619.235	0	1	C
114	35	1368	1.83	1536.7	0.074	0.593	0.075	628.229	1	0	C
115	65	32722	0.74	1293.7	0.592	0.020	0.000	650.690	1	1	C
116	55	5776	1.84	1054.5	0.055	0.552	0.030	650.205	1	0	C

117	60	6408	1.47	1055.3	0.070	0.508	0.135	584.869	1	0	C
118	35	1014	1.74	1536.2	0.094	0.524	0.137	631.636	1	0	C
119	45	4446	0.64	1540	0.111	0.011	0.795	612.581	1	0	C
120	65	32321	0.99	989.59	0.492	0.029	0.134	638.731	1	1	C
121	45	2992	1.51	1552.9	0.003	0.740	0.001	589.665	1	0	C
122	65	12154	0.83	1208	0.150	0.049	0.702	638.946	1	0	C
123	45	15190	0.62	1341.1	0.407	0.000	0.370	624.916	0	1	C
124	45	8558	1.21	1642	0.053	0.224	0.561	606.836	0	1	C
125	45	20365	0.72	1693.4	0.385	0.054	0.406	628.486	0	1	C
126	65	15001	0.86	1191.4	0.050	0.114	0.773	636.051	1	0	C
127	45	5147	1.54	1477.3	0.303	0.328	0.047	609.110	0	0	C
128	45	5300	2.34	1057.2	0.063	0.564	0.151	591.521	1	0	C
129	65	27080	1.49	1186.4	0.252	0.192	0.240	619.279	1	1	C
130	55	10942	2.07	1699	0.039	0.656	0.010	757.293	1	0	C
131	45	6216	1.56	1642	0.031	0.370	0.279	611.569	0	1	C
132	45	5996	1.20	1041	0.243	0.258	0.272	598.016	0	1	C
133	45	5463	1.57	1499.4	0.293	0.348	0.039	609.446	0	0	C
134	35	1086	1.17	1535.6	0.164	0.456	0.109	641.935	1	0	C
135	55	12510	1.45	1570.3	0.088	0.397	0.282	640.134	1	0	C
136	65	38838	0.84	1430.6	0.520	0.111	0.018	650.778	1	1	C
137	55	12583	1.39	1528.1	0.102	0.355	0.321	639.812	1	0	C
138	35	3042	0.86	1547.4	0.146	0.281	0.363	610.375	1	0	C
139	35	2060	1.45	1474.4	0.229	0.374	0.049	627.958	1	0	C
140	65	10122	0.86	1221.7	0.385	0.073	0.280	635.885	1	0	C
141	45	10000	2.00	1642	0.003	0.632	0.117	615.666	0	1	C
142	55	10018	2.69	1127.2	0.001	0.791	0.007	732.303	1	0	C
143	65	35952	0.47	1119.6	0.201	0.149	0.450	625.596	0	1	C
144	45	15809	0.56	1236.7	0.762	0.000	0.020	624.018	1	1	C
145	65	15211	0.66	1735.7	0.496	0.021	0.059	634.320	0	0	C
146	45	4050	0.83	1709.1	0.246	0.064	0.466	617.905	0	1	C
147	65	23101	1.36	1284.7	0.191	0.206	0.220	625.468	1	1	C
148	45	5300	2.22	1410.3	0.217	0.455	0.081	551.987	1	0	C
149	55	11800	1.10	1802.4	0.023	0.711	0.014	686.407	1	0	C
150	65	39000	0.45	1150.1	0.282	0.000	0.552	623.325	0	0	C
151	45	17065	0.63	1950	0.290	0.011	0.542	631.607	0	1	C
152	60	6997	1.50	1056.3	0.040	0.533	0.169	584.742	1	0	C
153	45	2763	1.05	1562.3	0.077	0.505	0.175	606.640	1	0	C
154	45	6444	0.39	1912.2	0.149	0.000	0.691	617.512	1	1	C
155	55	5365	1.75	1514.2	0.095	0.550	0.021	725.823	1	0	C
156	65	17337	0.67	1787.2	0.439	0.028	0.082	633.325	0	1	C
157	45	9833	2.01	1642	0.004	0.579	0.111	619.166	0	1	C
158	65	10797	0.82	1656.8	0.615	0.031	0.031	637.573	1	0	C
159	65	13344	0.91	1753.9	0.447	0.100	0.210	628.630	0	0	C

160	60	8180	1.95	1054.1	0.056	0.544	0.142	594.480	1	0	C
161	65	9235	0.80	1216.7	0.301	0.102	0.381	639.471	1	0	C
162	45	3766	0.80	1655.5	0.261	0.045	0.450	614.409	0	1	C
163	45	12037	0.63	1976.1	0.297	0.015	0.511	624.112	0	1	C
164	65	13731	0.65	1243.9	0.099	0.039	0.784	644.663	1	0	C
165	35	22964	0.96	1335	0.387	0.113	0.053	636.261	1	1	C
166	45	19494	0.70	1669.7	0.377	0.035	0.445	629.757	0	1	C
167	45	6861	0.40	1939.9	0.164	0.000	0.666	618.106	1	1	C
168	35	18271	1.03	1236.5	0.340	0.186	0.095	637.158	1	1	C
169	35	1578	1.43	1532.5	0.071	0.462	0.227	619.539	1	0	C
170	45	1700	0.76	1523.6	0.198	0.029	0.566	618.472	1	0	C
171	65	11861	0.83	1708.2	0.592	0.044	0.047	636.553	1	0	C
172	60	8030	2.00	1055.4	0.060	0.504	0.180	589.280	1	0	C
173	45	14483	0.71	1595.6	0.337	0.000	0.458	628.069	0	1	C
174	45	5076	1.57	1476	0.299	0.342	0.047	609.459	0	0	C
175	65	16000	0.86	1201.8	0.004	0.137	0.817	636.165	1	0	C
176	55	6008	1.62	1461.2	0.081	0.591	0.015	701.793	1	0	C
177	45	9602	1.93	1641.9	0.057	0.619	0.079	614.204	0	0	C
178	65	14596	0.85	1191.3	0.069	0.089	0.769	636.721	1	0	C
179	45	15702	0.59	1262.5	0.742	0.000	0.031	628.554	1	1	C
180	45	6789	1.78	1041	0.132	0.394	0.242	598.839	0	1	C
181	65	39000	0.42	1175.9	0.271	0.011	0.534	621.337	0	0	C
182	45	5300	2.60	1277.5	0.120	0.648	0.014	563.779	1	0	C
183	55	10849	1.43	1795	0.009	0.749	0.000	689.052	1	0	C
184	45	1700	0.79	1525.3	0.157	0.055	0.569	617.195	1	0	C
185	45	3734	0.85	1642	0.210	0.102	0.444	614.736	0	1	C
186	45	24564	0.69	1623.6	0.378	0.040	0.373	629.364	0	1	C
187	45	13628	0.56	1920.8	0.505	0.001	0.305	630.155	0	1	C
188	45	3695	0.82	1643.5	0.247	0.067	0.444	614.559	0	1	C
189	55	14558	1.43	1802.4	0.026	0.704	0.022	702.234	1	0	C
190	35	5709	0.90	1333.4	0.452	0.101	0.035	640.839	1	0	C
191	45	6268	0.40	1902.4	0.141	0.000	0.698	617.149	1	1	C
192	65	38103	0.87	1430.9	0.479	0.198	0.006	646.736	0	1	C
193	65	15378	0.67	1756.6	0.492	0.024	0.055	634.273	0	1	C
194	45	9758	0.49	1984.9	0.199	0.001	0.636	619.373	1	1	C
195	65	35952	0.55	1107.6	0.138	0.101	0.650	630.270	0	1	C
196	65	14900	0.70	1828.9	0.493	0.031	0.063	633.866	0	0	C
197	65	11432	0.68	1732.3	0.494	0.021	0.118	633.213	0	0	C
198	45	3655	1.97	1540	0.052	0.646	0.044	601.264	1	0	C
199	65	35546	0.84	1421.7	0.537	0.096	0.016	650.828	1	1	C
200	55	5330	1.96	1054.1	0.074	0.470	0.108	636.548	1	0	C
201	45	12841	0.64	1985.8	0.350	0.015	0.439	626.675	0	1	C
202	45	1700	0.78	1530.5	0.122	0.112	0.610	616.648	1	0	C

203	65	9865	0.85	1222.5	0.374	0.072	0.292	636.175	1	0	C
204	65	10252	0.78	1391.9	0.564	0.062	0.053	638.751	1	0	C
205	65	23773	1.36	1290.7	0.191	0.221	0.209	625.361	1	1	C
206	65	27589	1.16	1321.7	0.324	0.237	0.043	626.630	1	1	C
207	65	33185	0.88	1022.6	0.550	0.012	0.090	642.496	1	1	C
208	60	8041	2.04	1054.9	0.062	0.502	0.181	590.711	1	0	C
209	35	1032	1.07	1536.3	0.095	0.449	0.223	645.411	1	0	C
210	45	15618	0.59	1268.7	0.738	0.000	0.035	628.945	1	1	C
211	45	15154	0.61	1343.3	0.436	0.000	0.338	624.919	0	1	C
212	35	990	1.68	1536.1	0.082	0.511	0.172	634.051	1	0	C
213	45	5300	2.32	1392.7	0.200	0.484	0.068	553.347	1	0	C
214	35	4311	0.64	1540	0.182	0.111	0.540	613.498	1	0	C
215	45	6983	1.80	1602.3	0.150	0.529	0.027	612.483	0	0	C
216	65	10828	0.83	1196.4	0.296	0.095	0.376	635.541	1	0	C
217	65	39000	0.52	1431.4	0.239	0.073	0.493	641.132	0	1	C
218	65	11845	0.67	1721.6	0.503	0.018	0.112	633.482	0	0	C
219	35	1700	0.75	1522.8	0.236	0.036	0.515	619.349	1	0	C
220	45	4065	0.82	1709.4	0.248	0.054	0.477	617.741	0	1	C
221	60	7840	1.59	1055.6	0.028	0.570	0.177	588.580	1	0	C
222	65	35952	0.49	1079	0.184	0.125	0.532	628.018	0	1	C
223	45	5300	2.05	1540	0.079	0.635	0.022	591.601	1	0	C
224	55	9901	2.10	1711.7	0.045	0.651	0.014	760.627	1	0	C
225	45	13620	0.56	1958	0.458	0.004	0.338	630.228	0	1	C
226	45	5300	2.55	1349.8	0.170	0.563	0.029	557.604	1	0	C
227	55	10576	1.39	1805.4	0.009	0.746	0.000	686.780	1	0	C
228	45	4009	0.61	1540	0.127	0.013	0.765	612.005	1	0	C
229	35	2612	0.80	1348.2	0.424	0.108	0.091	644.251	0	0	C
230	35	1052	1.06	1536.5	0.081	0.378	0.341	648.737	1	0	C
231	45	8738	1.07	1642	0.070	0.177	0.613	609.868	0	0	C
232	45	9073	1.16	1642	0.053	0.217	0.600	607.955	0	1	C
233	65	39000	0.57	1220.1	0.153	0.092	0.634	632.875	0	1	C
234	35	6532	0.70	1540	0.109	0.113	0.678	611.896	1	0	C
235	45	6460	1.53	1641.9	0.033	0.353	0.318	610.432	1	1	C
236	55	11073	1.18	1791.6	0.018	0.725	0.004	683.849	1	0	C
237	55	11768	2.92	1235.4	0.000	0.776	0.006	743.226	1	0	C
238	65	14650	0.85	1196.6	0.071	0.092	0.765	637.036	1	0	C
239	65	35389	0.48	1197.3	0.305	0.011	0.491	627.244	0	1	C
240	45	6423	2.17	1049.4	0.087	0.509	0.177	595.499	1	1	C
241	55	12304	2.84	1433.2	0.001	0.770	0.001	747.027	1	0	C
242	55	5902	1.95	1055	0.054	0.478	0.164	638.014	1	0	C
243	65	22990	1.37	1282.3	0.187	0.201	0.227	625.000	1	1	C
244	65	11404	0.74	1738.2	0.448	0.078	0.222	630.487	0	0	C
245	45	1700	0.75	1523.2	0.200	0.026	0.565	618.406	1	0	C

246	55	15000	1.50	1793.6	0.025	0.716	0.027	703.712	1	0	C
247	45	15774	0.57	1243.9	0.777	0.000	0.004	625.579	1	1	C
248	35	2664	0.82	1348.1	0.466	0.094	0.083	645.030	0	0	C
249	55	8126	1.58	1518	0.094	0.519	0.044	673.627	1	0	C
250	45	8712	1.93	1640.1	0.070	0.638	0.052	614.034	0	0	C
251	35	3055	0.86	1547.3	0.148	0.280	0.364	610.407	1	0	C
252	65	27499	0.54	1391.5	0.376	0.018	0.279	630.469	0	1	C
253	45	2687	1.26	1569.2	0.047	0.630	0.063	601.941	1	0	C
254	45	5923	1.16	1041	0.097	0.342	0.402	618.407	0	0	C
255	55	15000	1.97	1772.1	0.015	0.751	0.004	732.948	1	0	C
256	65	15425	0.88	1191	0.035	0.132	0.778	635.343	1	0	C
257	45	14318	0.55	1906.9	0.444	0.001	0.358	630.995	0	1	C
258	35	17978	1.07	1202	0.434	0.129	0.058	637.824	1	1	C
259	55	8245	1.55	1480.9	0.101	0.486	0.071	665.540	1	0	C
260	45	5300	2.05	1540	0.083	0.630	0.027	590.633	1	0	C
261	45	4304	0.60	1540	0.121	0.012	0.774	612.075	1	0	C
262	65	15641	0.71	1847.8	0.468	0.033	0.071	633.573	0	1	C
263	60	8062	1.95	1056.1	0.057	0.502	0.185	587.205	1	0	C
264	35	7536	0.72	1540	0.084	0.077	0.768	611.794	1	0	C
265	45	16553	0.61	1174.3	0.564	0.000	0.187	625.218	1	1	C
266	65	32904	0.76	1332.9	0.566	0.048	0.006	650.966	1	1	C
267	45	5300	2.56	1255.4	0.123	0.652	0.007	565.942	1	0	C
268	55	15000	1.52	1802.8	0.025	0.717	0.022	706.998	1	0	C
269	65	10279	0.79	1418.5	0.581	0.057	0.052	639.259	1	0	C
270	45	6082	0.90	1642	0.116	0.118	0.599	613.112	0	0	C
271	35	22095	1.06	1316	0.305	0.133	0.171	636.660	1	1	C
272	35	19825	1.04	1284.5	0.237	0.208	0.184	637.958	1	1	C
273	65	12201	0.79	1354	0.126	0.122	0.607	642.980	1	0	C
274	45	5874	1.60	1522.5	0.273	0.384	0.034	609.470	0	0	C
275	65	12099	0.89	1443.6	0.134	0.157	0.534	642.788	1	0	C
276	35	2620	0.81	1349.6	0.409	0.118	0.096	644.151	0	0	C
277	35	1700	0.94	1521.9	0.151	0.233	0.427	617.807	1	0	C
278	65	11637	0.82	1662.8	0.443	0.088	0.224	630.217	0	0	C
279	45	5807	1.68	1642	0.035	0.398	0.219	613.684	0	1	C
280	65	23112	1.42	1248.7	0.226	0.175	0.243	623.212	1	1	C
281	45	13332	0.57	1943.8	0.475	0.005	0.324	629.303	0	1	C
282	45	15842	0.56	1234.7	0.766	0.000	0.018	624.364	1	1	C
283	65	10284	0.85	1205.6	0.200	0.073	0.572	639.961	1	0	C
284	65	34174	0.85	1441.4	0.350	0.256	0.132	642.349	0	1	C
285	45	6227	2.20	1051.2	0.082	0.523	0.170	594.623	1	1	C
286	35	3211	0.81	1544	0.158	0.260	0.379	611.044	1	0	C
287	65	13256	0.89	1666.3	0.473	0.081	0.205	629.514	0	0	C
288	35	1036	1.05	1536.3	0.091	0.406	0.287	647.559	1	0	C

289	45	5300	2.74	1195.9	0.092	0.666	0.013	574.647	1	0	C
290	45	4810	0.40	1648.8	0.117	0.000	0.744	613.773	1	1	C
291	45	12874	0.61	1949.6	0.385	0.009	0.407	627.118	0	1	C
292	45	25105	1.24	1311	0.362	0.229	0.189	626.021	1	1	C
293	60	6531	1.51	1057.4	0.072	0.422	0.235	581.138	1	0	C
294	45	14000	0.77	1855.2	0.321	0.006	0.487	628.184	0	1	C
295	65	31994	1.02	990.83	0.481	0.031	0.133	638.038	1	1	C
296	60	12000	2.48	1057.7	0.012	0.631	0.155	589.781	1	0	C
297	65	10241	0.80	1361	0.538	0.068	0.067	637.665	1	0	C
298	45	1700	0.83	1526.4	0.135	0.067	0.585	616.971	1	0	C
1	65	10386	0.81	1479.1	0.597	0.051	0.041	639.061	1	0	D
2	65	15585	0.67	1745.1	0.494	0.022	0.049	634.322	0	1	D
3	55	8280	2.03	1054.9	0.049	0.399	0.360	627.679	1	0	D
4	35	1700	0.97	1528	0.227	0.188	0.347	620.039	1	0	D
5	55	15000	1.72	1803.2	0.000	0.795	0.000	699.679	1	0	D
6	55	8882	2.10	1056.5	0.056	0.409	0.358	614.037	1	0	D
7	45	6663	1.98	1041.3	0.112	0.446	0.209	597.436	1	1	D
8	45	9359	1.21	1642	0.043	0.253	0.554	607.582	0	1	D
9	60	6337	1.48	1056.6	0.063	0.513	0.157	582.179	1	0	D
10	45	6157	0.91	1642	0.112	0.120	0.601	612.671	0	0	D
11	65	11680	0.66	1641.4	0.514	0.018	0.118	633.433	0	0	D
12	65	23027	0.65	1699	0.425	0.024	0.124	632.276	0	1	D
13	45	5576	1.18	1110.1	0.193	0.349	0.227	613.706	0	1	D
14	35	1026	1.55	1536.7	0.063	0.498	0.233	640.376	1	0	D
15	45	2684	1.35	1565.4	0.030	0.676	0.038	598.750	1	0	D
16	45	15878	0.57	1237.8	0.774	0.000	0.010	625.602	1	1	D
17	35	32677	0.73	1254.3	0.560	0.009	0.004	651.817	1	1	D
18	65	39000	0.43	1173.1	0.273	0.008	0.541	622.003	0	0	D
19	45	5050	1.48	1441.4	0.314	0.291	0.063	608.318	0	1	D
20	65	16000	0.85	1201	0.005	0.139	0.817	636.287	1	0	D
21	65	26005	1.43	1111.1	0.342	0.150	0.196	620.164	1	1	D
22	45	4904	0.43	1815	0.118	0.000	0.739	615.623	1	1	D
23	35	2488	1.00	1345.5	0.337	0.226	0.027	640.093	1	0	D
24	65	25504	0.85	1311	0.577	0.100	0.029	631.676	1	1	D
25	65	12137	0.88	1420.7	0.133	0.151	0.547	642.811	1	0	D
26	65	10576	0.81	1579.5	0.621	0.026	0.045	638.206	1	0	D
27	65	10732	0.81	1626.5	0.621	0.027	0.032	637.922	1	0	D
28	45	5897	1.16	1041	0.089	0.300	0.475	615.065	0	0	D
29	55	7451	1.97	1055.3	0.012	0.723	0.010	692.539	1	0	D
30	45	6266	1.13	1041	0.107	0.357	0.359	617.478	0	1	D
31	45	24380	0.70	1657.5	0.380	0.049	0.353	629.463	0	1	D
32	45	14393	0.72	1626.5	0.319	0.000	0.489	628.511	0	1	D
33	45	5300	1.81	1534.9	0.235	0.389	0.091	559.539	1	0	D

34	45	12000	0.56	1927.7	0.287	0.000	0.535	622.823	0	1	D
35	60	10071	2.20	1054.4	0.052	0.339	0.467	606.927	1	0	D
36	60	12000	2.50	1057.6	0.012	0.614	0.178	590.270	1	0	D
37	55	5417	2.01	1053.3	0.069	0.513	0.063	637.199	1	0	D
38	45	4579	0.65	1540	0.099	0.013	0.810	612.447	1	0	D
39	35	9229	0.87	1327.7	0.486	0.058	0.072	637.254	1	1	D
40	60	9520	2.33	1056.3	0.034	0.587	0.154	590.377	1	0	D
41	35	2741	0.96	1555.2	0.100	0.409	0.260	608.313	1	0	D
42	65	12305	1.24	1493.4	0.124	0.278	0.397	641.197	1	0	D
43	65	16000	0.88	1203.6	0.008	0.132	0.820	635.482	1	0	D
44	65	36649	0.92	1431.4	0.444	0.226	0.023	644.460	0	1	D
45	45	3394	1.66	1550.1	0.012	0.727	0.021	579.418	1	0	D
46	65	39000	0.56	1153.3	0.140	0.100	0.647	631.175	0	1	D
47	65	35962	0.47	1105.1	0.202	0.140	0.477	626.524	0	1	D
48	65	9883	0.84	1204.2	0.211	0.099	0.518	640.194	1	0	D
49	45	5300	2.56	1246.1	0.120	0.650	0.014	564.854	1	0	D
50	45	7229	1.82	1620.2	0.106	0.570	0.041	613.056	0	0	D
51	65	35942	0.41	1188	0.274	0.117	0.384	619.920	0	1	D
52	55	8735	1.77	1568.2	0.097	0.477	0.089	647.460	1	0	D
53	45	22542	0.73	1311	0.639	0.007	0.076	631.383	1	1	D
54	45	1700	0.76	1523.8	0.194	0.030	0.570	618.365	1	0	D
55	45	9237	1.92	1641.6	0.062	0.620	0.077	614.137	0	0	D
56	65	11171	0.67	1636.5	0.488	0.040	0.158	632.091	0	0	D
57	65	13359	0.91	1785	0.487	0.078	0.190	629.626	0	0	D
58	35	1047	1.07	1536	0.094	0.479	0.185	644.377	1	0	D
59	45	12344	0.64	1988.2	0.324	0.017	0.492	624.911	0	1	D
60	35	10259	0.87	1328.1	0.483	0.055	0.073	637.316	1	1	D
61	45	8724	1.07	1642	0.068	0.189	0.600	610.600	0	0	D
62	45	4400	0.58	1540	0.112	0.011	0.787	612.111	1	0	D
63	60	7996	1.97	1054.8	0.080	0.444	0.226	589.554	1	0	D
64	35	1050	1.01	1536	0.082	0.416	0.294	647.545	1	0	D
65	45	5197	1.10	1041	0.213	0.223	0.353	601.448	0	1	D
66	45	6813	1.79	1041	0.132	0.403	0.230	598.336	0	1	D
67	60	6580	1.48	1056	0.070	0.437	0.214	583.222	1	0	D
68	35	1070	1.10	1535.7	0.127	0.479	0.136	643.272	1	0	D
69	45	5649	0.89	1642	0.120	0.119	0.591	614.352	0	0	D
70	65	9549	0.84	1222.8	0.363	0.073	0.308	636.547	1	0	D
71	45	16302	0.60	1282.6	0.707	0.000	0.050	629.825	1	1	D
72	65	24806	0.68	1617.6	0.446	0.043	0.225	630.839	0	1	D
73	65	10407	0.80	1483.9	0.611	0.043	0.038	639.254	1	0	D
74	35	22807	0.88	1333	0.429	0.067	0.043	635.394	1	1	D
75	55	8699	1.77	1592.3	0.095	0.492	0.085	647.700	1	0	D
76	45	3728	0.53	1579.4	0.111	0.007	0.757	612.501	1	0	D

77	35	5434	0.72	1540	0.088	0.075	0.759	611.807	1	0	D
78	45	14000	0.77	1805.7	0.306	0.002	0.504	628.900	0	1	D
79	65	16000	0.77	1199	0.013	0.140	0.806	639.158	1	0	D
80	45	15401	0.59	1277.5	0.732	0.000	0.030	628.879	1	1	D
81	65	25460	1.32	1310.9	0.226	0.217	0.161	626.749	1	1	D
82	35	1700	0.89	1497.5	0.137	0.223	0.480	616.734	1	0	D
83	45	5312	0.41	1842.4	0.128	0.000	0.721	616.248	1	1	D
84	65	32705	0.74	1268.8	0.604	0.003	0.000	650.182	1	1	D
85	45	6313	0.94	1642	0.108	0.137	0.595	612.833	0	0	D
86	45	6147	1.65	1544.8	0.263	0.412	0.028	610.750	0	0	D
87	55	6957	1.57	1498.7	0.081	0.588	0.010	694.193	1	0	D
88	45	5160	1.16	1041	0.175	0.255	0.360	604.583	0	1	D
89	65	35972	0.51	1077.8	0.183	0.118	0.554	628.601	0	1	D
90	35	18911	1.03	1260.9	0.272	0.216	0.123	637.450	1	1	D
91	65	39459	0.85	1433	0.484	0.195	0.006	647.855	0	1	D
92	60	8052	1.98	1055.7	0.071	0.455	0.224	587.181	1	0	D
93	65	38815	0.86	1431.8	0.488	0.193	0.006	647.245	0	1	D
94	45	5300	2.61	1226.9	0.114	0.660	0.007	568.683	1	0	D
95	45	7592	1.33	1641.9	0.055	0.284	0.431	606.953	1	1	D
96	65	38820	0.83	1424.6	0.541	0.105	0.010	650.858	1	1	D
97	35	1700	1.00	1528.8	0.231	0.187	0.352	619.308	1	0	D
98	35	20740	0.78	1327.9	0.495	0.009	0.062	635.911	1	1	D
99	65	10833	0.85	1196.4	0.175	0.061	0.630	638.679	1	0	D
100	35	5093	0.64	1540	0.149	0.124	0.594	613.188	1	0	D
101	55	8223	1.55	1496.2	0.102	0.488	0.063	664.409	1	0	D
102	35	8798	0.89	1327.1	0.467	0.072	0.081	637.333	1	0	D
103	45	8891	1.20	1642	0.048	0.220	0.583	606.877	0	1	D
104	45	7300	0.41	1944.5	0.182	0.000	0.634	618.454	1	1	D
105	65	13351	0.90	1773.2	0.491	0.075	0.187	629.888	0	0	D
106	45	13793	0.55	1924	0.479	0.001	0.323	630.512	0	1	D
107	55	7572	2.06	1056.5	0.011	0.735	0.013	697.306	1	0	D
108	65	39000	0.44	1179.4	0.282	0.003	0.544	623.203	0	0	D
109	45	5361	1.89	1642	0.026	0.464	0.112	615.867	0	1	D
110	55	6082	1.90	1053.6	0.058	0.569	0.021	649.880	1	0	D
111	65	26498	1.30	1318.2	0.245	0.240	0.134	625.098	1	1	D
112	45	9279	0.79	1919.9	0.361	0.039	0.336	623.987	0	1	D
113	45	6054	1.65	1541.6	0.272	0.406	0.029	610.779	0	0	D
114	45	24302	0.84	1311	0.593	0.070	0.047	631.734	1	1	D
115	35	1034	1.13	1536.4	0.088	0.359	0.370	647.291	1	0	D
116	65	11747	0.82	1657.8	0.602	0.042	0.049	637.044	1	0	D
117	45	2707	1.24	1569.6	0.052	0.618	0.073	602.729	1	0	D
118	45	1700	0.82	1531	0.106	0.139	0.598	616.035	1	0	D
119	55	12057	2.93	1296.7	0.000	0.774	0.001	745.676	1	0	D

120	35	1700	0.72	1521.9	0.250	0.054	0.485	620.278	1	0	D
121	35	1095	1.24	1535.7	0.187	0.435	0.098	640.602	1	0	D
122	35	18101	1.02	1233.5	0.357	0.179	0.093	637.488	1	1	D
123	65	11534	0.79	1678.9	0.445	0.084	0.223	630.395	0	0	D
124	65	14650	0.85	1195.2	0.071	0.091	0.766	636.909	1	0	D
125	65	19565	0.72	1865.5	0.394	0.048	0.114	631.838	0	1	D
126	35	6879	0.71	1540	0.102	0.103	0.713	611.615	1	0	D
127	55	6119	1.81	1053	0.048	0.597	0.028	663.458	1	0	D
128	45	5300	1.79	1507.5	0.240	0.363	0.123	552.508	1	0	D
129	55	8893	1.75	1593.5	0.088	0.489	0.105	645.068	1	0	D
130	60	6840	1.49	1056	0.047	0.532	0.155	584.910	1	0	D
131	65	13228	0.88	1633	0.500	0.068	0.185	630.415	0	0	D
132	45	12356	0.63	1973.4	0.333	0.013	0.487	625.032	0	1	D
133	35	1567	1.70	1536.1	0.056	0.609	0.088	623.984	1	0	D
134	45	14000	0.79	1896.8	0.343	0.009	0.450	627.441	0	1	D
135	65	32985	0.80	1174.6	0.575	0.004	0.004	649.213	1	1	D
136	55	8706	2.08	1055.8	0.056	0.400	0.355	616.219	1	0	D
137	45	5300	2.07	1442.3	0.222	0.424	0.111	551.149	1	0	D
138	55	5274	1.94	1054.6	0.073	0.458	0.133	636.551	1	0	D
139	45	14362	0.72	1613.7	0.334	0.000	0.470	628.693	0	1	D
140	45	14000	0.76	1762.9	0.296	0.000	0.524	629.246	0	1	D
141	65	12277	0.68	1306.7	0.144	0.065	0.667	643.823	1	0	D
142	35	1700	0.85	1525.4	0.242	0.113	0.408	620.183	1	0	D
143	55	15000	2.15	1718.4	0.011	0.747	0.008	735.831	1	0	D
144	55	11991	2.90	1271.9	0.000	0.773	0.004	743.702	1	0	D
145	65	20100	0.75	1890.9	0.382	0.055	0.129	631.199	0	1	D
146	60	8938	2.19	1056.4	0.041	0.553	0.168	588.466	1	0	D
147	65	35977	0.96	1440.6	0.410	0.246	0.035	643.571	0	1	D
148	65	36283	0.48	1195	0.306	0.008	0.498	627.022	0	1	D
149	45	3907	0.49	1657.7	0.110	0.000	0.762	613.461	1	0	D
150	35	24846	1.10	1215.8	0.551	0.037	0.041	646.789	1	1	D
151	65	37990	0.37	1180	0.322	0.031	0.415	617.771	0	1	D
152	65	12069	0.72	1362.1	0.136	0.093	0.634	643.518	1	0	D
153	35	14324	1.11	1192.5	0.504	0.134	0.035	639.873	1	0	D
154	35	1023	1.27	1536.9	0.080	0.391	0.344	646.217	1	0	D
155	55	9361	2.03	1618.3	0.056	0.612	0.014	762.929	1	0	D
156	65	19446	0.74	1891.2	0.397	0.052	0.118	631.658	0	1	D
157	45	18582	0.66	1800.5	0.323	0.035	0.507	630.699	0	1	D
158	65	28095	0.54	1377.3	0.354	0.015	0.301	630.345	0	1	D
159	45	16213	0.60	1933.9	0.321	0.003	0.513	631.819	0	1	D
160	45	4312	0.45	1718.8	0.102	0.000	0.774	614.378	1	1	D
161	45	3504	1.55	1546	0.003	0.751	0.007	585.932	1	0	D
162	55	11468	2.82	1185.2	0.001	0.776	0.007	737.680	1	0	D

163	55	7685	1.93	1519.1	0.085	0.530	0.017	759.289	1	0	D
164	45	15630	0.59	1268.6	0.736	0.000	0.037	629.043	1	1	D
165	60	8615	2.10	1056.8	0.048	0.537	0.174	586.891	1	0	D
166	45	17764	0.67	1962.8	0.279	0.026	0.538	631.132	0	1	D
167	45	3445	1.84	1540	0.050	0.623	0.036	598.411	1	0	D
168	45	5408	1.99	1642	0.025	0.498	0.067	617.091	0	1	D
169	45	14000	0.77	1843.2	0.332	0.006	0.470	628.145	0	1	D
170	65	39000	0.37	1217.1	0.328	0.025	0.421	618.052	0	0	D
171	60	7168	1.97	1055.7	0.062	0.435	0.217	581.098	1	0	D
172	55	9713	1.60	1703.5	0.077	0.499	0.143	640.216	1	0	D
173	45	20011	0.66	1302.3	0.659	0.000	0.071	631.101	1	1	D
174	60	10233	2.39	1057.1	0.027	0.614	0.142	589.684	1	0	D
175	45	5923	1.18	1041	0.100	0.357	0.377	618.908	0	0	D
176	55	12187	1.49	1600.4	0.082	0.426	0.251	640.475	1	0	D
177	65	39000	0.52	1438.6	0.287	0.062	0.448	642.521	0	1	D
178	65	27146	0.77	1310.8	0.497	0.144	0.047	630.087	1	1	D
179	45	5115	1.51	1462.6	0.306	0.311	0.052	608.474	0	0	D
180	65	27016	0.56	1433.1	0.373	0.019	0.239	630.711	0	1	D
181	65	33791	0.83	1386.3	0.574	0.066	0.002	650.397	1	1	D
182	60	8103	1.91	1055.4	0.056	0.530	0.156	589.230	1	0	D
183	65	27255	1.49	1186.9	0.250	0.194	0.244	619.151	1	1	D
184	55	6307	1.62	1468.1	0.075	0.603	0.011	701.089	1	0	D
185	65	35866	0.80	1433.1	0.367	0.250	0.139	642.113	0	1	D
186	45	4155	0.86	1642	0.171	0.121	0.498	614.782	0	1	D
187	35	1027	1.03	1536.3	0.093	0.424	0.255	646.670	1	0	D
188	60	7573	1.56	1055.7	0.034	0.546	0.177	587.409	1	0	D
189	65	11672	0.82	1688.6	0.607	0.039	0.034	637.213	1	0	D
190	45	20136	0.71	1656	0.395	0.047	0.407	628.802	0	1	D
191	35	19024	1.04	1259.4	0.273	0.215	0.121	637.193	1	1	D
192	65	25762	1.37	1064.6	0.370	0.142	0.157	623.524	1	1	D
193	65	32138	0.99	999.5	0.492	0.024	0.130	639.390	1	1	D
194	35	2165	1.36	1448.2	0.266	0.325	0.038	629.289	1	0	D
195	65	40644	0.82	1438.2	0.489	0.149	0.023	650.107	0	1	D
196	45	14000	0.76	1770.6	0.330	0.001	0.465	628.972	0	1	D
197	65	10795	0.84	1214.3	0.191	0.050	0.638	639.758	1	0	D
198	45	5300	2.75	1187.6	0.083	0.668	0.015	576.211	1	0	D
199	45	11903	0.79	1956	0.370	0.039	0.346	624.664	0	1	D
200	60	7974	1.97	1055.4	0.083	0.432	0.238	587.294	1	0	D
201	55	8717	1.77	1589.5	0.095	0.488	0.090	647.245	1	0	D
202	55	8141	1.59	1527.5	0.092	0.515	0.047	673.087	1	0	D
203	35	14128	1.09	1200.6	0.496	0.142	0.043	639.523	1	1	D
204	45	5118	1.24	1184.6	0.261	0.322	0.144	606.606	0	1	D
205	45	19953	0.74	1735.3	0.374	0.057	0.425	628.663	0	1	D

206	55	5172	1.97	1054.7	0.090	0.474	0.081	634.820	1	0	D
207	45	5771	1.15	1042.9	0.115	0.371	0.318	617.344	0	1	D
208	55	12015	2.92	1284.4	0.000	0.776	0.003	744.794	1	0	D
209	65	39000	0.53	1440.3	0.241	0.074	0.513	641.329	0	1	D
210	55	5287	1.98	1054.5	0.083	0.502	0.047	635.630	1	0	D
211	55	9999	2.07	1668.8	0.046	0.639	0.014	761.227	1	0	D
212	45	3986	0.64	1540	0.120	0.012	0.778	612.288	1	0	D
213	65	35211	0.59	1442.2	0.314	0.113	0.364	642.702	0	1	D
214	65	10563	0.80	1562.7	0.625	0.026	0.041	638.506	1	0	D
215	60	8123	1.68	1055.8	0.040	0.567	0.158	588.639	1	0	D
216	45	3712	0.82	1657.6	0.263	0.040	0.451	614.777	0	1	D
217	35	19369	1.04	1268.8	0.253	0.217	0.148	637.326	1	1	D
218	55	8452	1.71	1534.6	0.102	0.484	0.073	651.654	1	0	D
219	55	8906	2.10	1056.3	0.056	0.410	0.356	613.872	1	0	D
220	55	8947	2.12	1056.5	0.055	0.411	0.359	613.157	1	0	D
221	45	5205	1.15	1041	0.184	0.251	0.356	604.001	0	1	D
222	65	25676	1.37	1059.9	0.373	0.142	0.153	623.631	1	1	D
223	65	14132	0.83	1205.5	0.111	0.061	0.735	638.362	1	0	D
224	35	21190	1.07	1289.5	0.238	0.190	0.196	636.686	1	1	D
225	60	7801	1.59	1056.2	0.029	0.563	0.180	587.020	1	0	D
226	55	6267	2.00	1054.5	0.045	0.507	0.159	639.024	1	0	D
227	65	25769	1.41	1081.4	0.371	0.158	0.174	620.948	1	1	D
228	55	5641	1.82	1433	0.087	0.560	0.027	728.523	1	0	D
229	35	1496	1.27	1515	0.090	0.333	0.369	617.279	1	0	D
230	65	15316	0.86	1203.2	0.054	0.111	0.778	636.508	1	0	D
231	45	5329	1.11	1041	0.230	0.221	0.338	600.358	0	1	D
232	35	1914	1.53	1492.5	0.198	0.432	0.058	627.536	1	0	D
233	55	12582	2.10	1740.4	0.024	0.690	0.006	749.137	1	0	D
234	55	11994	2.94	1290.5	0.000	0.770	0.003	745.762	1	0	D
235	65	33129	0.79	1353.9	0.569	0.059	0.005	650.407	1	1	D
236	55	14548	2.33	1631.5	0.000	0.759	0.006	734.368	1	0	D
237	65	10495	0.81	1540.6	0.598	0.043	0.049	638.313	1	0	D
238	35	1078	1.44	1536.9	0.057	0.463	0.282	644.015	1	0	D
239	45	5013	1.25	1200.2	0.278	0.318	0.119	605.618	0	1	D
240	45	9206	1.13	1642	0.057	0.220	0.592	609.195	0	0	D
241	65	35923	0.39	1162	0.298	0.053	0.426	618.096	0	1	D
242	65	23939	0.64	1653.5	0.433	0.027	0.145	632.126	0	1	D
243	35	18310	1.12	1204.1	0.552	0.095	0.037	643.240	1	1	D
244	35	4900	0.63	1540	0.155	0.120	0.581	613.414	1	0	D
245	65	15212	0.86	1200.2	0.052	0.112	0.779	636.362	1	0	D
246	45	10000	1.94	1642	0.007	0.610	0.125	617.714	0	1	D
247	60	8052	1.97	1055.9	0.070	0.450	0.231	586.484	1	0	D
248	60	8073	2.02	1054.5	0.068	0.495	0.181	591.886	1	0	D

249	35	1032	1.12	1536.5	0.091	0.357	0.370	647.590	1	0	D
250	65	13221	0.87	1628.1	0.525	0.054	0.156	632.114	0	0	D
251	55	5719	1.63	1494.4	0.084	0.567	0.018	710.159	1	0	D
252	45	7723	1.32	1641.8	0.055	0.278	0.441	606.899	1	1	D
253	65	11222	0.68	1734.6	0.459	0.056	0.176	631.493	0	0	D
254	65	22214	0.67	1740.5	0.398	0.033	0.123	631.892	0	1	D
255	45	4247	0.87	1642	0.169	0.136	0.482	614.702	0	0	D
256	65	14063	0.67	1706.4	0.516	0.012	0.090	633.983	0	0	D
257	55	6157	1.96	1055.8	0.052	0.480	0.177	637.671	1	0	D
258	35	5408	0.72	1540	0.090	0.072	0.763	611.903	1	0	D
259	45	14000	0.79	1900.2	0.348	0.009	0.442	627.298	0	1	D
260	45	5586	1.10	1073.1	0.153	0.331	0.300	614.155	0	1	D
261	65	37145	0.38	1198.2	0.316	0.034	0.413	617.782	0	1	D
262	45	14955	0.57	1931.3	0.388	0.001	0.422	631.489	0	1	D
263	65	12151	0.91	1422	0.132	0.158	0.534	642.750	1	0	D
264	55	7602	1.98	1056.1	0.044	0.397	0.364	633.900	1	0	D
265	45	5398	0.41	1858.7	0.132	0.000	0.717	616.372	1	1	D
266	45	5300	2.61	1274.9	0.122	0.638	0.018	562.570	1	0	D
267	35	2407	1.35	1420.9	0.240	0.389	0.022	630.224	1	0	D
268	45	1700	0.69	1529.7	0.159	0.063	0.625	617.061	1	0	D
269	65	28089	1.09	1317.9	0.336	0.244	0.033	626.610	1	1	D
270	35	5460	0.71	1540	0.086	0.063	0.778	612.029	1	0	D
271	55	14562	1.39	1795.4	0.026	0.698	0.027	698.503	1	0	D
272	65	22662	1.40	1261.5	0.222	0.174	0.236	624.013	1	1	D
273	45	5391	1.98	1642	0.024	0.507	0.070	617.460	0	1	D
274	60	8086	1.98	1054.3	0.079	0.467	0.200	591.440	1	0	D
275	35	1297	1.39	1534.6	0.247	0.387	0.082	636.575	1	0	D
276	65	23672	1.42	1282.8	0.178	0.207	0.245	623.162	1	1	D
277	35	8924	0.89	1327.9	0.473	0.066	0.071	637.485	1	0	D
278	35	25071	1.12	1195.6	0.537	0.039	0.038	645.457	1	1	D
279	60	6770	1.49	1056	0.053	0.526	0.153	584.483	1	0	D
280	35	5470	0.70	1540	0.084	0.057	0.791	612.130	1	0	D
281	65	26228	1.48	1171.1	0.265	0.170	0.224	620.794	1	1	D
282	65	24557	0.67	1629.9	0.437	0.040	0.187	631.397	0	1	D
283	60	8186	1.67	1055.1	0.037	0.577	0.157	590.889	1	0	D
284	45	10000	2.02	1642	0.009	0.641	0.119	614.568	0	1	D
285	65	11656	0.82	1636.2	0.454	0.081	0.225	630.330	0	0	D
286	65	30014	1.08	983.9	0.472	0.040	0.133	636.124	1	1	D
287	45	14678	0.69	1523.9	0.374	0.000	0.408	626.935	0	1	D
288	65	37710	0.90	1438.7	0.452	0.219	0.006	645.989	0	1	D
289	45	5923	1.20	1041	0.084	0.331	0.437	618.372	0	0	D
290	65	35942	0.42	1121.2	0.235	0.169	0.386	621.242	0	1	D
291	60	7974	1.96	1055.7	0.085	0.424	0.250	586.019	1	0	D

292	55	13655	2.11	1741.3	0.018	0.697	0.006	747.647	1	0	D
293	35	5432	0.66	1540	0.138	0.128	0.610	612.673	1	0	D
294	65	33557	0.75	1079	0.601	0.008	0.039	646.308	1	1	D
295	45	18636	0.66	1767.3	0.330	0.032	0.510	630.701	0	1	D
296	35	1700	0.92	1525.4	0.186	0.189	0.415	620.485	1	0	D
297	45	3227	1.65	1552.7	0.003	0.753	0.008	582.818	1	0	D
298	60	8050	1.64	1054.6	0.026	0.586	0.161	591.928	1	0	D
1	60	8979	2.21	1057.2	0.041	0.560	0.170	587.640	1	0	E
2	65	32895	0.75	1213.3	0.579	0.004	0.003	650.737	1	1	E
3	35	2925	0.90	1551	0.119	0.328	0.331	609.432	1	0	E
4	55	6087	1.81	1053.9	0.041	0.622	0.019	668.602	1	0	E
5	55	9162	2.02	1623.7	0.058	0.602	0.014	763.213	1	0	E
6	60	7157	1.95	1056.1	0.064	0.425	0.243	581.032	1	0	E
7	65	30551	1.06	990.72	0.472	0.033	0.132	636.993	1	1	E
8	35	2235	1.39	1446.5	0.231	0.371	0.036	628.799	1	0	E
9	55	12012	2.93	1286.3	0.000	0.770	0.003	745.298	1	0	E
10	45	3798	0.83	1642	0.206	0.095	0.466	614.507	0	1	E
11	45	7352	1.02	1642	0.080	0.165	0.606	611.101	0	0	E
12	45	5206	1.58	1496.4	0.296	0.350	0.039	609.618	0	0	E
13	65	39000	0.70	1429.9	0.359	0.204	0.194	641.774	0	1	E
14	45	24270	0.88	1311	0.554	0.079	0.096	630.870	1	1	E
15	60	8113	1.68	1055.4	0.040	0.571	0.158	589.986	1	0	E
16	60	8769	2.16	1057.4	0.043	0.550	0.173	586.657	1	0	E
17	45	25247	1.17	1311	0.402	0.187	0.181	626.868	1	1	E
18	65	20573	0.71	1824.8	0.374	0.046	0.122	631.684	0	1	E
19	35	1017	1.25	1536.9	0.082	0.382	0.350	646.971	1	0	E
20	35	1700	0.94	1525.9	0.191	0.191	0.408	620.487	1	0	E
21	65	26127	1.32	1316.2	0.236	0.239	0.144	624.956	1	1	E
22	45	25564	0.98	1311	0.498	0.092	0.158	629.435	1	1	E
23	45	7846	0.81	1920.9	0.352	0.034	0.349	624.006	0	1	E
24	45	15656	0.60	1172.8	0.496	0.000	0.261	625.408	0	1	E
25	45	24007	0.79	1311	0.604	0.017	0.095	631.637	1	1	E
26	60	7044	1.70	1056.7	0.067	0.461	0.200	584.076	1	0	E
27	55	14311	1.42	1806.9	0.026	0.708	0.017	702.748	1	0	E
28	45	4400	0.43	1578.2	0.158	0.000	0.688	612.559	1	1	E
29	65	25397	1.32	1034.7	0.401	0.125	0.137	625.575	1	1	E
30	55	11334	1.59	1729.5	0.070	0.514	0.161	642.676	1	0	E
31	65	12338	1.29	1527.8	0.115	0.306	0.371	641.033	1	0	E
32	55	9795	2.53	1099.7	0.002	0.787	0.007	723.435	1	0	E
33	45	3405	1.83	1540	0.049	0.623	0.036	598.431	1	0	E
34	35	1420	1.86	1536.9	0.070	0.623	0.058	628.925	1	0	E
35	60	7147	2.00	1055.9	0.055	0.410	0.187	578.918	1	0	E
36	55	10742	2.73	1141.9	0.001	0.788	0.007	732.196	1	0	E

37	60	6457	1.48	1057.4	0.071	0.417	0.239	580.779	1	0	E
38	45	5300	2.65	1103.9	0.055	0.635	0.080	585.258	1	0	E
39	55	6252	1.83	1054.5	0.034	0.663	0.018	672.853	1	0	E
40	45	9141	1.19	1642	0.046	0.222	0.591	607.280	0	1	E
41	45	7279	1.02	1642	0.082	0.157	0.613	610.328	0	0	E
42	55	6849	1.82	1056.2	0.053	0.407	0.308	637.239	1	0	E
43	55	8692	2.07	1055.9	0.056	0.403	0.354	616.611	1	0	E
44	65	40118	0.82	1423.6	0.518	0.152	0.006	649.785	0	1	E
45	45	5400	1.40	1540	0.008	0.755	0.011	583.854	1	0	E
46	55	6952	1.85	1057	0.048	0.387	0.361	636.739	1	0	E
47	65	28167	0.83	1310.6	0.586	0.133	0.021	630.665	1	1	E
48	45	16519	0.60	1171.7	0.550	0.000	0.199	625.340	1	1	E
49	65	26446	1.47	1135.9	0.321	0.170	0.202	618.558	1	1	E
50	35	1595	1.50	1533.6	0.064	0.503	0.189	620.514	1	0	E
51	45	6068	1.18	1041	0.241	0.244	0.292	597.069	0	1	E
52	55	10544	2.07	1693.9	0.043	0.649	0.014	758.908	1	0	E
53	65	16000	0.79	1202.9	0.011	0.137	0.813	638.089	1	0	E
54	45	5300	2.64	1306.3	0.123	0.627	0.016	561.794	1	0	E
55	55	14657	2.34	1638.7	0.000	0.757	0.006	739.427	1	0	E
56	65	25738	1.37	1307.7	0.203	0.242	0.169	625.058	1	1	E
57	55	12263	2.88	1396.8	0.001	0.769	0.001	747.631	1	0	E
58	65	10373	0.85	1195.7	0.184	0.083	0.577	639.339	1	0	E
59	55	6251	1.89	1434.2	0.098	0.511	0.021	742.744	1	0	E
60	45	12584	0.64	1977	0.340	0.015	0.473	625.818	0	1	E
61	45	6157	0.91	1642	0.113	0.117	0.606	613.743	0	0	E
62	45	14281	0.73	1622.9	0.332	0.000	0.467	629.010	0	1	E
63	35	1602	1.56	1534.6	0.058	0.547	0.146	621.485	1	0	E
64	45	24201	0.85	1311	0.577	0.071	0.071	631.372	1	1	E
65	45	5082	1.24	1192.7	0.267	0.321	0.131	606.467	0	1	E
66	35	1183	1.85	1536.5	0.081	0.547	0.087	628.454	1	0	E
67	35	1044	1.03	1536.1	0.085	0.408	0.298	647.661	1	0	E
68	55	5410	1.92	1054.7	0.080	0.515	0.031	638.102	1	0	E
69	60	7018	1.70	1056.8	0.068	0.457	0.203	583.638	1	0	E
70	45	23670	0.79	1311	0.604	0.016	0.100	631.658	1	1	E
71	45	1700	0.82	1527.6	0.137	0.080	0.591	616.465	1	0	E
72	35	32686	0.72	1288	0.562	0.021	0.003	652.225	1	1	E
73	45	5300	1.86	1532	0.221	0.403	0.092	560.048	1	0	E
74	35	21004	1.03	1300.3	0.266	0.167	0.201	638.276	1	1	E
75	55	6978	1.91	1054.7	0.013	0.708	0.011	686.607	1	0	E
76	45	25032	1.05	1311	0.459	0.114	0.177	628.970	1	1	E
77	45	3287	1.66	1552	0.012	0.733	0.020	579.868	1	0	E
78	65	13310	0.86	1765.9	0.557	0.058	0.101	633.436	0	0	E
79	45	11169	0.50	1986.8	0.199	0.002	0.635	619.557	0	1	E

80	60	6417	1.48	1055.3	0.070	0.494	0.152	584.693	1	0	E
81	35	6405	0.74	1540	0.089	0.080	0.755	611.599	1	0	E
82	65	13193	0.87	1618.1	0.513	0.058	0.174	631.174	0	0	E
83	45	12239	0.65	2001.4	0.304	0.019	0.502	624.525	0	1	E
84	45	14130	0.54	1900.1	0.469	0.001	0.335	630.778	0	1	E
85	65	12097	0.84	1722.2	0.579	0.049	0.064	635.452	1	0	E
86	35	1062	1.44	1536.6	0.060	0.460	0.288	642.209	1	0	E
87	45	3768	0.53	1600	0.109	0.007	0.757	612.700	1	0	E
88	65	11176	0.66	1604.3	0.507	0.029	0.145	632.434	0	0	E
89	65	11716	0.82	1590.6	0.476	0.071	0.221	630.593	0	0	E
90	45	12000	0.61	1962.5	0.278	0.009	0.548	623.087	0	1	E
91	55	5977	1.78	1054.5	0.049	0.590	0.024	662.522	1	0	E
92	65	13959	0.69	1774	0.506	0.013	0.087	633.795	0	0	E
93	35	21298	0.78	1328.3	0.488	0.008	0.057	635.633	1	1	E
94	65	9883	0.85	1209.1	0.210	0.090	0.532	640.548	1	0	E
95	55	8738	2.08	1055.9	0.056	0.401	0.354	615.739	1	0	E
96	65	15648	0.88	1197.2	0.031	0.127	0.789	635.584	1	0	E
97	65	10759	0.80	1583.3	0.635	0.030	0.021	638.680	1	0	E
98	55	12525	1.38	1540	0.102	0.349	0.328	640.237	1	0	E
99	45	3204	1.79	1540	0.047	0.648	0.025	598.361	1	0	E
100	55	11607	2.09	1727	0.034	0.678	0.006	753.553	1	0	E
101	65	32836	0.75	1312.1	0.590	0.028	0.002	650.271	1	1	E
102	45	3675	0.56	1562.7	0.122	0.010	0.745	612.407	1	0	E
103	65	30889	0.50	1268.7	0.318	0.015	0.407	628.984	0	1	E
104	55	11840	2.87	1235.3	0.000	0.776	0.007	741.169	1	0	E
105	55	15000	1.53	1797.8	0.024	0.719	0.025	706.538	1	0	E
106	60	8142	1.99	1053.9	0.078	0.484	0.185	592.880	1	0	E
107	35	1700	0.98	1528.3	0.236	0.172	0.361	619.383	1	0	E
108	55	10992	1.17	1797.5	0.018	0.727	0.004	683.763	1	0	E
109	35	18003	1.02	1225.4	0.374	0.160	0.090	637.427	1	1	E
110	45	5028	1.25	1209.6	0.285	0.313	0.114	606.398	0	1	E
111	65	39000	0.58	1272	0.156	0.077	0.637	634.760	0	1	E
112	65	23281	1.38	1230.2	0.251	0.160	0.229	623.930	1	1	E
113	45	24151	1.27	1311	0.354	0.229	0.193	629.061	1	1	E
114	65	11383	0.73	1678.2	0.461	0.067	0.223	630.949	0	0	E
115	45	24397	0.92	1311	0.532	0.049	0.139	630.959	1	1	E
116	35	1318	1.44	1534.4	0.224	0.402	0.086	635.647	1	0	E
117	45	17359	0.63	1911.9	0.299	0.013	0.533	631.573	0	1	E
118	45	5189	1.12	1041	0.109	0.297	0.443	612.029	0	1	E
119	35	32762	0.74	1317.4	0.561	0.037	0.008	651.888	1	1	E
120	45	2760	1.53	1556.7	0.004	0.739	0.001	590.531	1	0	E
121	55	7094	1.90	1485.8	0.093	0.514	0.017	755.307	1	0	E
122	65	15873	0.70	1833.7	0.470	0.029	0.073	633.575	0	1	E

123	55	11163	1.18	1788.2	0.018	0.730	0.004	683.764	1	0	E
124	45	1700	0.80	1530.2	0.118	0.118	0.600	616.299	1	0	E
125	60	11911	2.48	1056.1	0.015	0.612	0.161	592.867	1	0	E
126	35	2720	1.01	1559.2	0.088	0.442	0.242	607.719	1	0	E
127	65	12117	0.97	1475.8	0.133	0.184	0.499	642.698	1	0	E
128	35	29424	1.08	1201.8	0.508	0.019	0.039	646.772	1	1	E
129	45	6947	1.80	1598.1	0.161	0.523	0.025	612.521	0	0	E
130	45	24540	0.89	1311	0.549	0.078	0.104	630.719	1	1	E
131	65	35539	0.96	1440.7	0.389	0.250	0.064	642.772	0	1	E
132	65	39000	0.59	1291.9	0.162	0.072	0.641	635.555	0	1	E
133	60	8123	1.67	1055.7	0.040	0.568	0.159	589.144	1	0	E
134	35	1030	1.16	1536.6	0.089	0.357	0.369	647.333	1	0	E
135	35	24177	0.86	1328.7	0.439	0.071	0.052	633.478	1	1	E
136	65	33690	0.82	1391.5	0.538	0.075	0.018	651.058	1	1	E
137	35	1670	1.52	1517.3	0.231	0.378	0.072	629.293	1	0	E
138	35	17850	1.02	1222.5	0.390	0.152	0.088	637.822	1	1	E
139	65	12242	0.77	1322.6	0.125	0.108	0.629	643.008	1	0	E
140	45	10000	1.96	1642	0.047	0.619	0.091	614.230	0	0	E
141	60	7536	1.56	1056.3	0.035	0.544	0.182	585.991	1	0	E
142	45	3182	1.47	1549	0.003	0.744	0.000	589.241	1	0	E
143	35	19672	1.05	1277.1	0.233	0.213	0.177	637.397	1	1	E
144	45	4127	0.82	1686.5	0.249	0.048	0.478	616.143	0	1	E
145	60	8124	1.79	1055	0.051	0.571	0.134	591.011	1	0	E
146	55	15000	1.42	1790.8	0.025	0.706	0.027	698.526	1	0	E
147	65	26236	1.37	1056.1	0.383	0.150	0.154	623.164	1	1	E
148	45	15622	0.60	1272.6	0.724	0.000	0.046	629.523	1	1	E
149	65	36542	0.94	1440	0.420	0.243	0.016	644.425	0	1	E
150	45	11648	0.79	1937.2	0.371	0.041	0.338	624.462	0	1	E
151	55	5822	1.66	1519.2	0.084	0.586	0.013	710.127	1	0	E
152	55	11665	1.11	1798.5	0.023	0.714	0.007	685.144	1	0	E
153	55	15000	2.10	1721.4	0.011	0.742	0.007	730.638	1	0	E
154	55	7244	1.93	1055.8	0.012	0.714	0.011	688.434	1	0	E
155	55	6635	1.90	1053.8	0.021	0.689	0.015	681.136	1	0	E
156	55	6193	1.88	1485.9	0.107	0.497	0.023	748.226	1	0	E
157	45	2754	1.02	1560	0.085	0.467	0.213	607.371	1	0	E
158	45	1700	0.80	1531.8	0.114	0.133	0.610	616.516	1	0	E
159	45	4544	0.42	1614.9	0.130	0.000	0.727	613.096	1	1	E
160	65	39000	0.41	1151.7	0.253	0.011	0.557	620.719	0	0	E
161	35	8700	0.71	1540	0.091	0.094	0.740	611.864	1	0	E
162	55	9690	2.49	1094.3	0.004	0.785	0.007	721.547	1	0	E
163	55	6180	1.99	1054.5	0.046	0.502	0.161	638.891	1	0	E
164	55	5736	1.63	1488.6	0.081	0.577	0.020	707.177	1	0	E
165	35	21659	0.76	1326.5	0.498	0.006	0.055	635.064	1	1	E

166	45	23939	0.80	1311	0.598	0.017	0.098	631.650	1	1	E
167	45	24388	0.87	1311	0.575	0.085	0.046	631.478	1	1	E
168	65	37746	0.89	1431.7	0.467	0.207	0.007	646.250	0	1	E
169	65	10293	0.80	1428.7	0.594	0.055	0.043	639.541	1	0	E
170	65	28072	0.82	1310.7	0.605	0.122	0.024	630.937	1	1	E
171	65	39961	0.84	1433.3	0.480	0.193	0.006	648.510	0	1	E
172	65	39000	0.58	1310.5	0.169	0.070	0.638	636.330	0	1	E
173	35	2390	1.37	1425.5	0.226	0.402	0.022	629.776	1	0	E
174	45	2684	1.48	1559.9	0.003	0.728	0.011	592.882	1	0	E
175	55	5780	1.76	1055	0.055	0.571	0.029	658.890	1	0	E
176	45	3332	1.65	1550.9	0.012	0.730	0.020	579.960	1	0	E
177	45	10000	2.01	1642	0.006	0.637	0.119	614.857	0	1	E
178	45	5367	0.88	1642	0.124	0.133	0.565	614.498	0	0	E
179	45	4072	0.82	1709.4	0.247	0.047	0.489	617.611	0	1	E
180	45	4193	0.86	1642	0.166	0.119	0.507	614.750	0	1	E
181	55	12377	1.61	1804.2	0.003	0.776	0.000	695.034	1	0	E
182	65	35933	0.41	1200	0.290	0.091	0.387	619.203	0	1	E
183	65	27078	1.25	1321.3	0.287	0.236	0.084	625.829	1	1	E
184	55	5267	1.77	1502.4	0.101	0.540	0.026	729.752	1	0	E
185	55	9821	1.59	1722.8	0.076	0.504	0.143	640.577	1	0	E
186	35	2603	0.92	1342	0.366	0.164	0.058	641.457	1	0	E
187	60	6798	1.56	1055.9	0.072	0.436	0.212	584.279	1	0	E
188	65	13315	0.89	1690.8	0.445	0.093	0.220	629.251	0	0	E
189	35	1598	1.08	1501.9	0.108	0.288	0.435	616.407	1	0	E
190	35	2610	0.91	1344.1	0.377	0.151	0.069	641.906	0	0	E
191	35	1030	1.19	1536.5	0.082	0.366	0.366	646.064	1	0	E
192	35	973	1.62	1536.3	0.080	0.497	0.190	636.422	1	0	E
193	35	29059	1.05	1222	0.513	0.024	0.042	647.810	1	1	E
194	45	19644	0.73	1727.2	0.370	0.052	0.436	629.273	0	1	E
195	55	10904	1.52	1803	0.009	0.755	0.000	690.477	1	0	E
196	65	39000	0.40	1177.9	0.256	0.015	0.547	619.713	0	0	E
197	65	9477	0.80	1207.7	0.260	0.106	0.443	639.832	1	0	E
198	45	14635	0.54	1863.5	0.448	0.000	0.356	631.158	0	1	E
199	55	7121	1.91	1507.6	0.094	0.512	0.017	756.436	1	0	E
200	45	5338	0.69	1540	0.078	0.037	0.823	612.093	1	0	E
201	65	12450	0.83	1192.4	0.127	0.049	0.730	637.585	1	0	E
202	65	39000	0.51	1438.2	0.285	0.062	0.449	642.497	0	1	E
203	65	9660	0.85	1229.9	0.389	0.071	0.276	636.610	1	0	E
204	55	6389	1.97	1055.9	0.055	0.482	0.190	638.126	1	0	E
205	55	6178	1.91	1053.7	0.058	0.567	0.021	647.176	1	0	E
206	45	6715	1.77	1041	0.133	0.390	0.245	599.119	0	1	E
207	45	10210	0.78	1968.5	0.378	0.042	0.346	624.438	0	1	E
208	45	5904	1.13	1041	0.247	0.243	0.292	597.514	0	1	E

209	55	10393	2.65	1123.8	0.001	0.790	0.007	727.999	1	0	E
210	65	11384	0.74	1742.3	0.449	0.079	0.222	630.471	0	0	E
211	55	6006	1.80	1053.8	0.049	0.593	0.027	662.895	1	0	E
212	65	13960	0.83	1194.5	0.107	0.052	0.755	637.547	1	0	E
213	55	10983	1.55	1809.6	0.008	0.758	0.000	690.596	1	0	E
214	55	14142	1.36	1797.5	0.027	0.698	0.024	697.772	1	0	E
215	45	6178	1.39	1041	0.207	0.294	0.262	599.144	0	1	E
216	65	10281	0.84	1343.6	0.498	0.071	0.116	636.235	1	0	E
217	45	18513	0.65	1786.3	0.328	0.032	0.507	630.789	0	1	E
218	45	16592	0.61	1168.8	0.550	0.000	0.198	625.480	1	1	E
219	65	36410	0.78	1428.3	0.377	0.242	0.139	642.029	0	1	E
220	45	24257	1.28	1311	0.351	0.234	0.195	628.384	1	1	E
221	45	14000	0.80	1874.8	0.372	0.008	0.380	626.750	0	1	E
222	45	7099	1.44	1641.4	0.047	0.326	0.366	607.627	1	1	E
223	45	22944	0.75	1311	0.624	0.009	0.089	631.557	1	1	E
224	35	1153	1.35	1535.5	0.243	0.393	0.082	637.914	1	0	E
225	45	5300	2.58	1338	0.161	0.577	0.024	558.122	1	0	E
226	55	15000	1.71	1805.2	0.000	0.795	0.000	698.812	1	0	E
227	55	6472	1.62	1477.5	0.070	0.610	0.008	698.793	1	0	E
228	45	11358	0.54	1997.8	0.216	0.003	0.616	620.274	0	1	E
229	35	1050	1.75	1536.1	0.101	0.502	0.131	629.456	1	0	E
230	55	15000	1.70	1789	0.018	0.726	0.021	713.666	1	0	E
231	65	27875	0.82	1310.4	0.574	0.135	0.031	630.598	1	1	E
232	65	13304	0.86	1678.4	0.564	0.054	0.111	633.590	0	0	E
233	45	3578	1.95	1540	0.050	0.638	0.045	600.507	1	0	E
234	45	17075	0.61	1883.2	0.314	0.008	0.525	631.762	0	1	E
235	45	3649	0.83	1644.2	0.248	0.072	0.438	614.818	0	1	E
236	55	10464	1.44	1808.2	0.009	0.753	0.000	687.544	1	0	E
237	65	25078	1.35	1305.2	0.205	0.233	0.176	626.092	1	1	E
238	45	3665	0.82	1645.9	0.255	0.062	0.437	614.625	0	1	E
239	65	35952	0.48	1097.9	0.194	0.129	0.504	627.433	0	1	E
240	35	17892	0.80	1326.4	0.502	0.021	0.078	636.398	1	1	E
241	35	1967	1.41	1472.8	0.274	0.306	0.046	628.306	1	0	E
242	55	6194	1.97	1055.6	0.052	0.489	0.170	637.965	1	0	E
243	60	8041	1.98	1054.5	0.078	0.456	0.217	590.637	1	0	E
244	65	27578	1.07	1317.9	0.338	0.239	0.040	626.843	1	1	E
245	65	22914	1.37	1279.1	0.185	0.197	0.235	624.889	1	1	E
246	55	12322	1.52	1665.3	0.074	0.454	0.236	642.402	1	0	E
247	55	14500	2.38	1618	0.000	0.759	0.006	735.750	1	0	E
248	65	27689	0.79	1310.3	0.594	0.119	0.034	631.003	1	1	E
249	55	15000	2.02	1734.5	0.011	0.743	0.008	726.945	1	0	E
250	45	5103	1.53	1467.8	0.305	0.323	0.048	609.060	0	0	E
251	55	6295	1.88	1450.7	0.097	0.511	0.021	745.192	1	0	E

252	55	6887	1.89	1056.9	0.055	0.450	0.250	638.182	1	0	E
253	45	19512	0.73	1772.5	0.359	0.053	0.450	629.333	0	1	E
254	45	4025	0.86	1642	0.178	0.121	0.481	614.767	0	1	E
255	45	9758	1.18	1642	0.048	0.251	0.569	608.614	0	1	E
256	45	21092	0.72	1676.1	0.391	0.052	0.393	628.571	0	1	E
257	65	12238	1.24	1538.3	0.118	0.286	0.394	641.723	1	0	E
258	55	7960	2.01	1056.1	0.044	0.396	0.369	630.368	1	0	E
259	65	12205	0.67	1327.8	0.141	0.065	0.667	644.212	1	0	E
260	55	8142	1.56	1490.4	0.101	0.510	0.050	674.023	1	0	E
261	45	24424	0.86	1311	0.585	0.080	0.034	631.669	1	1	E
262	55	8176	2.01	1056.8	0.047	0.398	0.368	628.526	1	0	E
263	45	2766	1.06	1563.1	0.077	0.508	0.174	606.699	1	0	E
264	55	7014	1.93	1056.1	0.055	0.467	0.220	638.346	1	0	E
265	45	3095	1.53	1550.3	0.003	0.743	0.000	587.563	1	0	E
266	45	15452	0.62	1226.5	0.468	0.000	0.296	625.000	0	1	E
267	35	1053	1.07	1535.9	0.099	0.487	0.171	644.095	1	0	E
268	55	11753	1.55	1643.5	0.073	0.468	0.200	640.279	1	0	E
269	45	6983	1.80	1601.2	0.150	0.529	0.027	612.483	0	0	E
270	65	11206	0.69	1700.7	0.449	0.060	0.213	631.239	0	0	E
271	45	18398	0.68	1878.1	0.309	0.040	0.504	630.681	0	1	E
272	45	26135	0.91	1311	0.535	0.079	0.124	630.342	1	1	E
273	55	5971	1.80	1053.8	0.050	0.592	0.027	662.637	1	0	E
274	45	7411	1.37	1641.8	0.050	0.294	0.413	607.133	1	1	E
275	60	7733	1.58	1055.7	0.032	0.559	0.178	587.996	1	0	E
276	35	3947	0.66	1540	0.201	0.119	0.503	612.904	1	0	E
277	45	10000	2.00	1642	0.026	0.648	0.095	614.165	0	0	E
278	45	1700	0.80	1527.7	0.133	0.080	0.598	616.421	1	0	E
279	45	11435	0.79	1969.2	0.378	0.040	0.347	624.666	0	1	E
280	60	8165	1.66	1055.5	0.036	0.575	0.160	589.824	1	0	E
281	60	7995	2.00	1054.2	0.086	0.488	0.188	589.664	1	0	E
282	55	9763	2.62	1112.1	0.002	0.786	0.007	729.377	1	0	E
283	65	16000	0.71	1198.6	0.050	0.086	0.819	643.374	1	0	E
284	55	12402	1.12	1794.5	0.022	0.709	0.011	686.986	1	0	E
285	55	8603	1.77	1621.4	0.089	0.511	0.076	648.305	1	0	E
286	45	13540	0.56	1953.7	0.469	0.004	0.328	630.006	0	1	E
287	65	33437	0.81	1379	0.545	0.074	0.012	650.986	1	1	E
288	45	25897	0.87	1311	0.558	0.066	0.105	630.879	1	1	E
289	65	39000	0.41	1198.4	0.277	0.013	0.523	621.363	0	0	E
290	65	12209	0.75	1320.4	0.126	0.097	0.641	643.079	1	0	E
291	35	31287	1.02	1163.8	0.513	0.007	0.026	646.121	1	1	E
292	65	23242	1.37	1284.6	0.189	0.206	0.224	625.173	1	1	E
293	55	5954	1.79	1054.1	0.051	0.591	0.028	662.400	1	0	E
294	55	6701	1.90	1512.7	0.102	0.501	0.018	755.294	1	0	E

295	65	39000	0.52	1438.1	0.252	0.073	0.483	642.003	0	1	E
296	35	17909	1.05	1209.7	0.413	0.136	0.070	637.605	1	1	E
297	65	14574	0.66	1700.6	0.516	0.012	0.075	634.187	0	0	E
298	55	6427	1.62	1489.9	0.071	0.612	0.008	700.346	1	0	E
1	55	15000	1.94	1771.7	0.015	0.742	0.007	728.675	1	0	F
2	45	15240	0.63	1318	0.405	0.000	0.372	624.842	0	1	F
3	35	19112	1.12	1210.1	0.561	0.084	0.036	644.129	1	1	F
4	65	26200	1.47	1182.2	0.254	0.181	0.233	620.391	1	1	F
5	65	38103	0.55	1126.4	0.140	0.100	0.649	630.610	0	1	F
6	65	10629	0.80	1568.9	0.639	0.026	0.027	638.720	1	0	F
7	45	8966	1.92	1641.2	0.066	0.625	0.066	614.131	0	0	F
8	45	5887	1.12	1115.7	0.192	0.344	0.235	610.663	0	1	F
9	35	1570	1.09	1499.7	0.104	0.287	0.436	616.364	1	0	F
10	55	7790	1.55	1457.8	0.104	0.497	0.060	672.030	1	0	F
11	35	22193	1.06	1320.2	0.317	0.132	0.155	636.650	1	1	F
12	65	39000	0.40	1140.5	0.242	0.013	0.572	619.974	0	0	F
13	45	4159	0.86	1642	0.169	0.123	0.498	614.786	0	1	F
14	65	9626	0.85	1253.7	0.465	0.073	0.183	636.494	1	0	F
15	65	39000	0.41	1179	0.263	0.013	0.538	620.827	0	0	F
16	55	15000	1.79	1788.3	0.017	0.730	0.017	718.774	1	0	F
17	60	10289	2.25	1054.4	0.049	0.346	0.468	605.355	1	0	F
18	35	2172	1.38	1451.8	0.246	0.347	0.039	628.761	1	0	F
19	65	12445	1.39	1586.8	0.093	0.364	0.323	641.272	1	0	F
20	35	1499	1.50	1530.2	0.232	0.381	0.085	632.248	1	0	F
21	45	2752	1.12	1566.7	0.062	0.562	0.127	605.242	1	0	F
22	65	39000	0.54	1430.6	0.319	0.101	0.363	642.285	0	1	F
23	35	1700	0.79	1524.2	0.210	0.047	0.541	619.025	1	0	F
24	35	2093	1.17	1379.2	0.305	0.296	0.015	634.438	1	0	F
25	45	25924	0.96	1311	0.503	0.091	0.147	629.579	1	1	F
26	35	21254	1.08	1286.8	0.234	0.198	0.192	636.439	1	1	F
27	65	32977	0.77	1336.3	0.571	0.047	0.003	650.473	1	1	F
28	35	14330	1.12	1195.5	0.529	0.119	0.036	641.443	1	1	F
29	65	33071	0.79	1348	0.583	0.051	0.002	650.178	1	1	F
30	45	5300	2.34	1395.1	0.201	0.492	0.064	553.846	1	0	F
31	65	35962	0.53	1086.6	0.183	0.110	0.568	629.423	0	1	F
32	45	25378	1.25	1311	0.355	0.236	0.189	625.040	1	1	F
33	45	5300	2.60	1272.4	0.121	0.645	0.017	563.268	1	0	F
34	65	26325	0.88	1314.6	0.383	0.190	0.054	628.546	1	1	F
35	45	14621	0.69	1535.7	0.373	0.000	0.407	627.256	0	1	F
36	55	6258	1.98	1056	0.053	0.485	0.181	637.778	1	0	F
37	65	32964	0.76	1197	0.577	0.004	0.004	650.219	1	1	F
38	45	1700	0.57	1529.6	0.169	0.029	0.654	615.390	1	0	F
39	45	1700	0.79	1526.2	0.146	0.060	0.589	616.854	1	0	F

40	45	4864	1.50	1540	0.024	0.722	0.020	587.382	1	0	F
41	55	10898	1.25	1792.6	0.015	0.744	0.000	685.230	1	0	F
42	55	9338	1.64	1638	0.075	0.491	0.117	641.345	1	0	F
43	45	25191	0.89	1311	0.552	0.073	0.105	630.702	1	1	F
44	55	7587	2.05	1056.1	0.011	0.740	0.008	697.491	1	0	F
45	35	2243	1.36	1440.1	0.245	0.352	0.035	629.364	1	0	F
46	45	5254	1.15	1041	0.197	0.247	0.346	602.894	0	1	F
47	60	10617	2.34	1054.7	0.039	0.367	0.457	603.412	1	0	F
48	55	14621	2.31	1641.7	0.000	0.757	0.006	736.006	1	0	F
49	45	25328	1.01	1311	0.478	0.103	0.169	629.103	1	1	F
50	65	9414	0.80	1214.5	0.257	0.099	0.451	640.663	1	0	F
51	45	6758	1.73	1585.1	0.180	0.499	0.028	611.771	0	0	F
52	45	5524	0.80	1849.1	0.282	0.032	0.444	622.656	0	1	F
53	60	8030	1.63	1055.4	0.030	0.577	0.164	589.702	1	0	F
54	45	15090	0.58	1948.5	0.368	0.002	0.447	631.564	0	1	F
55	45	3998	0.63	1540	0.123	0.012	0.773	612.371	1	0	F
56	45	5709	1.67	1642	0.035	0.392	0.227	613.641	0	1	F
57	35	1892	1.53	1495.6	0.207	0.407	0.058	627.613	1	0	F
58	45	4829	0.44	1790.3	0.107	0.000	0.753	615.345	1	1	F
59	45	24769	0.83	1311	0.594	0.078	0.015	631.917	1	1	F
60	65	25282	1.42	1214.3	0.249	0.175	0.235	621.766	1	1	F
61	60	11425	2.53	1055.7	0.024	0.464	0.364	596.689	1	0	F
62	55	6132	1.83	1053.4	0.036	0.634	0.017	671.492	1	0	F
63	65	15006	0.69	1207.5	0.061	0.073	0.813	643.763	1	0	F
64	60	10016	2.19	1054.5	0.052	0.340	0.463	607.281	1	0	F
65	65	26616	1.48	1182.5	0.254	0.183	0.238	619.893	1	1	F
66	55	11499	1.13	1796.1	0.020	0.718	0.006	684.183	1	0	F
67	45	3639	1.95	1540	0.054	0.641	0.044	600.150	1	0	F
68	45	3944	0.49	1683.8	0.106	0.000	0.769	613.784	1	1	F
69	45	5169	1.15	1067.6	0.144	0.352	0.285	615.699	0	1	F
70	35	1058	1.08	1535.8	0.108	0.482	0.162	643.893	1	0	F
71	55	5810	1.76	1054.6	0.058	0.562	0.033	657.159	1	0	F
72	55	8043	1.58	1486.2	0.102	0.476	0.077	657.180	1	0	F
73	65	10240	0.78	1406.8	0.590	0.055	0.046	639.471	1	0	F
74	45	1700	0.69	1529.5	0.163	0.061	0.621	617.114	1	0	F
75	45	19786	0.72	1680.1	0.380	0.046	0.425	629.173	0	1	F
76	65	28223	0.83	1310.7	0.596	0.130	0.023	630.772	1	1	F
77	55	15000	1.68	1794.5	0.000	0.795	0.000	700.626	1	0	F
78	55	8195	1.56	1501	0.102	0.490	0.061	664.297	1	0	F
79	35	1700	0.93	1525.6	0.185	0.193	0.410	620.340	1	0	F
80	55	6596	1.62	1460.8	0.068	0.613	0.008	696.903	1	0	F
81	45	7781	0.80	1927.6	0.356	0.035	0.346	624.058	0	1	F
82	55	15000	1.67	1791.9	0.020	0.721	0.025	712.762	1	0	F

83	45	16597	0.61	1171.5	0.561	0.000	0.188	625.360	1	1	F
84	45	4596	0.65	1540	0.101	0.014	0.807	612.435	1	0	F
85	45	2761	1.13	1567	0.063	0.562	0.126	605.246	1	0	F
86	45	5880	2.03	1642	0.019	0.525	0.070	618.007	0	1	F
87	65	27368	1.54	1171.4	0.269	0.202	0.234	617.500	1	1	F
88	45	2850	1.43	1561.3	0.004	0.726	0.024	595.334	1	0	F
89	60	8198	1.73	1054.6	0.048	0.578	0.136	592.771	1	0	F
90	45	6289	1.14	1041	0.109	0.364	0.346	617.585	0	1	F
91	45	4903	1.37	1362.7	0.316	0.279	0.076	607.596	0	1	F
92	45	3025	1.62	1552.3	0.003	0.749	0.007	584.705	1	0	F
93	45	4206	0.47	1719.8	0.099	0.000	0.780	614.288	1	1	F
94	45	15862	0.60	1956.4	0.329	0.002	0.501	631.801	0	1	F
95	65	10968	0.85	1196.6	0.170	0.054	0.651	638.542	1	0	F
96	45	4265	0.82	1772.2	0.269	0.034	0.466	620.589	0	1	F
97	65	26514	1.38	1311.7	0.210	0.256	0.155	623.286	1	1	F
98	65	35756	0.86	1430.3	0.398	0.227	0.113	642.563	0	1	F
99	35	2384	1.02	1348.2	0.333	0.232	0.028	639.663	1	0	F
100	35	3483	0.75	1541.1	0.174	0.188	0.442	611.898	1	0	F
101	35	2715	0.98	1556.3	0.097	0.426	0.244	607.927	1	0	F
102	45	1700	0.49	1526.3	0.200	0.000	0.638	612.933	1	0	F
103	35	1008	1.60	1536.6	0.070	0.498	0.209	638.938	1	0	F
104	55	15000	2.17	1720.1	0.012	0.753	0.006	739.137	1	0	F
105	65	33920	0.82	1396.3	0.539	0.076	0.018	650.991	1	1	F
106	65	15393	0.66	1737	0.494	0.022	0.052	634.352	0	1	F
107	55	15000	1.71	1800.4	0.000	0.794	0.000	700.238	1	0	F
108	55	11138	2.07	1697.6	0.039	0.662	0.008	756.715	1	0	F
109	35	2625	0.92	1344.2	0.372	0.156	0.068	641.738	0	0	F
110	45	12605	0.65	1986.9	0.335	0.015	0.479	625.806	0	1	F
111	65	12141	0.69	1793.2	0.486	0.017	0.109	633.428	0	0	F
112	55	12833	2.75	1478	0.002	0.769	0.001	745.272	1	0	F
113	45	16551	0.60	1907.4	0.317	0.004	0.519	631.843	0	1	F
114	45	11116	0.52	2014.5	0.193	0.003	0.645	619.370	1	1	F
115	65	35933	0.39	1197	0.309	0.049	0.403	618.103	0	1	F
116	45	5300	2.55	1082.9	0.057	0.610	0.103	587.580	1	0	F
117	45	4810	1.07	1041	0.122	0.266	0.441	608.804	0	1	F
118	65	39000	0.57	1316.7	0.190	0.070	0.603	636.502	0	1	F
119	55	5749	1.63	1488	0.081	0.579	0.018	706.977	1	0	F
120	45	6814	1.82	1041	0.128	0.402	0.235	598.926	0	1	F
121	55	6622	1.91	1054.3	0.019	0.693	0.016	682.324	1	0	F
122	65	14964	0.70	1204.5	0.067	0.074	0.803	643.717	1	0	F
123	65	22731	1.38	1272.8	0.194	0.188	0.230	624.903	1	1	F
124	45	4655	0.87	1642	0.147	0.138	0.511	614.570	0	0	F
125	55	6090	1.90	1053.7	0.058	0.563	0.021	648.710	1	0	F

126	45	4106	0.82	1691.6	0.245	0.050	0.481	616.518	0	1	F
127	65	23438	0.65	1684.7	0.429	0.025	0.135	632.247	0	1	F
128	35	1569	1.43	1532.4	0.074	0.455	0.234	619.390	1	0	F
129	45	3588	1.70	1540	0.047	0.665	0.016	596.532	1	0	F
130	45	12000	0.62	1961	0.302	0.011	0.511	624.104	0	1	F
131	45	17069	0.64	1971.4	0.283	0.015	0.541	631.552	0	1	F
132	55	12095	1.52	1614.2	0.075	0.439	0.243	640.546	1	0	F
133	55	5996	1.64	1512.1	0.076	0.602	0.010	703.811	1	0	F
134	65	33013	0.78	1348.2	0.566	0.055	0.005	650.614	1	1	F
135	35	21719	1.00	1324.1	0.338	0.109	0.163	638.235	1	1	F
136	45	9306	1.17	1642	0.052	0.235	0.581	608.463	0	1	F
137	55	7174	1.97	1054.7	0.049	0.489	0.195	638.961	1	0	F
138	55	15000	1.92	1788.7	0.000	0.793	0.000	716.372	1	0	F
139	65	39000	0.40	1152.5	0.248	0.015	0.559	619.970	0	0	F
140	60	8146	1.91	1054.9	0.056	0.540	0.149	591.206	1	0	F
141	65	39000	0.54	1434.7	0.218	0.070	0.548	640.690	0	1	F
142	35	8189	0.91	1327.1	0.454	0.091	0.070	637.691	1	0	F
143	65	13723	0.69	1787.7	0.500	0.015	0.095	633.696	0	0	F
144	65	14042	0.67	1225.6	0.086	0.051	0.798	644.268	1	0	F
145	65	14949	0.86	1201.1	0.065	0.103	0.767	636.869	1	0	F
146	45	4917	1.30	1294.2	0.309	0.303	0.075	606.460	0	1	F
147	35	28805	1.05	1222.9	0.517	0.024	0.042	647.848	1	1	F
148	65	13391	0.64	1257.8	0.132	0.032	0.733	644.510	1	0	F
149	55	5278	1.75	1484.6	0.100	0.543	0.024	727.953	1	0	F
150	35	5374	0.70	1540	0.081	0.052	0.802	612.213	1	0	F
151	55	12026	1.11	1791.3	0.024	0.710	0.010	684.928	1	0	F
152	55	15000	2.10	1724.5	0.011	0.744	0.008	731.696	1	0	F
153	65	10483	0.85	1204.8	0.192	0.065	0.598	639.637	1	0	F
154	35	7753	0.92	1328.2	0.450	0.096	0.051	638.255	1	0	F
155	35	2607	0.84	1348.3	0.405	0.119	0.092	643.622	0	0	F
156	65	13313	0.88	1706.7	0.532	0.058	0.155	631.882	0	0	F
157	45	3801	0.53	1591.9	0.109	0.007	0.757	612.617	1	0	F
158	45	5300	2.63	1299.5	0.119	0.636	0.014	562.683	1	0	F
159	45	2818	1.43	1561.5	0.004	0.725	0.024	595.193	1	0	F
160	55	14581	2.33	1633	0.000	0.757	0.006	735.757	1	0	F
161	45	5300	1.97	1540	0.179	0.476	0.079	569.276	1	0	F
162	45	3302	1.62	1551.2	0.003	0.753	0.007	583.646	1	0	F
163	45	7131	0.80	1883.8	0.323	0.033	0.384	623.474	0	1	F
164	55	9455	1.62	1685.2	0.074	0.502	0.127	640.643	1	0	F
165	45	25432	1.04	1311	0.464	0.117	0.173	628.694	1	1	F
166	45	24915	0.84	1311	0.588	0.085	0.020	631.821	1	1	F
167	60	7134	2.00	1055.8	0.056	0.410	0.189	579.232	1	0	F
168	65	16000	0.73	1196.5	0.022	0.122	0.816	642.051	1	0	F

169	45	1700	0.49	1526	0.206	0.000	0.622	613.544	1	0	F
170	65	27569	0.77	1310.4	0.620	0.104	0.025	631.286	1	1	F
171	35	1505	1.16	1499.7	0.092	0.288	0.437	616.478	1	0	F
172	45	14000	0.76	1818	0.336	0.004	0.459	628.344	0	1	F
173	55	10743	1.56	1664.2	0.076	0.478	0.178	640.164	1	0	F
174	55	6017	1.77	1055.1	0.049	0.591	0.024	662.512	1	0	F
175	65	16000	0.89	1198.2	0.009	0.128	0.825	634.642	1	0	F
176	45	4649	1.52	1540	0.035	0.708	0.020	589.054	1	0	F
177	65	21841	0.72	1797.2	0.393	0.048	0.136	631.241	0	1	F
178	35	5348	0.70	1540	0.080	0.049	0.805	612.182	1	0	F
179	35	16207	1.12	1211.1	0.555	0.100	0.037	643.562	1	1	F
180	35	3824	0.70	1540	0.192	0.145	0.477	612.279	1	0	F
181	45	5300	1.88	1532.1	0.217	0.413	0.090	560.988	1	0	F
182	45	5897	1.16	1041	0.106	0.364	0.360	618.579	0	1	F
183	55	8544	1.74	1539.5	0.104	0.468	0.086	649.765	1	0	F
184	45	5300	1.78	1491.2	0.241	0.356	0.141	550.220	1	0	F
185	60	11826	2.48	1057.2	0.015	0.555	0.258	590.848	1	0	F
186	55	13139	2.69	1508.5	0.001	0.767	0.000	743.772	1	0	F
187	65	33134	0.78	1354.6	0.558	0.058	0.008	650.833	1	1	F
188	65	16000	0.71	1202.9	0.042	0.092	0.829	643.175	1	0	F
189	65	11055	0.85	1196.7	0.168	0.051	0.659	638.434	1	0	F
190	65	10342	0.79	1388.1	0.539	0.066	0.070	637.827	1	0	F
191	65	33354	0.82	1367.7	0.580	0.061	0.002	650.077	1	1	F
192	55	6967	1.82	1055.5	0.049	0.405	0.317	636.821	1	0	F
193	65	11119	0.85	1190.9	0.157	0.056	0.663	638.048	1	0	F
194	45	1700	0.74	1530.4	0.142	0.092	0.616	617.017	1	0	F
195	65	12997	0.65	1259.8	0.137	0.039	0.710	643.872	1	0	F
196	55	10071	2.71	1131.8	0.001	0.786	0.007	732.897	1	0	F
197	45	1687	0.47	1526.2	0.212	0.000	0.639	612.012	1	0	F
198	35	2090	1.19	1382.1	0.302	0.303	0.015	634.095	1	0	F
199	55	7890	1.56	1524.9	0.107	0.492	0.054	663.031	1	0	F
200	45	5300	2.50	1074.1	0.055	0.600	0.121	588.488	1	0	F
201	55	6079	1.78	1054.7	0.045	0.611	0.020	665.600	1	0	F
202	35	2997	0.87	1549.1	0.135	0.302	0.345	609.835	1	0	F
203	65	33271	0.72	1121.8	0.617	0.005	0.010	647.694	1	1	F
204	45	1700	0.79	1524.9	0.175	0.047	0.569	617.650	1	0	F
205	55	6350	1.86	1053.3	0.030	0.667	0.017	676.604	1	0	F
206	65	15446	0.69	1796.2	0.488	0.029	0.052	634.051	0	1	F
207	45	12459	0.65	1991.1	0.327	0.017	0.487	625.260	0	1	F
208	35	1092	1.07	1536.1	0.073	0.387	0.357	648.044	1	0	F
209	35	6108	0.90	1335.4	0.448	0.091	0.040	641.419	1	0	F
210	45	5766	1.59	1516.4	0.281	0.369	0.034	609.461	0	0	F
211	65	16000	0.80	1196.2	0.010	0.150	0.797	637.863	1	0	F

212	65	27496	0.80	1310.4	0.504	0.154	0.045	630.110	1	1	F
213	65	24644	0.69	1638.8	0.413	0.049	0.277	630.313	0	1	F
214	55	7958	1.55	1507.2	0.108	0.482	0.064	660.359	1	0	F
215	45	5400	1.40	1540	0.009	0.753	0.011	584.046	1	0	F
216	45	3656	0.55	1579.9	0.118	0.009	0.744	612.540	1	0	F
217	55	15000	2.06	1750.7	0.015	0.749	0.007	734.513	1	0	F
218	65	33002	0.77	1346.1	0.557	0.055	0.010	651.091	1	1	F
219	45	8249	1.91	1637.1	0.078	0.627	0.049	613.947	0	0	F
220	35	22970	1.12	1204.5	0.553	0.050	0.038	645.401	1	1	F
221	45	24125	1.28	1311	0.354	0.230	0.193	629.165	1	1	F
222	55	5231	1.94	1054.6	0.081	0.454	0.116	635.797	1	0	F
223	35	1025	1.06	1536.5	0.094	0.412	0.269	647.212	1	0	F
224	45	6152	1.32	1041	0.225	0.267	0.276	598.458	0	1	F
225	45	1700	0.84	1528.3	0.130	0.091	0.588	616.286	1	0	F
226	45	14915	0.64	1441.8	0.421	0.000	0.349	625.747	0	1	F
227	65	9217	0.81	1210.6	0.308	0.098	0.370	637.910	1	0	F
228	65	39857	0.83	1424.3	0.518	0.167	0.006	649.001	0	1	F
229	55	5433	2.02	1053	0.066	0.531	0.045	637.769	1	0	F
230	35	22647	1.06	1325.3	0.331	0.132	0.125	636.692	1	1	F
231	45	3357	1.78	1540	0.045	0.663	0.020	597.939	1	0	F
232	35	2625	0.84	1349.4	0.404	0.121	0.094	643.767	0	0	F
233	55	11455	1.58	1807.8	0.007	0.764	0.000	692.211	1	0	F
234	45	13659	0.81	1900.5	0.375	0.016	0.364	625.882	0	1	F
235	35	22784	0.88	1333.1	0.430	0.068	0.043	635.507	1	1	F
236	60	7141	1.73	1055.9	0.067	0.476	0.187	585.829	1	0	F
237	35	6321	0.91	1331.5	0.448	0.104	0.033	640.043	1	0	F
238	55	5628	1.66	1508.2	0.084	0.567	0.014	715.013	1	0	F
239	45	4127	0.83	1684.9	0.253	0.053	0.466	616.145	0	1	F
240	60	8347	2.03	1057.1	0.056	0.517	0.181	585.479	1	0	F
241	65	11351	0.73	1741.3	0.447	0.074	0.224	630.563	0	0	F
242	55	7638	1.97	1593.3	0.083	0.552	0.017	762.760	1	0	F
243	35	1826	1.57	1502.4	0.191	0.442	0.061	627.787	1	0	F
244	65	36765	0.91	1428.4	0.452	0.223	0.016	644.742	0	1	F
245	45	14000	0.76	1816.9	0.339	0.004	0.452	628.305	0	1	F
246	45	12000	0.64	1998.5	0.281	0.018	0.528	623.561	0	1	F
247	65	11674	0.81	1593	0.470	0.075	0.221	630.706	0	0	F
248	45	3771	0.83	1642	0.214	0.093	0.456	614.522	0	1	F
249	45	4085	0.84	1692.9	0.252	0.063	0.458	617.034	0	1	F
250	35	2391	1.37	1426.3	0.225	0.407	0.022	629.679	1	0	F
251	55	10542	1.56	1673.1	0.078	0.480	0.170	640.085	1	0	F
252	45	5256	0.87	1642	0.131	0.130	0.548	614.743	0	0	F
253	45	5300	2.72	1186.5	0.091	0.654	0.021	574.485	1	0	F
254	45	12000	0.63	1995.2	0.263	0.017	0.550	622.907	0	1	F

255	35	1067	1.08	1536.3	0.078	0.368	0.370	648.161	1	0	F
256	45	3745	0.53	1613.2	0.113	0.006	0.753	612.828	1	0	F
257	45	14000	0.78	1848.7	0.360	0.007	0.425	627.635	0	1	F
258	65	39000	0.55	1390.9	0.198	0.061	0.608	639.128	0	1	F
259	45	20420	0.68	1305.8	0.647	0.000	0.077	631.304	1	1	F
260	45	4943	1.28	1256.4	0.309	0.305	0.084	606.396	0	1	F
261	35	1089	1.07	1536.1	0.071	0.389	0.358	648.031	1	0	F
262	45	3862	1.99	1540	0.063	0.635	0.039	600.093	1	0	F
263	55	9865	2.08	1684	0.046	0.641	0.014	761.368	1	0	F
264	45	7505	0.80	1940.1	0.357	0.035	0.349	624.087	0	1	F
265	45	8932	1.10	1642	0.063	0.178	0.626	608.608	0	0	F
266	45	19828	0.73	1691.8	0.382	0.048	0.425	629.070	0	1	F
267	65	26119	1.36	1311.6	0.217	0.241	0.156	624.490	1	1	F
268	65	14180	0.69	1794.6	0.501	0.017	0.085	633.796	0	0	F
269	45	14157	0.74	1668.2	0.321	0.000	0.492	629.310	0	1	F
270	35	1700	0.81	1524.6	0.205	0.052	0.546	618.910	1	0	F
271	45	5300	2.03	1540	0.075	0.647	0.014	594.939	1	0	F
272	35	2724	0.99	1557.8	0.092	0.442	0.234	607.730	1	0	F
273	35	1048	1.04	1535.9	0.091	0.485	0.187	644.668	1	0	F
274	65	16000	0.87	1211	0.017	0.108	0.839	635.959	1	0	F
275	55	9133	2.02	1627.2	0.059	0.602	0.014	763.304	1	0	F
276	65	27935	0.54	1388.1	0.358	0.015	0.290	630.414	0	1	F
277	65	11199	0.67	1708.4	0.479	0.043	0.145	632.095	0	0	F
278	45	5300	2.68	1208.5	0.107	0.661	0.010	571.113	1	0	F
279	45	4450	0.44	1562	0.173	0.000	0.668	612.536	1	1	F
280	65	15646	0.88	1199.6	0.036	0.123	0.788	635.772	1	0	F
281	55	11201	1.20	1784.6	0.017	0.734	0.004	684.175	1	0	F
282	35	2030	1.42	1470.3	0.251	0.340	0.045	628.168	1	0	F
283	35	975	1.66	1536.6	0.077	0.513	0.176	637.728	1	0	F
284	60	8123	1.66	1054.9	0.031	0.585	0.157	591.449	1	0	F
285	55	5469	1.98	1053.3	0.056	0.502	0.109	638.691	1	0	F
286	55	8708	1.77	1580.2	0.099	0.487	0.082	648.111	1	0	F
287	45	4067	0.83	1694.7	0.246	0.055	0.475	616.883	0	1	F
288	35	5314	0.72	1540	0.088	0.068	0.773	612.045	1	0	F
289	35	1588	1.52	1522.8	0.214	0.400	0.079	630.145	1	0	F
290	65	14293	0.68	1221	0.080	0.056	0.806	644.167	1	0	F
291	45	18412	0.65	1796.1	0.318	0.033	0.513	630.872	0	1	F
292	35	23096	1.06	1328.9	0.348	0.137	0.088	636.451	1	1	F
293	65	25972	1.28	1318.6	0.259	0.223	0.130	626.680	1	1	F
294	45	5300	1.99	1540	0.052	0.673	0.022	601.216	1	0	F
295	45	15875	0.56	1229.8	0.750	0.000	0.034	623.673	1	1	F
296	45	14000	0.76	1770	0.307	0.000	0.504	629.213	0	1	F
297	55	5259	1.99	1054.2	0.082	0.491	0.069	635.583	1	0	F

298	45	4787	0.40	1656.5	0.112	0.000	0.751	613.885	1	1	F
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