

1	An act to start integrating solar panel walkways, parking lots, and roads into Kentucky's infrastructure.
2	
3	Be it enacted by the Youth Assembly of the Commonwealth of Kentucky
4	
5	
6	Section 1: Kentucky receives an average of 12.7 inches of snowfall each year. Generally, we use road salt In
7	order to clear the snow off the roads, which helps melt the ice and snow off the road. The salt however ruins
8 9	the infrastructure of our roads in Kentucky as well as corroding bridges and parking lots.
10	Section 2: We plan to implement these solar roadways into our roadways system as a great alternative to
11	road salt. These roadways use the energy they collect from the sun to heat up the surface and melt what ice
12	or snow is on them. As well as saving money on the road salt, we also save money on the paint used to
13	paint the road lines. The solar roads use LED lights to create the lines on the roads.
14	
15	Section 3: According to Scott Brusaw, an electrical engineer, these roadways save money because there is
16	little to no maintenance, plus over time it begins to pay for itself. For each 230 watt solar panel we get
17	about 21,827 billion kilowatt-hours of electricity. On overcast days solar roadways gets more energy than
18	standing up solar panels. These panels last 20 years. The cost of the solar panels roadways is \$70 per
19	square foot.
20	
21	Section 4: We plan to integrate these solar panels on roads that are notoriously dangerous during the winter
22	months. All around Kentucky, certain areas of roads have more wrecks than others. For example, I-75, I-64,
23	Bluegrass Parkway, New Circle Road, Man O' War Boulevard, and Bert T. Combs Mountain Parkway are all
24	roadways that endure dangerous driving conditions. In order to effectively place these panels, we will look at
25	where most number of ice related accidents occur. Then, we will begin the process by integrating solar
26	roadways into the top 3% of roads sections with the most ice related accidents.
27	
28	Section 5: This bill will go into effect in July 2016.