

BREXIT'S LAND BORDER

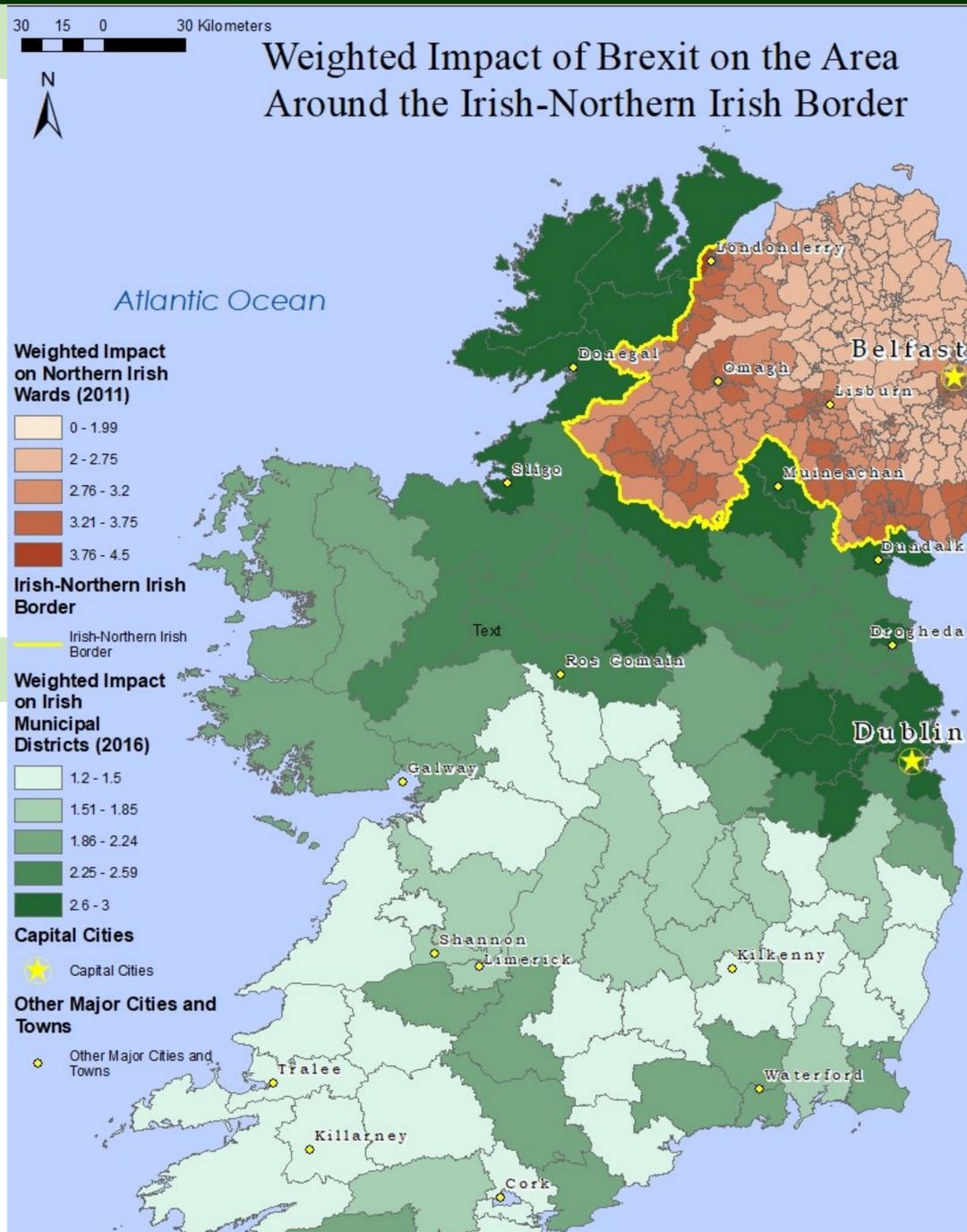
Potential Impact of a Customs Border on Northern Ireland and the Republic of Ireland

Background

Northern Ireland's open border with the Republic of Ireland has become one of the most contentious parts of the past two-years of Brexit negotiations. The central issue at hand is whether the U.K. withdraws from the E.U. customs union as part of Brexit – a move that would necessitate either an exception for Northern Ireland or hard border infrastructure between it and the Republic of Ireland. The British Parliament has rejected the exception option twice. Furthermore, a withdrawal from the customs union is slated to happen by default if no agreement can be reached by the Brexit deadline. Brexit will also result in a rescindment of current freedom of movement agreements, which allow citizens of E.U. member states to easily live and work within other member states. Given these two factors, how would infrastructure – whether fencing or customs checkpoints – and the associated rescindment of current migration laws, affect populations on either side of the Irish-Northern Irish border.

Methodology

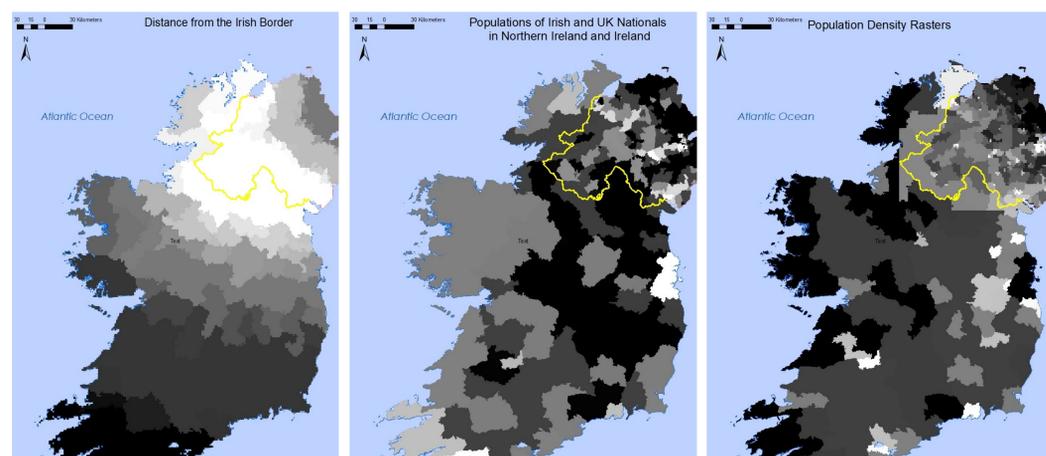
Three factors were used to determine how much wards and Municipal Districts would be impacted by Brexit: 1 Distance from the border itself, 2 - Number of UK nationals living in Ireland and number of Irish nationals living in Northern Ireland, and 3 - Population density. Each of these factors was rated between 1 and 5, with higher scores equating to larger impact. A Weighted Impact was then calculated using the following equation: $Impact = (Distance * .5) + (Nationals * .25) + (Population-Density * .25)$ Distance was weighted more highly due to several factors. First proximity to the border would mean a higher likelihood of being affected by traffic slowdowns at border checkpoints. Second, places proximal to the border would be more likely to see economic benefit from inter-irish travel. Finally those places adjacent to the border would have to deal with the construction process of building customs checkpoints. Population and Numbers of UK nationals and EU nationals were found in the Censuses for 2016 in Ireland and 2011 in Northern Ireland. These were joined with polygons of level 4 administrative geography. A new field was generated to display pop-density. In it the total number of people were divided by the area of the polygons. These were then converted into raster files. The



Kaitlyn N. Fitzgerald — P207: GIS for International Applications — May 7th, 2019 — Spring 2019. GIS Data Sources (GADM, Northern Ireland Regional Statistics Agency, Irish Central Statistics Office, ESRI, OSNI). Projected Coordinate System: IRENET95 Irish Transverse Mercator. Image Citations: Fletcher Logo— Fletcher School of Law and Diplomacy



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Results

Given that proximity was weighted highly, most of the border areas ranked highly in the evaluation. The highest ranked Districts and Wards contain the cities of Dublin, Drogheda, Dundalk, Muineachan, Donegal, and Sligo in Ireland and Belfast, Londonderry, Omagh and Belfast in Northern Ireland. The non border, non-capital areas that stand out in Northern Ireland happen to have higher numbers of Irish nationals. Further analysis should seek to determine which existing border crossings experience the most average traffic. This would lend a clearer understanding of which border areas will see the highest negative impact

Major Cities and Towns Most Likely to Be Affected

Ireland		Northern Ireland	
Sligo	3	Londonderry	4.5
Donegal	3	Omagh	3.5
Muineachan	3	Belfast	3.5
Dundalk	3		
Drogheda	3		
Dublin	3		