

### Appendix 3: Governmental activities information sources methods and analyses.

As the paper has indicated, the city of La Pine and the Greater Crescent communities of Oregon are socio-economically and environmentally linked to the federal and state public forests that surround them. Therefore public policy and actions by the federal government and state legislators and the agencies that administer the lands have an effect on these communities especially when it comes to the funding and management of the forests to address wildfires and future management and planning for climate change. As we have seen in the paper and in Appendix 2, the expressed social capital measure of governmental trust has an effect on how residents in these communities perceive climate change. It does not however seem to impact the concerns the residents have on localized risks. This can be problematic in the sense that global climate change is not what these communities need to adapt to as much as the local manifestations. Bridging the links between the global scale and localized scale of climate change and addressing those local risks in the public forests may take local governmental agencies and collaborative efforts with the residents in the communities to address.

In order to gain insight into the residents means of collecting information on governmental activities which could include but is not limited to the direct and indirect policies and actions on addressing wildfire and regional climate change in local forests we asked “How do you obtain information on governmental activities” and to select three. This question was followed by a roster of 14 possible sources: Personal/social relations, community bulletin board, local markets, membership groups/associations, business/ work associates, political associations, community leaders, governmental employees/agents, non-governmental organizations, local newspaper, state or national newspaper, radio, television, and internet. The interest in relation to this study is to find the most utilized source types and see if a correlation can be made to governmental trust, collective action and community solidarity, as we are now aware that governmental trust has a positive relationship on climate change perspectives and residents with higher perceptions of collective action for the community have a more concerns for local risks.

The data was collected from the respondents and incorporated into UCINET in community case files for analysis. To identify the most common sources used by the residents of La Pine and residents of Greater Crescent two-mode normalized degree centrality analysis was run for each community. The scores from UCINET are presented in Table A3.1 for both communities. The three highest centrality scores and the ones most frequently used in La Pine are television, local newspaper and internet (centrality scores 0.494, 0.468 and 0.429 respectively). The three highest scores for Greater Crescent respondents were also television and the local newspaper with centrality scores of 0.431 followed by personal/social relationships with a score of 0.353. This does show some consistency with the social network analysis and social capital literature, larger communities are more likely to maintain impersonal and mass media links to information sources while smaller communities are more likely to maintain a degree of personal social ties as a source of information (Richardson et al 1979)

Table A3.1: Normalized two-mode degree centrality analysis of residents in both Greater Crescent and La Pine on the sources they use for governmental activities information.

Media Agent:	Greater Crescent	La Pine
Personal/Social Relations	0.353	0.286
Community Bulletin Boards	0.275	0.091
Local Markets	0.059	0.065
Membership Groups/Association	0.108	0.143
Business/Work Associates	0.118	0.169
Political Associations	0.078	0.169
Community Leaders	0.127	0.182
Governmental Employee/Agent	0.157	0.104

Non-Governmental Organization	0.020	0.078
Local Newspaper	0.431	0.468
State/National Newspaper	0.069	0.065
Radio	0.284	0.195
Television	0.431	0.494
Internet	0.333	0.429

Knowing which information sources the residents of the communities' use most often allows agencies and institutions to use specific media sources and have some degree of confidence on if and how information is likely to transfer from resident to resident. The interest here is in whether or not these sources of information have an impact on expressive outcomes of social capital such as governmental trust, collective action and solidarity in the communities. To assess any relationship information sources have to social capital measures of interest in this study we used the respondents self-reporting on the roster and their index scores for governmental trust and collective action. This analysis was run on split data files for each community in SPSS and La Pines sample had n= 72 while Greater Crescent had sample n= 93. Disparity in samples comes from respondent's selective question response rate and from the removal of cases in which respondents did not include 3 sources or responded with more than 3 selected sources.

For the results of the analysis on bivariate correlations between governmental information sources and the two expressive social capital variables governmental trust and collective action, the results for both communities were not as expected. For La Pine (Table A3.2), only two information sources have a statistically significant correlation to social capital variables and both are correlated to governmental trust. The most noteworthy is the internet, which is one of the top three information sources used in the La Pine. The internet has a negative correlation to governmental trust ( $r = -0.30$ ) and is statistically significant at  $p \leq 0.05$ . The second information source with a statistically significant correlation ( $p \leq 0.05$ ) is the radio. The radio is not one of the top three information sources used in La Pine but it is noteworthy that the radio shares with the internet a negative correlation to governmental trust ( $r = -0.28$ ).

Table A3.2: Bivariate Pearson Correlations for sources used to acquire governmental information and the relationship these sources have on governmental trust and collaborative action for La Pine (N=72).

	Governmental Trust	Community's Collective Action
Personal/Social Relations	0.00	0.07
Community Bulletin Boards	0.09	0.02
Local Markets	0.16	0.01
Membership Groups/Association	0.05	0.08
Business/Work Associates	0.01	-0.01
Political Associations	-0.09	-0.20
Community Leaders	0.23	-0.13
Governmental Employee/Agent	0.08	-0.08
Non-Governmental Organization	0.02	0.15
Local Newspaper	-0.07	-0.19
State/National Newspaper <sup>2</sup>	0.04	.00
Radio	-0.28*	-0.05
Television <sup>1</sup>	-0.07	0.03
Internet <sup>3</sup>	-0.30*	-0.07

Note: Superscript values on information sources denote the three most central sources; \*  $p \leq 0.05$

For the Bivariate Pearson Correlations between governmental information sources and governmental trust and collective action in Greater Crescent, the results show nothing of significance for this study. The results (see Table A3.3) show that only one information source has any statistically significant correlation to the social capital variables: non-governmental organizations. Non-governmental organizations are not a central information source to Greater Crescent but they do have a negative correlation to both governmental trust and to collective action,  $r = -0.24$  and  $r = -0.22$  respectively.

Table A3.3: Bivariate Pearson Correlations for sources used to acquire governmental information and the relationship these sources have on governmental trust and collaborative action for Greater Crescent (N=93).

	Governmental Trust	Community's Collective Action
Personal and Social Relations <sup>3</sup>	-0.15	-0.15
Community Bulletin Boards	-0.11	-0.17
Local Markets	-0.02	0.19
Membership Groups and Association	0.13	0.01
Business and Work Associates	-0.00	0.03
Political Associations	0.01	-0.04
Community Leaders	0.01	0.05
Governmental Employee/Agent	0.13	-0.01
Non-Governmental Organization	-0.24*	-0.22*
Local Newspaper	0.03	-0.09
State/National Newspaper <sup>1 and 2</sup>	0.15	-0.10
Radio	0.03	0.01
Television <sup>1 and 2</sup>	0.09	0.05
Internet	0.00	0.04

Note: Superscript values on information sources denote the three most central sources; \*  $p \leq 0.05$

In the research framework, the third research question asked “*Is there a correlation between a community's information sources on governmental activities (their instrumental social capital) and the measures of solidarity, collective action potential, and governmental trust (their expressive social capital)?*”. The hypotheses suggested that there would be correlations between information sources and expressive social capital measures and that mass media sources would maintain negative correlations to government. The results show that only three information sources correlate to the social capital measures and all of them, mass media (radio and internet) as well as institutional (non-governmental organizations) correlate to governmental trust negatively.