

CONTENTS

Chapter 1: Introduction	1-2
1.1 What is Geographic Information System	1
1.2 GIS Architecture	1
Chapter 2: Basic Terminology	3-6
2.1 Geographic Data	3
2.2 What is shapefile?	4
2.3 What do we mean by Projection?	4
2.4 Coordinate reference System	5
2.5 Spatial database	6
Chapter 3: Basic Services for GIS	7-10
3.1 OGC Web Service	7
3.2 Using OGC Web Service	
3.2.1 Web Map Service	7
3.2.2 Web Feature Service	9
3.2.3 Web Coverage Service	10
Chapter 4: GIS Implementation	11-26
4.1 Overview of GIS Implementation Process	11
4.2 Planning GIS	11
4.3 Analyzing requirements	11
4.4 Designing the GIS	12
4.5 Development of GIS	
4.5.1 Loading Spatial Data	12
4.5.2 Publishing a Shapefile	14
4.5.3 Creating a Map	18
4.5.3 Developing OGC Compliant Web Applications.....	19
Chapter 5: Conclusion	27
Chapter 6: Appendixes	28-30
A. Snapshot of NESDI	28
B. Bibliography	30