PolicyInsight Knowledge Graph Schema Design

Policy Knowledge Graph Entity types:

1. Policy

2. PolicyMaker

3. PolicyArea

4. PolicyStakeholder

* Policy entity fields:

Policy(policy\_id STRING, policy\_title STRING, policy\_description STRING, policy\_state STRING, policy\_legislation\_type STRING, policy\_content STRING, policy\_rules STRING, policy\_summary STRING, policy\_obligations STRING, policy\_risks STRING, policy\_issue\_date DATE, policy\_approved\_date DATE, policy\_effective\_date DATE)

where policy\_state is {

draft,

proposed,

effective,

amended\_and\_effective,

amended,

repealed,

archived

}

and policy\_legislation\_type is {

bills,

statutes,

regulations,

ordinances,

directives,

resolutions

}

* PolicyMaker entity fields:

PolicyMaker(policy\_maker\_id STRING, policy\_maker\_name STRING, policy\_maker\_description STRING, policy\_maker\_type STRING, policy\_jurisdiction STRING)

where policy\_maker\_type is {

international,

continental,

multinational,

national,

state/provincial,

municipal,

regional

}

* PolicyArea entity fields:

PolicyArea(policy\_area\_id STRING, policy\_area\_name STRING, policy\_area\_description STRING)

where policy\_area\_name is {

Healthcare,

Environmental,

Energy,

Climate Change,

Education,

Economic,

Fiscal,

Monetary,

Trade,

Immigration,

Social,

Welfare,

Housing,

Urban Development,

Transportation,

Infrastructure,

Technology,

Innovation,

Cybersecurity,

Privacy,

Telecommunications Policy

Agriculture Policy

Food Policy

Water Policy

Natural Resources Policy

Forestry Policy

Fisheries Policy

Wildlife Conservation Policy

Land Use Policy

Conservation Policy

Biodiversity Policy

Waste Management Policy

Recycling Policy

Pollution Control Policy

Air Quality Policy

Water Quality Policy

Hazardous Waste Policy

Chemical Safety Policy

Occupational Safety and Health Policy

Consumer Protection Policy

Financial Regulation Policy

Banking Policy

Insurance Policy

Securities Regulation Policy

Tax Policy

Labor Policy

Employment Policy

Workforce Development Policy

Trade Union Policy

Equal Opportunity Policy

Civil Rights Policy

Human Rights Policy

Justice Policy

Law Enforcement Policy

Criminal Justice Policy

Corrections Policy

Drug Policy

Substance Abuse Policy

Mental Health Policy

Disability Policy

Aging Policy

Family Policy

Child Welfare Policy

Youth Policy

Gender Policy

LGBTQ+ Policy

Indigenous Policy

Multiculturalism Policy

Integration Policy

National Security Policy

Defense Policy

Intelligence Policy

Counterterrorism Policy

Homeland Security Policy

Diplomatic Policy

Foreign Aid Policy

International Development Policy

Global Health Policy

Humanitarian Aid Policy

Refugee Policy

...

}

* PolicyStakeholder entity fields:

PolicyStakeholder(policy\_stakeholder\_id STRING, policy\_stakeholder\_name STRING, policy\_stakeholder\_description STRING, policy\_stakeholder\_type STRING)

where policy\_stakeholder\_type is {

resident,

group,

organization

}

Policy Knowledge Graph Relationship types:

* PolicyAreaMapping(FROM Policy TO PolicyArea, mapping\_strenght STRING)
* PolicyStakeholderAreaMapping(FROM PolicyStakeholder TO PolicyArea, mapping\_strenght STRING)
* PolicyMakerToPolicyMapping(FROM PolicyMaker TO Policy)

where mapping\_strenght is {

LOW,

MEDIUM,

HIGH

}