

# Database Coverage Area: South Korea

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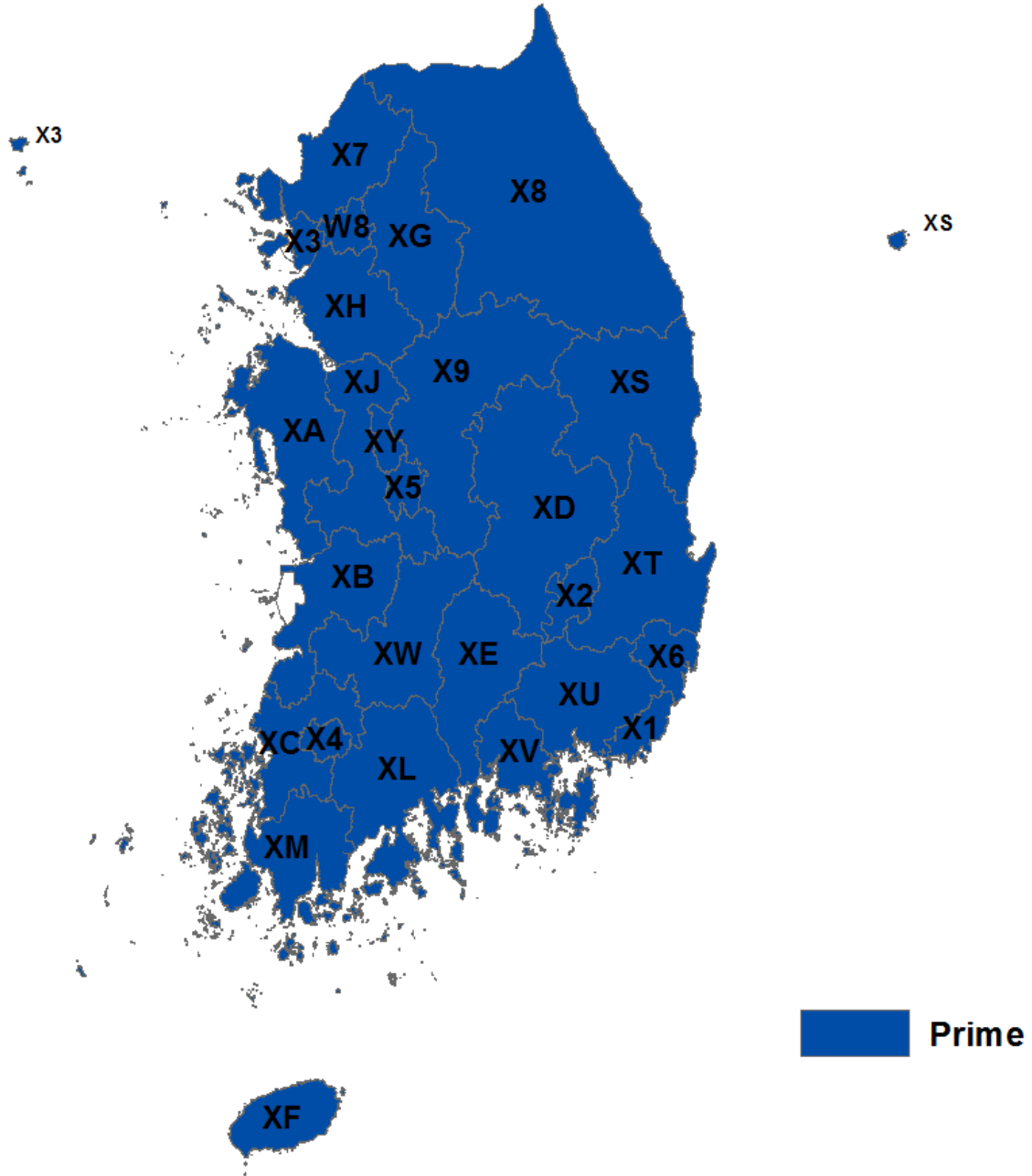
Release date : 20<sup>th</sup> July 2018

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## Database Scope

South Korea 27 regions



## Region code, name and GDF Dataset ID

Region code	Region name	Dataset ID
W8000	Seoul, Korea	535
X1000	Busan, Korea	642
X2000	Daegu, Korea	643
X3000	Incheon, Korea	644
X4000	Gwangju, Korea	645
X5000	Daejeon, Korea	646
X6000	Ulsan, Korea	647
X7000	Gyeonggi-do North Korea	648
XG000	Gyeonggi-do East, Korea	697
XH000	Gyeonggi-do South, Korea	698
X8000	Gangwon-do, Korea	649
X9000	Chungcheongbuk-do, Korea	650
XA000	Chungcheongnam-do West, Korea	651
XJ000	Chungcheongnam-do East, Korea	699
XB000	Jeollabuk-do West, Korea	652
XW000	Jeollabuk-do East, Korea	706
XC000	Jeollanam-do West, Korea	653
XL000	Jeollanam-do East, Korea	700
XM000	Jeollanam-do South, Korea	701
XD000	Gyeongsangbuk-do West, Korea	654
XS000	Gyeongsangbuk-do East, Korea	702
XT000	Gyeongsangbuk-do South, Korea	703
XE000	Gyeongsangnam-do West, Korea	655
XU000	Gyeongsangnam-do East, Korea	704
XV000	Gyeongsangnam-do South, Korea	705
XF000	Jeju-do, Korea	656
XY000	Sejong, Korea	762

## RDF/GDF Country Overview

Area	Population Covered	% Population Covered	Kilometers Covered
<b>Prime Coverage (N0)</b>			
South Korea	51.7 Milion	100%	342,914.07
<b>Total</b>	51.7 Milion	100%	342,914.07

Population: Government Statistics

Total number Prime links (N0) (navigable links)	Total number Complete links (N1) (navigable links)	Total number Network links (N2) (navigable links)	Total number of links (navigable links)
3,900,703	NA	NA	3,900,703

Total number Prime links (N0) (non-navigable links only)	Total number Complete links (N1) (non-navigable links only)	Total number Network links (N2) (non-navigable links only)	Total number of links (non-navigable links only)
1,725,569	NA	NA	1,725,569

Functional class	Total Prime (N0) Kilometers (Km)	Total Complete (N1) kilometers (Km)	Total Network (N2) kilometers (Km)	Total City-to-City (N4) Kilometers (Km)	TOTAL KILOMETERS
Level 1	7,541.64	NA	NA	NA	7,541.64
Level 2	19,907.33	NA	NA	NA	19,907.33
Level 3	18,939.37	NA	NA	NA	18,939.37
Level 4	30,250.70	NA	NA	NA	30,250.70
Level 5	266,275.02	NA	NA	NA	266,275.02
<b>Total</b>	342,914.07	NA	NA	NA	342,914.07

## POI Figures and Statistics

POI Category	Facility Code	Q218 Totals	Added POIs	Q318 Totals
Airport	4581	40	0	40
Amusement Park	7996	750	0	750
Animal Park	9718	23	0	23
Auto Dealership-Used Cars	5512	3	0	3
Auto Dealerships	5511	3,180	9	3,189
Auto Service & Maintenance	7538	3,804	4	3,808
Bank	6000	17,663	-17	17,646
Bookstore	9995	8	0	8
Bus Station	4170	481	0	481
Business Facility	5000	11,894	-2	11,892
Business Service	9500	26	0	26
Campground	9517	924	-1	923
Casino	7985	18	0	18
Cemetery	9591	2,584	0	2,584
Cinema	7832	531	-1	530
City Hall	9121	4,108	66	4,174
Civic/Community Centre	7994	939	1	940
Clothing Store	9537	19	0	19
Coffee Shop	9996	9,691	3	9,694
Commuter Rail Station	4100	5,021	39	5,060
Consumer Electronics Store	9987	4,488	-3	4,485
Convenience Store	9535	23,109	431	23,540
Convention/Exhibition Centre	7990	910	-1	909
Court House	9211	198	0	198
Department Store	9545	141	1	142
EV Charging Station	9598	808	0	808
Embassy	9993	168	3	171
Ferry Terminal	4482	751	1	752
Fire Department	9527	2,402	-1	2,401
Golf Course	7992	482	0	482
Government Office	9525	1,571	1	1,572

Grocery Store	5400	4,013	595	4,608
Higher Education	8200	7,656	0	7,656
Highway Exit	9592	2,083	2	2,085
Historical Monument	5999	234	0	234
Home Specialty Store	9560	12	0	12
Hospital	8060	603	0	603
Hotel	7011	1,606	4	1,610
Library	8231	1,380	4	1,384
Medical Service	9583	5,356	-1	5,355
Motorcycle Dealership	5571	14	1	15
Museum	8410	1,835	1	1,836
Named Intersection	9730	15,759	-8	15,751
Named Place	4444	21,941	5	21,946
Nightlife	5813	302	0	302
Optical	9564	8	0	8
Other Accommodation	7013	442	0	442
Park/Recreation Area	7947	2,203	-1	2,202
Parking Lot	7520	636	2	638
Performing Arts	7929	817	0	817
Petrol/Gasoline Station	5540	16,520	20	16,540
Pharmacy	9565	22,754	-1	22,753
Place of Worship	9992	99	0	99
Police Station	9221	4,477	-3	4,474
Post Office	9530	3,526	0	3,526
Race Track	9572	1	0	1
Rental Car Agency	7510	18	0	18
Residential Area/Building	9590	291,729	-24	291,705
Rest Area	7897	490	3	493
Restaurant	5800	16,522	-9	16,513
School	8211	21,762	-3	21,759
Shopping	6512	1,974	0	1,974
Ski Resort	7012	25	0	25
Specialty Store	9567	524	1	525
Sporting Goods Store	9568	3	0	3
Sports Centre	7997	537	0	537

Sports Complex	7940	347	0	347
Taxi Stand	9989	185	0	185
Tollbooth	9717	1,028	5	1,033
Tourist Attraction	7999	1,671	3	1,674
Train Station	4013	500	-1	499
Training Centre/Institute	9596	91	0	91
Veterinarian Service	9585	4	0	4
<b>TOTAL</b>		<b>548,422</b>	1,128	<b>549,550</b>



## Database Enhancements

### Major Road Updates (ENG)

Road Type	Route Num	Admin	Update Type	Highlights	Dist (Km)
Express Highway	1	Ulsan Ulju-gun	updated	Gyeongbu Expressway (Ulju ~ Bonggye)	18.87
Express Highway	100	Incheon Gyeyang-gu	updated	Seoul Ring Expressway (Gyeyang IC ~ Nooji JC)	7.41
Express Highway	1	Gyeongbuk Gyeongju-si	updated	Gyeongbu Expressway (Gyeongju IC)	4.86
Express Highway	65	Gangwon Yangyang-gun	updated	Donghae Expressway (Yangyang JC)	4.63
Express Highway	15	Gyeonggi Hwaseong-si	opened	Seohaean Expressway (Maesong Rest Area)	4.36
Express Highway	1	Chungbuk Cheongju-si Cheongwon-gu	updated	Gyeongbu Expressway (Cheongju Rest Area)	3.3
Express Highway	105	Gyeongnam Changwon-si Jinhae-gu	opened	Namhae 3rd Branch Expressway (Jinhae TG)	1.7
Express Highway	253	Jeonnam Damyang-gun	opened	Gochang Damyang Expressway (near Daejeon-myeon Taemok-ri 368-22)	1.58
Express Highway	16	Ulsan Nam-gu	updated	Ulsan Expressway (Janggeom IC)	1.44
Express Highway	451	Daegu Dalseo-gu	opened	Branch Line of Jungbu Naeryuk Expressway (Yucheon IC)	1.21
Express Highway	50	Gangwon Pyeongchang-gun	updated	Yeongdong Expressway (near Yongpyeong-myeon Soksa-ri 642-3)	1.01
National Road	7	Gyeongbuk Gyeongju-si	opened	National Road 7 (Naenam ~ Hyohyeon ~ Oedong)	59.5
National Road	17	Jeonnam Yeosu-si	opened	National Road 17 (Dolsan ~ Udueup)	36.29
National Road	31	Busan Gijang-gun	opened	National Road 31 (Jangan ~ Onsan 1st section)	33.05
National Road	31	Gyeongbuk Bonghwa-gun	opened	National Road 31 (Socheon ~ Dogye)	23.95
National Road	79	Gyeongnam Changwon-si Masanhappo-gu	opened	National Road 79 (Changwon-si Masanhappo-gu)	21.1
National Road	4	Jeonbuk Gunsan-si	opened	National Road 4 (Munyeodo ~ Seonyudo ~ Jangjado)	20.6

National Road	6	Gangwon Hoengseong-gun	opened	National Road 6 (Seowon ~ Gonggeun)	19.86
National Road	19	Chungbuk Cheongju-si Sangdang-gu	opened	National Road 19 (Unam ~ Miwon)	17.25
National Road	21	Chungnam Boryeong-si	opened	National Road 21 (Seocheon ~ Boryeong 1st section)	14.69
National Road	48	Gyeonggi Gimpo-si	opened	National Road 48 (near Geolpo-dong 904-1)	9.34
National Road	24	Jeonbuk Sunchang-gun	opened	National Road 24 (Damyang ~ Sunchang)	7.92
National Road	30	Jeonbuk Buan-gun	opened	National Road 30 (Sogwang Jct ~ Saemangeum Jct)	6.55
National Road	47	Gyeonggi Namyangju-si	opened	National Road 47 (Jinjeop ~ Toegyewon)	5.83
National Road	30	Jeonbuk Jinan-gun	opened	National Road 30 (Jinan ~ Jeoksang)	5.74
National Road	42	Gangwon Jeongseon-gun	opened	National Road 42 (Pyeongchang ~ Jeongseon 3rd section)	5.15
National Road	31	Gangwon Pyeongchang-gun	opened	National Road 31 (Hupyeong Jct)	5.13
National Road	6	Gangwon Hoengseong-gun	opened	National Road 6 (near Dunnae-myeon Dunbangnae-ri 317-24)	4.199
National Road	77	Gyeonggi Hwaseong-si	opened	National Road 77 (Songsan-myeon ~ Ansan-si Choji-dong)	3.04
National Road	3	Gyeongnam Namhae-gun	opened	National Road 3 (near Changseon-myeon Daeyeok-ri 6-15)	2.5
National Road	3	Gyeonggi Dongducheon-si	opened	National Road 3 (Sangpae IC ~ Anheung IC)	2.02
Regional Road	67	Gyeongbuk Goryeong-gun	opened	Regional Road 67 (Dangsan Jct ~ Yeolmoe Jct)	27.49
Regional Road	49	Jeonnam Muan-gun	opened	Regional Road 49 (Mongtan ~ Donggang)	16.91
Regional Road	32	Daejeon Daedeok-gu	opened	Regional Road 32 (Daejeon ~ Munui)	16.48
Regional Road	919	Gyeongbuk Yeongcheon-si	opened	Regional Road 919 (Wachon-myeon Baksa-ri ~ Cheongtong-myeon Gyeji-ri)	16
Regional Road	30	Gyeongnam Changwon-si Uichang-gu	opened	Regional Road 30 (Masan Masan Jct ~ Dongeupbon Dongeupbon Jct)	11.87

Regional Road	82	Gyeonggi Hwaseong-si	opened	Regional Road 82 (Jangji Jct)	8.52
Regional Road	461	Gangwon Hwacheon-gun	opened	Regional Road 461 (Bongo ~ Papo)	4.77
Regional Road	60	Gyeongnam Yangsan-si	opened	Regional Road 60 (Myeonggok Jct ~ 13beon Jct)	4.76
Regional Road	649	Chungnam Seosan-si	opened	Regional Road 649 (Seosan ~ Buseok)	4.7
Regional Road	403	Gangwon Chuncheon-si	opened	Regional Road 403 (near Gangchondaegyo)	4.15
Regional Road	494	Gangwon Hongcheon-gun	opened	Regional Road 494 (Gureop ~ Hwajeon)	3.37
Regional Road	69	Gyeongbuk Yeongcheon-si	opened	Regional Road 69 (Jogyo-dong ~ Imgo-myeon)	2.47
Regional Road	931	Gyeongbuk Yeongju-si	opened	Regional Road 931 (near Bonghyeon-myeon Ohyeon-ri 964-14)	2.2
Regional Road	722	Jeonbuk Iksan-si	opened	Regional Road 722 (near Geumma Jct)	2.13
Regional Road	70	Gangwon Hongcheon-gun	opened	Regional Road 70 (Bangok ~ Namsan)	1.93
General Road	-	Gyeongnam Changwon-si Jinhae-gu	opened	General Road (Sosa ~ Noksan)	31.43

### Major Road Updates (KOR)

Road Type	Route Num	Admin	Update Type	Highlights	Dist (Km)
고속도로	1	울산 울주군	선형변경	경부고속도로(울주~봉계)확포장	18.87
고속도로	100	인천 계양구	선형변경	서울외곽순환고속도로 계양 IC~노오지 JC 가변차로 신규	7.41
고속도로	1	경북 경주시	선형변경	경주 IC 선형변경	4.86
고속도로	65	강원 양양군	선형변경	서울양양고속도로 양양 JC 부근 선형 변경	4.63
고속도로	15	경기 화성시	신설반영	매송 휴게소 신축(상,하행)	4.36
고속도로	1	충북 청주시 청원구	선형변경	청주휴게소 내부도로 및 경부고속도로 합류부근 선형변경	3.3
고속도로	105	경남 창원시 진해구	신설반영	진해 TG 톨게이트 신설	1.7
고속도로	253	전남 담양군	신설반영	전남 담양군 대전면 태목리 368-22 회전도로 신설	1.58
고속도로	16	울산 남구	선형변경	울산고속도로 장검 IC 부근 종점부 진출입로 개선	1.44
고속도로	451	대구 달서구	신설반영	중부내륙고속도로지선 유천 IC 신설	1.21



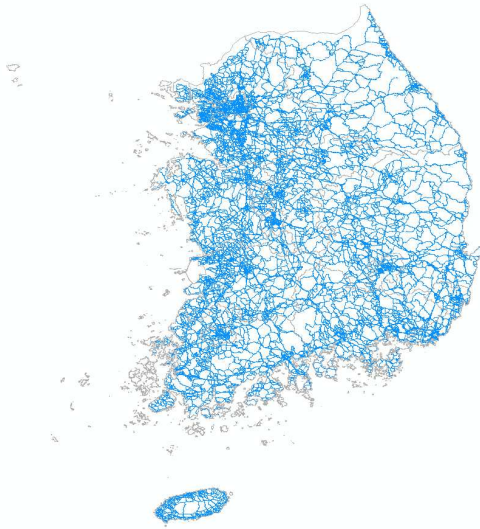
고속도로	50	강원 평창군	선형변경	용평면 속사리 642-3 부근 도로 신설 및 선형변경	1.01
국도	7	경북 경주시	신설반영	내남-효현-외동간국도신설	59.5
국도	17	전남 여수시	신설반영	돌산읍 중앙중학교 부근 돌산~우두읍 도로확장	36.29
국도	31	부산 기장군	신설반영	장안-온산 1 공구 개통	33.05
국도	31	경북 봉화군	신설반영	소천~도계 1,2 국도 개통	23.95
국도	79	경남 창원시 마산합포구	신설반영	마산합포구 국도 신설	21.1
국도	4	전북 군산시	신설반영	고군산군도 (무녀도-선유도-장자도) 신설	20.6
국도	6	강원 횡성군	신설반영	서원-공근 국도 신설	19.86
국도	19	충북 청주시 상당구	신설반영	충북 청원군 운암~미원간 도로 신설	17.25
국도	21	충남 보령시	신설반영	충남 보령시 서천~보령(제 1 공구)도로 신설	14.69
국도	48	경기 김포시	신설반영	경기 김포시 걸포동 904-1 부근 국도 개통	9.34
국도	24	전북 순창군	신설반영	담양~순창간도로 4 차로 개통	7.92
국도	30	전북 부안군	신설반영	격포~하서간 (소광교차로~새만금교차로) 도로 신설	6.55
국도	47	경기 남양주시	신설반영	진접 퇴계원간 도로 신설	5.83
국도	30	전북 진안군	신설반영	진안~적상간도로 신설	5.74
국도	42	강원 정선군	신설반영	평창~정선간 신설(42 번국도) 3 공구. 정선터널부근 신설	5.15
국도	31	강원 평창군	신설반영	후평사거리부근 신설	5.13
국도	6	강원 횡성군	신설반영	강원 횡성군 둔내면 둔방내리 317-24 부근 도로 신설	4.199
국도	77	경기 화성시	신설반영	송산면~안산시 초지동 구간 77 번 국도 연결도로 신설	3.04
국도	3	경남 남해군	신설반영	경남 남해군 창선면 대벽리 6-15 부근 국도 3 호선 진출입램프 신설	2.5
국도	3	경기 동두천시	신설반영	상패 IC~안흥 IC 국도대체도로 3 호선 개통	2.02
지방도	67	경북 고령군	신설반영	당산삼거리~열외삼거리	27.49
지방도	49	전남 무안군	신설반영	몽탄~동강 신설	16.91
지방도	32	대전 대덕구	신설반영	대전~문의 신설	16.48
지방도	919	경북 영천시	신설반영	와촌면 박사리~청통면 계지리/와촌~청통간 도로 4 차로 신설	16
지방도	30	경남 창원시 의창구	신설반영	동읍-한림간 도로中 마산교차로~동읍본교차로 개통	11.87
지방도	82	경기 화성시	신설반영	장지교차로 주변 지방도 신설 및 변경	8.52
지방도	461	강원 화천군	신설반영	봉오~파포(숙고개)간 지방도 신설 및 변경	4.77
지방도	60	경남 양산시	신설반영	명곡교차로~13 번교차로 지방도 신설	4.76
지방도	649	충남 서산시	신설반영	서산~부석간 지방도 신설	4.7
지방도	403	강원 춘천시	신설반영	강춘대교 부근 신설	4.15
지방도	494	강원 홍천군	신설반영	굴업-화전(백양치)간 도로 신설 및 변경	3.37



지방도	69	경북 영천시	신설반영	조교동~임고면 구간 지방도 확장 신설	2.47
지방도	931	경북 영주시	신설반영	경북 영주시 봉현면 오현리 964-14 부근 풍기인삼교 신설	2.2
지방도	722	전북 익산시	신설반영	금마교차로 우측부근 도로 신설	2.13
지방도	70	강원 홍천군	신설반영	반곡~남산간 도로 신설	1.93
일반도	-	경남 창원시 진해구	신설반영	소사~녹산간 도로개설사업 신설 및 변경	31.43

## Other highlights

- Lane Attribute coding applied into 80,694 number of intersections in Q318 product. A look-aside table, CLM\_XTDL\_LINK\_PVID.CSV, provided to discern links with Lane Attribute coding.
- Starting in Q2, 2014, CLM\_XTDL\_LINK\_PVID.CSV includes header and double quotation.
- ADAS Enhanced Geometry coded into 71504.21km of South Korea



- **POI Category Icons**  
Starting in Q1, 2014, POI Category Icons will be published as file attachments to individual Standard Listing POIs with the following attribution:
  - Multi Media Description (GDF 3.0: MD = 19) POI Icons (32 \* 32)
  - Multi Media Description (GDF 3.0: MD = 20) POI Icons (16 \*16)
  - Multi Media Attachment Type (GDF 3.0: AT) = BMP
  - Multi Media File Name (GDF 3.0: MN) publishes each POI Icon name, the naming conversion will continue reference to legacy POI category code.

See TNM-179, Appendix H for the detailed naming convention and references to legacy POI category codes.

- **Permitted Driving Manoeuvres**  
Starting In Q1, 2014, Admin Wide Regulations will be published for South Korea. Additionally, Permitted Driving Manoeuvres will be published to indicate where U-turns are legally allowed in South Korea.
- **New GDF 3.0 and RDF Attribution**  
Starting in Q1, 2014, the following attributes will be available in South Korea.
  - Road Class
  - Overpass/Underpass
  - Positive/Negative TPEG ID
  - Intersection Name
  - Building Texture Pattern
  - Bridge Name
  - Tunnel Name
  - Overpass Name
  - Underpass Name

The attribution is available in RDF and GDF 3.0 only. See the following for the detailed specifications:

- South Korean Migration, RDF: TNM-176, Appendix E Revised
  - South Korean Migration, GDF 3.0: TNM-176, Appendix F Revised
- **New Building/Landmark Feature Sub-Types**  
Starting in Q1, 2014, the following new Feature Sub-Types will be introduced, for South Korea only:

Feature Sub-Type	Feature Sub-Type Code	GDF 3.0 Feature Code
Apartment Building/Landmark	2005453	7110
Housing Building/Landmark	2005452	7110

Starting in Q1, 2014, the following existing Building/Landmark Feature Sub-Types will be included for South Korea:

Feature Sub-Type	Feature Sub-Type Code	GDF 3.0 Feature Code
Hotel Building/Landmark	2005003	7110
Petrol Station Building/Landmark	2005007	7110
Museum Building/Landmark	2005102	7110
Theatre Building/Landmark	2005103	7110
University or College Building/Landmark	2005151	7110
School Building/Landmark	2005152	7110
Embassy Building/Landmark	2005251	7110

City Hall Building/Landmark	2005253	7110
Hospital Building/Landmark	2005351	7110
Amusement Park Building/Landmark	2005407	7110
Golf Course Building/Landmark	2005408	7110
Park/Recreation Area Building/Landmark	2005411	7110
Ski Resort Building/Landmark	2005413	7110
Department Store Building/Landmark	2005507	7110
Grocery Store Building/Landmark	2005508	7110
Sports Activity Building/Landmark	2005552	7110
Airport Building/Landmark	2005651	7110
Bus Station Building/Landmark	2005652	7110
Toll Structure Building/Landmark	2005657	7110
Church Building/Landmark	2005751	7110
Temple Building/Landmark	2005753	7110

- New Feature Type**  
 Starting in Q1, 2014, the following Feature Type will be introduced in South Korea:

Category Description	Definition	Feature Type	GDF 3.0 Feature Code
Residential Area (Apartment Complex)	Apartment Complex Polygons	900160	7110

- Add Route Type Prefix in Route Number Sign**  
 Starting in Q1, 2014, Route Number (GDF 3.0: &R) ) in Sign Text will be published with a prefix and a dash as part of the name in Sign Text, if it is on a valid route type shield. For example, if 85 is displayed on a Route Type 1 shield, then the Sign Text will be published as "E-85". See the table below for route type prefixes:

Prefix	Shield Route Type
E-	1
U-	2
N-	3

R-	4
----	---

▪ Subway Line Linear Carto Feature

The linear carto feature type Subway Line is published as Feature Type 1800202, (NAVSTREETS: Railroads (RailRds); GDF 3.0 Feature Type: 9068). Starting in Q1, 2014, each subway line feature will be named identifying the actual Subway line name + line number + "/", followed by "U" if the subway feature is underground or followed by "O" if the subway feature is above ground. See the following examples:

Naming in Reality			Naming in Database		
Name (KOR)	Name (ENG)	Above Ground (KOR)	Underground (KOR)	Above Ground (ENG)	Underground (ENG)
신분당선	Shinbundang(DX Line)	신분당선 /O	신분당선 /U	Shinbundang (DX Line)/O	Shinbundang (DX Line)/U
경춘선	Gyeongchun Line	경춘선 /O	경춘선 /U	Gyeongchun Line/O	Gyeongchun Line/U
중앙선	Jungang Line	중앙선 /O	중앙선 /U	Jungang Line/O	Jungang Line/U
경의중앙선	Gyeongui Jungang Line	경의중앙선 /O	경의중앙선 /U	Gyeongui Jungang Line /O	Gyeongui Jungang Line /U
공항철도	Airport Railroad(AREX)	공항철도 /O	공항철도 /U	Airport Railroad(AREX)/O	Airport Railroad(AREX)/U
의정부경전철	Light Rail (Uijeongbu Line)	의정부경전철 /O	의정부경전철 /U	Light Rail (Uijeongbu Line)/O	Light Rail (Uijeongbu Line)/U
에버라인	Light Rail(Ever Line)	에버라인 /O	에버라인 /U	Light Rail (Ever Line)/O	Light Rail (Ever Line)/U
대전 1 호선	Daejeon Line 1	대전 1 호선 /O	대전 1 호선 /U	Daejeon Line 1/O	Daejeon Line 1/U
대구 1 호선	Daegu Line 1	대구 1 호선 /O	대구 1 호선 /U	Daegu Line 1/O	Daegu Line 1/U
대구 2 호선	Daegu Line 2	대구 2 호선 /O	대구 2 호선 /U	Daegu Line 2/O	Daegu Line 2/U
대구 3 호선	Daegu Line 3	대구 3 호선 /O	대구 3 호선 /U	Daegu Line 3/O	Daegu Line 3/U
부산 1 호선	Busan Line 1	부산 1 호선 /O	부산 1 호선 /U	Busan Line 1/O	Busan Line 1/U
부산 2 호선	Busan Line 2	부산 2 호선 /O	부산 2 호선 /U	Busan Line 2/O	Busan Line 2/U
부산 3 호선	Busan Line 3	부산 3 호선 /O	부산 3 호선 /U	Busan Line 3/O	Busan Line 3/U
부산 4 호선	Busan Line 4	부산 4 호선 /O	부산 4 호선 /U	Busan Line 4/O	Busan Line 4/U
부산김해경전철	Light Rail (Busan-Gimhae)	부산김해경전철 /O	부산김해경전철 /U	Light Rail (Busan-Gimhae)/O	Light Rail (Busan-Gimhae)/U
광주 1 호선	Gwangju Line 1	광주 1 호선 /O	광주 1 호선 /U	Gwangju Line 1/O	Gwangju Line 1/U
1 호선	Line 1	1 호선 /O	1 호선 /U	Line 1/O	Line 1/U
2 호선	Line 2	2 호선 /O	2 호선 /U	Line 2/O	Line 2/U
3 호선	Line 3	3 호선 /O	3 호선 /U	Line 3/O	Line 3/U
4 호선	Line 4	4 호선 /O	4 호선 /U	Line 4/O	Line 4/U
5 호선	Line 5	5 호선 /O	5 호선 /U	Line 5/O	Line 5/U
6 호선	Line 6	6 호선 /O	6 호선 /U	Line 6/O	Line 6/U
7 호선	Line 7	7 호선 /O	7 호선 /U	Line 7/O	Line 7/U
8 호선	Line 8	8 호선 /O	8 호선 /U	Line 8/O	Line 8/U





9 호선	Line 9	9 호선 /O	9 호선 /U	Line 9/O	Line 9/U
인천 1 호선	Incheon Line 1	인천 1 호선 /O	인천 1 호선 /U	Incheon Line 1/O	Incheon Line 1/U
인천 2 호선	Incheon Line 2	인천 2 호선 /O	인천 2 호선 /U	Incheon Line 2/O	Incheon Line 2/U
경전철 (수인선)	Light Rail (Suwon-Incheon)	경전철 (수인선)/O	경전철 (수인선)/U	Light Rail (Suwon-Incheon)/O	Light Rail (Suwon-Incheon)/U
분당선	Bundang Line	분당선 /O	분당선 /U	Bundang Line/O	Bundang Line/U
인천공항자기 부상철도	Incheon Airport Maglev	인천공항자기부상 철도/O	인천공항자기부 상철도/U	Incheon Airport Maglev/O	Incheon Airport Maglev/U
경강선	Gyeonggang Line	경강선/O	경강선/U	Gyeonggang Line/O	Gyeonggang Line/U
동해선	Donghae Line	동해선/O	동해선/U	Donghae Line/O	Donghae Line/U
우이신설선	Ui-Sinseol Line	우이신설선/O	우이신설선/U	Ui-Sinseol Line/O	Ui-Sinseol Line/U

▪ RDF Schema Changes

Starting in Q1, 2014, RDF schema will introduce a new table and columns as listed below. The schema changes described below are introduced to model South Korea specific content, thus will not be populated in coverage areas outside South Korea (unless announced in a future TNM). See the following for the detailed specifications:

South Korean Migration, RDF: TNM-176, Appendix E Revised

New Table: RDF\_LINK\_TPEG:

Column Name	Type	NULL	Contents
LINK_ID	N(10)	N	Permanent identifier of the link.
POS_TPEG_ID	N(10)	Y	TPEG ID in the positive direction.
NEG_TPEG_ID	N(10)	Y	TPEG ID in the negative direction.

New Columns in RDF\_NAV\_LINK Table: Column

Column Name	Type	NULL	Contents
LINK_ID	N(10)	N	Permanent identifier of the link.
...	...	...	...
PEDESTRIAN_PREFERRED	CHAR(1)	Y	Indication of trust in the source.
ROAD_CLASS	N(2)	Y	Identification of the road network based on governmental classification.
OVERPASS_UNDERPASS	N(1)	Y	Identifies when a road goes over/under another road.

New Columns in RDF\_ROAD\_LINK Table:



Column Name	Type	NULL	Contents
ROAD_LINK_ID	N(10)	N	Permanent identifier of the road name.
.....	...	...	...
IS_INTERSECTION_NAME	C(1)	Y	Identifies a road name as an intersection name.
IS_OVERPASS_NAME	C(1)	Y	Identifies a road name as an overpass name.
IS_UNDERPASS_NAME	C(1)	Y	Identifies a road name as an underpass name.
IS_BRIDGE_NAME	C(1)	Y	Identifies a road name as a bridge name.
IS_TUNNEL_NAME	C(1)	Y	Identifies a road name as a tunnel name.

- Phone Number Format Change
  - Starting in Q1 2014, the phone number formats of POI contacts will change into HERE's globally supported format.
    - '0' identifier will be removed from phone number string at the beginning  
e.g: From 010-1234-5678 to 10-1234-5678
    - '-' (hyphen) will be removed in the middle of phone number string  
e.g. From 1544-0773 to 15440773

Phone Type	Phone Format Description	Phone Format example (Q3, 2013)	Phone Format example (Q1, 2014)
Mobile	South Korea Mobile Number Format	010-123-4567 or 011-9616-6608	10-1234567 or 11-96166608
Mobile	South Korea Mobile Number Format 2	016-123-4567 or 017-371-2764	16-1234567 or 17-3712764
Phone	South Korea Phone Number Format 1	02-123-4567 or 02-2186-6869	2-1234567 or 2-21866869
Phone	South Korea Phone Number Format 2	1544-0773	15440773
Phone	South Korea Phone Number Format 3	043-296-0070	43-2960070
Phone	South Korea Phone Number Format 4	0505-930-6000	505-9306000
Toll Free	South Korea Toll Free Number Format	080-002-3030 or 080-776-17000	80-0023030 or 80-77617000

- Expanded POI/Service Coverage
  - Note: This section replaces TNM-179, Section 2.3.1. Highway Exit placement information was added. Starting in Q1, 2014, South Korea will include the following POI content into Core POIs:

POI Services	Description	South Korea Specification
Highway Exit: 9592 (GDF 3.0: 9592)	A point of exit along a motorway, preceding an exit ramp.	Does not require Parent/Child Association Type (GDF 3.0: \$C) with the POIs/Services within a short driving distance from the Highway. See the note below for placement information.
Commuter Rail Station: 4100 (GDF 3.0: 9110)	A facility established to provide regional or intra-city rail transportation	Subway Entrances/Exits are published as Commuter Rail Station It has Parent/Child Association Type (GDF 3.0: \$C) with the corresponding Subway Stop which is also published as Commuter Rail Station Subway Exit number is published as Commuter Rail Station POI/Service name
Fire Department: 9527 (GDF 3.0: 9527)	A station from which firefighters are dispatched	New
Named Intersection: 9730 (GDF 3.0: 9730)	An intersection/crossroad/flyover with an official name.	New

Note: Both Highway Entrances and Highway Exits are included as Highway Exit POIs/Services. Highway Exit POI/Services are placed on the highway link before the split (at the split node), and Highway Entrance POI/Services are placed on the highway link that is merged into (at the merging node). Please refer to the figure below:

- **POI Access Road**  
Starting in Q1, 2014, POI Access Road (GDF 3.0: Service Access Road FW = 13) will be applied in South Korea. This addition will complete path/roads that are used to enter and exit a rest area POI along a highway. The coding of both POI Access Road (GDF 3.0: Service Access Road FW = 13) and Ramp (Yes) (GDF 3.0 Ramp @6 = 1) will be allowed for South Korea only.
- **Junction Names**  
Starting in Q1, 2014, Junction Name (GDF 3.0 @J) will be applied in South Korea to all ramps that comprise a junction when two roads do not cross at-grade.
- **Extended Lane and Comprehensive Lane Model Publication - South Korea**  
Following the TNM announcement in TNM-180, section 2.3.17, starting in Q1, 2014, only Comprehensive Lane Model (CLM) has been published. However, the coverage of Lane Connectivity (GDF 3.0: 9119) and attributes related to CLM published in South Korea from Q1, 2014 are essentially the same as in previous South Korea product release. The following enhancements were announced in TNM-180, section 2.3.17, and published from Q1, 2014:
  - Number of Lanes From/To (GDF 3.0: NL) and Physical Number of Lanes From/To (GDF 3.0: +P) will be published according to reality.
  - In complex intersections, Lane Connectivity (GDF 3.0: 9119) can pass through multiple links if they are considered part of the same intersection.

- Destination Lane (GDF 3.0: Out-Lane ID) in a Lane Connectivity condition (GDF 3.0: 9119) will be published according to reality.
- Coverage of Lane Connectivity will be applied to Functional Class 1-4 links where lane-to-lane guidance is needed. All lanes on both sides of a bi-directional link will receive Lane Connectivity if any of the lanes has applied Lane Connectivity condition.
- Lane Type (GDF 3.0: %I) will be published according to reality.
- Lane Divider Marker (GDF 3.0: 7D) and Center Lane Divider Marker (GDF 3.0:7G) will be published.
- Bus Only Lanes (GDF 3.0: Vehicle Type-VT= (17)) will be published.

In addition, starting from Q4, 2014, the full suite of CLM attributes will be published along road networks where Extended Lane and Lane Markings are published and (or) Bus Only Lane (GDF 3.0: Vehicle Type-VT = (17)) is published. The full suite of CLM attributes will be published in Gangnam-gu, Seoul. Newly introduced CLM attributes are as following:

- Express Lane
- Passing/Overtaking Lane
- Parking Lane
- Regulated Lane Access
- Reversible Lane
- Slow Lane
- Truck Parking Lane
- Lane Width
- Lane Height
- Lane Speed
- Access Restriction\_Lane level
- Direction of Travel\_Lane Level
- Usage Fee Required\_Lane Level

Extended Lanes and Lane Markings is premium content. Please contact your account executive for pricing and ordering information.

#### ■ Highway Simple Map

Note: The following section replaces TNM-179, Section 2.4.1. The South Korea Legacy LAT Specification referenced below has been revised. The field “REC ID” was changed to “ID”.

Starting in Q1, 2014, the South Korea Highway Simple Map will be released. It will be used to create a schematic representation of the highway system for highway guidance. Consisting of a CSV file publishing highway node information, it is a replication of the HighwayInfo table in the current Urimap database.

Please see the South Korea Legacy LAT specification in TNM-179, Appendix E, Revised for more information.

- **Intersection Name LAT**  
Starting in Q1, 2014, named Intersections will be extracted into a look aside file consisting of Node IDs and display coordinates for each intersection, with Intersection names in Korean (KOR), the Korean transliteration (KOX), and the English translation (ENG).  
Please see the detailed Intersection Name LAT file specification in TNM-179, Appendix F for more information.
- **Toll Cost LAT**  
Starting in Q1, 2014, the Toll Cost Look Aside file will be provided to support the customer transition from the South Korea legacy Urimap format to HERE GDF 3.0 and RDF format. The CSV file contains TGMATCH.txt and DUMMYTG\_PAIR\_TABLE.txt. These tables replace the corresponding tables provided following the Urimap specification and are to be used in conjunction with the additional set of tables in the Urimap Toll Cost deliverable. Please see the South Korea Legacy LAT Specification in TNM-179, Appendix E, Revised for more information.  
Toll Cost is premium content and may require an additional fee. Please contact your account executive for pricing and ordering information.
- **Highway Interchange and Highway Junction Crossing Annotation**  
Starting in Q3, 2014, Highway Interchange and Highway Junction names will be published as Annotation Point (GDF3.0: 9061) with Highway Interchange (IC) as Annotation Category (GDF3.0: 58 = 146) and Highway Junction (JC) as Annotation Category (GDF3.0: 58 = 147). The Display Category is defined as 3 (GDF3.0: 59 = 3) (zoom level 1:400k).

These Annotation Points are published in GDF3.0 Point Record {POFEREC}(51). Both the Korean name and English Name will be published. A Multimedia attachment file will not be published. Annotation category icon will publish through Multimedia attachment with Multimedia Description 10 (GDF 3.0: MD= 10) for Annotation Category Icon Low Resolution, 18 (GDF 3.0: MD=18) for Annotation Category Icon High Resolution; Multimedia Attachment Type BMP (GDF 3.0: AT=BMP). RDF will publish Annotation in RDF\_ANNOTATION table, RDF\_ANNOTATION.ANNOTATION\_TYPE = 2245 (Interchange IC) and RDF\_ANNOTATION.ANNOTATION\_TYPE = 2246 (Junction (C)).

- **Actual Address Inclusion**  
Starting in Q1 2014, in addition to POI House Number of Service (GDF 3.0: 10), HERE will also publish
  - POI Actual Address - Free Text (GDF 3.0: \$V) in both Language code KOR and transliteration KOX.  
The format is:  
House Number  
Order 2 Name (space) Order 8 Name (space) KD Zone Name  
A KOR example is:  
89-161

### 서울특별시 구로구 구로동

- Actual Address Parsed in language code 'ENG', it includes the following attributions:  
Actual House Number (GDF 3.0: !H)  
Actual Admin (GDF 3.0: !C) which contains a concatenation of Order 2 Name (space) Order 8 Name (space) KD Zone name, for example: Seoul Seocho-gu Yangjae-dong

From Q2, 2016 (in Release Note Q215, stated as Until Q1, 2016)

- Actual Address – Free Text in KOR and KOX
  - Actual Address Parsed in KOR and contents previously published as Actual Address Parsed in English (ENG) will be published as Actual Address Parsed in Transliteration with Language Code KOX.
- NAVSTREETS Look-aside (LAT) Files  
Starting in Q2, 2014, look-aside (LAT) files will be provided in South Korea for NAVSTREETS Shapefile. NAVSTREETS South Korea LAT files will publish the following content:  
South Korea Link Attribute LAT file including:
    - Road Class
    - Overpass/Underpass

South Korea Street Name Status LAT file including:

    - Bridge/Tunnel Name Status
    - Overpass/Underpass Name Status

TPEG LAT File publishing TPEG IDs.  
See the following for the detailed specification:

    - South Korea NAVSTREETS LAT Specification: TNM-180, Appendix E
  - RDF File Type for 2D JUNCTION VIEW  
In Q3, 2014 product, RDF File Type = 34(2D JUNCTION VIEW) has been divided into two File types = 31(2D LOW RESOLUTION VIEW), 32(2D HIGH RESOLUTION VIEW) and file attachments coded with Attachment Type = "PNG". And the file name of both RDF File Types (= 31, 32) also changed to JV\_KR\_[Origin Link ID]\_[Destination Link ID].png (e.g. JV\_KR\_1028908382\_1028909236.png )

- **Safety Camera Type Addition**  
Starting from Q1, 2015, a new safety camera type, EndingPointOfLaneAndSpeedingViolationBlock, will be introduced into Safety Camera Korea XML product. It will be paired with BeginningPointOfLaneAndSpeedingViolationBlock. Currently in Safety Camera Korea XML product, BeginningPointOfLaneAndSpeedingViolationBlock is paired with SectionEnd.  
  
Safety Camera is a premium content product and may require an additional fee. Please contact your Account Executive for more information.
- **Naming Redesign for Multilingual POI/Service Names and Cartography Names**  
Currently, in countries where more than one language is represented, it is necessary to replicate POI and Cartography features, one per language.  
  
Starting Q4, 2014, in order to better support growing multilingual needs, a new structure will be introduced that allows publication of a single feature with multiple names in different languages. This change will prevent future duplication of features and therefore, the complexity associated with duplication in application development.
- **Grade Category**  
Starting in Q4, 2015, Grade Category (GDF 3.0: Grade Category (62)) will be published in South Korea. Grade Category will be published on both the Ramps and Straight-on roads after a decision point on all Controlled Access roads.
- **Starting in Q3, 2016, Voice Phonetic Transcriptions in Korean (KOR) will be available in South Korea for Admin Names, Road Names, and POI Names.**
- **Voice Phonetic Transcriptions Expansion – South Korea (VIF/VAF Only)**  
Starting in Q4, 2016, Voice Phonetic Transcriptions in Korean (KOR) will be available in South Korea in VIF/VAF for Admin Names, Road Names, and POI Names.  
Voice Phonetic Transcriptions in Korean (KOR) in VIF/VAF will cover:
  - Approximately 1.5 million Core POIs.  
The remainder Core POIs; Admin Names and Street Names, will be delivered along with GDF/RDF starting in Q3, 2016.
- **Korea Address LAT files**  
Address name in following Look Aside Tables can be different from Core Map address name since there are 35 bytes of length limitations with address name
  - All tables in UTF8\_NEW\_ADDRESS delivery
  - All tables in OLD\_POINT\_ADDRESS delivery
- **Starting in Q3, 2016, GDF file names will be changed by gz compression and region identification code. This changes only be applied to GDF products.**

Flavor	File	Until Q216	From Q316
Unmerged	gdf	W8AM161F0WW8000GKA**.gdf	W8AM161F0WW8000GKA**.gz
	stats.xml	W8AM161F0WW8000GKA**.gdf.stats.xml	W8AM161F0WW8000GKA**.stats.xml.gz
Merged	gdf	W8LM161F0WW8000GKA**.gz	W8LM161F0WKR000GKA**.gz
	stats.xml	KRLM161F0WKR000GKA**.gdf.stats.xml	KRLM161F0WKR000GKA**.stats.xml.gz

- Starting in Q2, 2017, HERE is delivering Natural Guidance limited to contracted Customer(s). Natural Guidance in Q2, 2017 product is an engineering sample. Commercial Natural Guidance product will be available from Q3, 2017. Natural Guidance is a premium product. Please contact Account Executive(s) for more information.
- Map display of ORDER1 name  
Starting in Q3, 2017, following ORDER1 name can also be displayed using capital indicator value from it's subordinate admin (ORDER8).

ORDER1	ORDER8	NAMED_PLACE_PVID with Capital Indicator
Gangwon-do	Chuncheon-si	1135705427
Gyeonggi-do	Suwon-si Paldal-gu	1135705348
Gyeongsangnam-do	Changwon-si Uichang-gu	1135705394
Gyeongsangbuk-do	Andong-si	1135705362
Sejong-si	Sejong-si	1135705345
Jeollanam-do	Muan-gun	1135705408
Jeollabuk-do	Jeonju-si Wansan-gu	1135705332
Jeju-do	Jeju-si	1135705440
Chungcheongnam-do	Hongseong-gun	1135705333
Chungcheongbuk-do	Cheongju-si Sangdang-gu	1139157701

- New Railroad Linear Carto Feature  
Starting in Q1, 2018, Railroad Linear Carto Feature for **Gyeonggang High Speed Railway** will be added. This is published as Feature Type 1800201, (NAVSTREETS: Railroads (RailRds); GDF 3.0 Feature Type: 4210).



## POI/Service

- **Lamborghini**  
Starting from Q1 2015 Commercial Release, the facility type for the Lamborghini will be changed from Business Facility to Auto Dealership.
- **Facility Code for INCHEON Airport Railway Station**  
Starting from Q2 2015 Commercial Release, the facility type for the INCHEON Airport Railway Station POI will be changed from Train Station(4013) to Commuter Rail Station(4100). See the appendix in this document for more details.
- **Food type for the DUNKIN DONUTS**  
Starting from Q4 2015 Commercial Release, the food type for the DUNKIN DONUTS (Fast Food: CUISINE\_ID=27) will be removed.
- **Expansion of Rest Area – South Korea**  
Starting in Q3, 2016, Rest Area Type of Parking & Rest Room Only (RDF: Rest\_Area\_Type – Attribute Value '2'), (NAVSTREETS: Rest Area Type – Attribute Modifier Value '2'), (GDF 3.0: Rest Area Type (64), Value of '2') and Parking Only (RDF: Rest\_Area\_Type - Attribute Value '3'), (NAVSTREETS: Rest Area Type - Attribute Modifier Value '3'), (GDF 3.0: Rest Area Type (64), Value of '3') will be added into South Korea HERE Map. These types of Rest Area will be added to Look-Aside Table file named "HIGHWAYSIMPLEMAP.CSV".
- **New POI chains**  
Starting in Q4, 2016, new POI chains for **Ex-Oil** and **Natuur Pop** will be added.  
Starting in Q4, 2017, new POI chains for **Jeep** will be added.
- **Naming rule for Child POI**  
Starting in Q4, 2016, Parent POI name will be excluded from Child POI.  
Ex) 강원도립대학수영장 → 수영장
- **New Commuter Rail Station POIs**  
Starting in Q1, 2017, Commuter Rail Station POIs for Gyeonggang Line and Incheon Line 2 will be added  
Starting in Q2, 2017, Commuter Rail Station POIs for Donghae Line will be added

## Database Quality

The Quality of the HERE Databases and customer satisfaction is our highest priority. In order to achieve this objective, we have established a comprehensive and rigorous set of quality checks and product validations. We have achieved ISO 9001 and ISO/TS 16949 certification on the road to an integrated, company-wide quality management system. HERE strives to continually improve its processes, which helps the company remain the leading world class supplier of enhanced digital map products used for vehicle, consumer, business and governmental applications.

## Database Specifications

### Coverage Indicator table

CI Value	Definition	Specification	Note
NO	Prime	<i>Functional Class</i> = 1-5 (GDF 3.0: FC = 0-4) verified <i>Detailed City</i> = Y <i>In Process Data</i> = N <i>Full Geometry</i> = Y	

### Unique Code Situations

Category	Item	Description
Addressing	Address Ranges	N/A
Administrative Coding	Postal Codes	N/A
Composite Road Features (CRF)	Coding	N/A
Conditions	Date/Time Modifiers	Not all RDM and Access Restriction conditions that have a DTM in reality are coded with a Date Time Modifier.
	Junction View	Junction View Conditions are published with generic 2D/3D Junction View images. Due to legacy system, Junction View Condition in South Korea is limited to two links.
	Traffic Sign	Sharp Curve Left and Sharp Curve Right are both coded as General Curve.
		Railway Crossing Protected and Railway Crossing Unprotected are both coded as Railway Crossing Unprotected.
Attributes /Conditions	N/A	

	RDM	Restricted Driving Manoeuvre conditions representing a No U-turn restriction are not coded on bi-directional roads(single link) in South Korea at this time. RDM are not coded on single link bi-directional roads until further notice.
Extended Lane Specifications	Lane Connectivity	Intersections may be missing lane connectivity per the rule “every direction should be coded at an intersection”.
	Lane Traversal	Destination lane information is defaulted to dummy values.
		Lane Markings are not coded (except for links receiving CLM values).
		Lane Traversal condition on intersections that involves 3 or more links(condition that passes through multiple links if they are considered part of the same intersection and there is no intermediate lane information) are not all coded to Lane Traversal spec.
	Transition Point	CLM is only coded where XTDL coding exists. Lane Transition Point is not identified in Lane Traversal condition.
Feature Naming	Scenic Route Name	The Scenic Route attribute will be published. However, the Scenic Route Name attribute will not be published, since scenic routes do not have names in reality in South Korea.
	Roundabouts	N/A
Geometric Representation	Reusing Links	All polygonal features are coded to road casements and do not reuse existing links.
	Z-Levels	In most cases, when more than two levels of crossing not at grade occur at the same coordinates, the road geometry is slightly shifted to avoid multiple z-levels at the same lat/long. As a result, there are very rare cases of z-level > 1.
		Z-levels between roads and cartographic features are arbitrary and therefore may not contain the correct relative positions of crossings at different grade. - Where a road crosses a railroad at different grade, the road will always cross over the railroad. - Where a road or railroad crosses water, the road or railroad will always cross over the water feature. - Both situations above might not reflect reality.
		Z-levels are added for situations where turn lanes cross at same grade. This occurs at intersections to avoid coding of logical turn restrictions.
	Transportation Network	The multi digitized attribute may not meet NT specification in all areas.
Polygons	N/A	

Inclusion	Cartographic Inclusion	Only three Built-Up Area polygons are included.
Link Attributing	Access Characteristics	Vehicle Access is coded for Autos, Buses, Emergency Vehicles, Pedestrians, and Through Traffic. All other Vehicle Types are defaulted to Yes, except for Pedestrian roads, where non-Pedestrian Vehicle Types are set to No.
		There are currently four islands connected with passenger-only ferries while vehicles are allowed on the islands. These islands are northernmost islands within South Korean territory. The ferry links are Pedestrian only, while the links allow all Access Characteristics on the island.
	Display Characteristics	Public Access attribute is defaulted to Yes.
	Lane Category	The lane count for Lane Category includes reversible lanes.
	Intersection coding	N/A
Points of Interest (POIs)	Attributing of POIs	The calculated Latitude/Longitude on the link, based on Link/Percentage/Side information, does not align with the published Latitude/Longitude for the POI's physical location.
		Not all POIs contain a phone number.
	Named Place POI	For cases where there is no geometry within a city level, Named Place POI are coded on the nearest navigable link within 5 kilometres of the city boundary (instead of 2 kilometres).
RDS-TMC	RDS-TMC Codes	N/A
Signs	Straight-on-Sign	Straight On Sign text information is included as Toward Text information.
	Attributes /Representation	N/A

## Database Known Issues

- Coexistence of South Korea Legacy Lane Model and Extended Lane/Comprehensive Lane Model  
Permanent link ID of Extended Lane/Comprehensive Lane Model coded will be delivered as a Look-aside Table: CLM\_XTDL\_LINK\_ID.CSV
- Global Permanent ID  
Starting from Q2 2014 Commercial Release, Permanent IDs will become persistent for HERE South Korea MAP products.

- **Commuter Rail Station POIs (Subway Station POIs/ Exit POIs)**  
For transfer stations, Parent-Child relationship doesn't exist between Subway Station POI and Exit POI.
- **Interchange and Junction Crossing (IC\JC) Look-aside Table**  
In Q1 2014, Interchange nodes on non-Highways will be extracted into a look-aside file. Junction Crossing nodes on non-Highways will be provided from Q3 2014 Commercial release.

Following is HERE has announced for Interchange and Junction Crossing (IC\JC) Look-aside Table through TNM.

Starting in Q1, 2014, Interchange and Junction (IC\JC) nodes not on Highways will be extracted into a look-aside file, consisting of Node ID & Intersection Name in Korean (KOR), Transliteration (KOX) and English Translation (ENG). Please see the detailed South Korea Interchange and Junction Crossing Specification in TNM-180, Appendix F for more information.

- **Physical Divider/RDM coding**  
Starting from Q2 2018, Physical Divider coding will be added and RDM will be removed where physical divider is coded.

## Legal Obligations and Copyrights

- If duplicates are made of the database, the legal obligation exists to report such duplication as needed to be supported under a license agreement with HERE. If smaller subsets are created of the HERE database, the obligation exists to report to HERE the kilometers of roads as well as the number of links for each subset and the number of these sold

**YOU ARE REQUIRED TO COMPLY WITH THE RESTRICTION THAT HERE KOREA DATA MUST NOT BE EXPORTED OR IN ANY WAY TRANSFERRED OUTSIDE OF THE REPUBLIC OF KOREA. IF YOU DO NOT ACCEPT THIS RESTRICTION, YOU ARE TO IMMEDIATELY RETURN THE DATA TO US. BY USING THE DATA, YOU HAVE CONFIRMED YOUR ACCEPTANCE OF THIS RESTRICTION.**

Korea map data (Coordinates with lat./long.) cannot be taken out of Korea

It is illegal to take map data out of Korea

A server that is processing map data should reside in Korea

If a software vendor wants to compile Korea map data, they have to come to Korea and complete the development locally.

According to Korean Law, the following information needs to appear in your application.

KASM(Korean Association Surveying & Mapping) License Number;

Q3 2018 by HERE Solutions Korea Co., Ltd

Certified by KASM, No. 2015-0016

KASM(대한측량협회) License Number;

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