



# Advanced City Models

## Bringing maps closer to reality

Advanced City Models represent a major enhancement in TomTom's relentless drive to deliver a cutting edge display for navigation systems. Placing the map in its three dimensional context provides the end-user with a display closer to reality and delivers superior orientation.

Advanced City Models are part of the complete visualisation data eco-system maintained by TomTom and can be easily integrated not only with TomTom's navigable product, but also with TomTom 2D City Map and TomTom 3D Landmark products.

### Reasons to Use TomTom Advanced City Models

- Provide a richer navigational experience to the end-user thanks to the enhanced spatial orientation, detailed map display and customization
- Use together with 3D Landmarks and 2D City Maps and leverage the full power of TomTom's visualization product eco-system to differentiate from the competition and make your product offering irresistible to the end-user

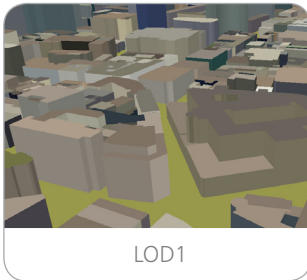
### Product Feature Highlights

- Optimized for real-time 3D display
- Tiered model complexity provides support to a range of hardware platforms
- Compact texture library is easy to customize
- Precise geo-positioning
- Aligned with TomTom's global navigable map database
- Integrates seamlessly with the complete TomTom visualization product eco-system (2D City Maps and 3D Landmarks)
- The most comprehensive global coverage of any comparable product on the market

Our flexible product offering makes the Advanced City Model easy to use, integrate and customize. Advanced City Models are provided in four Levels of Details (LOD), beginning with a simplified model and building up to the photo-realistic textured model.

## There are four Levels of Detail (LOD) offerings:

- LOD1: 'Shoebox' model: basic, un-textured 3D model without roofs or superstructures. This model is aimed at supporting the lowest specification hardware platforms.
- LOD2: Detailed 3D block models including roofs, large superstructures and small superstructures (e.g. elevator shafts)
- LOD3: The LOD2 detailed block models with the addition of texture utilizing a window and door library. The manageable size of the texture library makes it very easy to customize the look and feel of the data.
- LOD4: Photo-realistic textured 3D models including corresponding ortho images (ground images). ACM LOD4 is made available on request only.

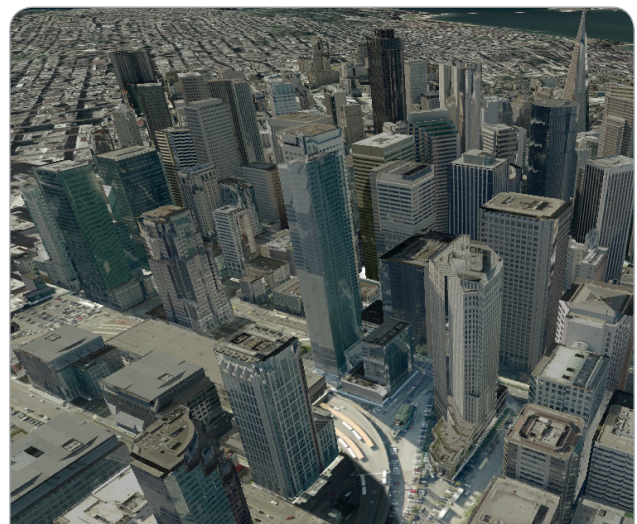


## Format Offerings

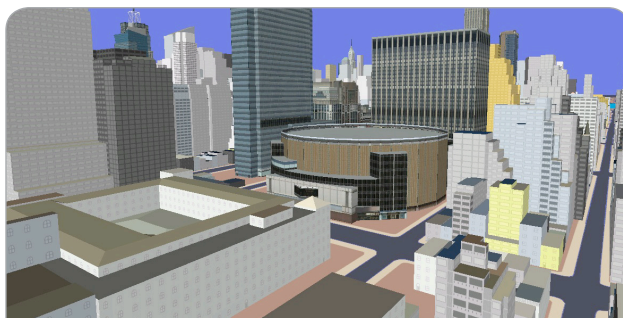
- Advanced City Model Collada: LOD2, LOD3, LOD4 with KML geo-referencing file. LOD3 and LOD4 textures in PNG format
- Advanced City Model Shape: LOD1 and LOD3. LOD3 textures in PNG format



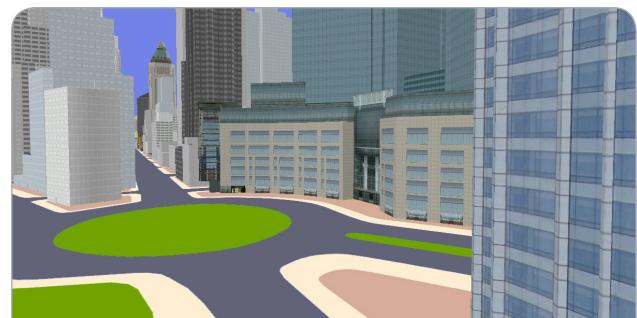
Advanced City Model LOD4 Geneva  
Application screenshot



Advanced City Model LOD4 San Francisco  
Application screenshot



Advanced City Model LOD3 of New York on top of TomTom 2D City Map and integrated with TomTom 3D Landmarks - Application screenshots



## European coverage

Country	City Name	Country	City Name	Country	City Name
Austria	Graz	Germany	Cologne		Parma
	Linz		Dortmund		Pisa
	Salzburg		Dresden		Prato
	Vienna		Duisburg		Ravenna
Belgium	Antwerp		Dusseldorf		Reggio Di Calabria
	Bruges		Erfurt		Rimini
	Brussels		Essen		Rome
	Charleroi		Frankfurt		Trieste
	Ghent		Freiburg Im Breisgau		Turin
	Liege		Gelsenkirchen		Venice
	Mons		Hamburg		Verona
Denmark	Aalborg		Hanover	Latvia	Riga
	Aarhus		Heidelberg	Lithuania	Kaunas
	Copenhagen		Kaiserslautern	Lithuania	Vilnius
	Odense		Karlsruhe	Luxembourg	Luxembourg
Estonia	Tallinn		Kassel	Monaco	Monaco
Finland	Helsinki		Koblenz (& Neuwied)	Netherlands, The	Almere
	Oulu		Leipzig		Amersfoort
	Tampere		Magdeburg		Amsterdam
	Turku		Mannheim		Arnhem
France	Amiens		Muenster		Breda
	Angers		Munchengladbach		Eindhoven
	Avignon		Munich		Groningen
	Bordeaux		Nuremberg		Leyden
	Caen		Osnabrueck		Maastricht
	Calais		Potsdam		Nijmegen
	Cannes		Rostock		Rotterdam
	Clermont-Ferrand		Saarbrucken		The Hague
	Dijon		Schwerin		Tilburg
	Grenoble		Stuttgart		Utrecht
	Le Havre		Wiesbaden (& Mainz)	Norway	Bergen
	Le Mans		Wuerzburg		Oslo
	Lille	Greece	Athens		Stavanger
	Limoges		Heraklion (Iraklion)		Trondheim
	Lyon		Larissa	Portugal	Almada
	Marseille		Patras		Braga
	Montpellier		Thessaloniki		Coimbra
	Nantes		Volos		Lisbon
	Nice	Ireland	Cork		Porto
	Orleans		Dublin	Romania	Bucharest
	Paris	Italy	Ancona		Constanta
	Reims		Bari	Spain	Albacete
	Rennes		Bologna		Alicante
	St-Etienne		Brescia		Almeria
	Strasbourg		Cagliari		Barcelona
	Toulouse		Catania		Bilbao
	Tours		Ferrara		Burgos
Germany	Aachen		Florence		Cadiz
	Augsburg		Fogia		Cartagena
	Berlin		Genoa		Castellon De La Plana
	Bielefeld		Livorno		Cordoba
	Bochum		Messina		Coruna
	Bonn		Milan		Gijon
	Braunschweig (Brunswick)		Modena		Granada
	Bremen		Naples		Huelva
	Chemnitz		Padova (Padua)		Jerez De La Frontera
			Palermo		

## European coverage

Country	City Name	Country	City Name	Country	City Name
Spain	Leon	Switzerland	Lausanne	United Kingdom	Manchester
	Madrid		Luzern		Middlesborough
	Malaga		Zurich		Newcastle
	Murcia	United Kingdom	Aberdeen		Norwich
	Oviedo		Bath		Nottingham
	Palma de Mallorca		Belfast		Nuneaton
	Pamplona		Birmingham		Oxford
	Salamanca		Blackburn		Peterborough
	San Sebastian		Blackpool		Plymouth
	(Donostia)		Bradford		Preston
	Santa Cruz de Tenerife		Brighton And Worthing		Reading
	Santander		Bristol		Sheffield
	Seville		Cambridge		Southampton
	Tarragona		Cardiff		Stoke-On-Trent
	Valencia		Coventry		Swansea
	Valladolid		Derby	Swindon	
	Vigo		Dover	Telford	
Zaragoza	Dundee		Warrington		
Sweden	Gothenborg		Edinburgh	United Kingdom	York
	Jonkoping		Glasgow		
	Linkoping	Grimsby			
	Malmo	Ipswich			
	Orebro	Kingston upon Hull			
	Stockholm	Leeds			
	Uppsala	Leicester			
	Vasteras	Liverpool			
Switzerland	Basel	London			
	Bern	Londonderry			
	Geneva	Luton			

## APAC coverage

Country	City Name	Country	City Name
Australia	Adelaide*	Malaysia	Kuala Lumpur
	Brisbane*	New Zealand	Auckland*
	Canberra*		Wellington*
	Melbourne*	Singapore	Singapore*
	Perth*	* 3D City Map format	
	Sydney*		

## Middle East & Africa coverage

Country	City Name	Country	City Name
South Africa	Bloemfontein	South Africa	Port Elizabeth
	Cape Town		Pretoria (Tswane)
	Durban		Rustenburg
	Johannesburg		
	Nelspruit		
	Polokwane		

## Americas coverage

Country	City Name	Country	City Name	Country	City Name
Canada	Calgary	United States	Corpus Christi	United States	Portland
	Edmonton		Dallas		Providence
	Halifax		Denver		Raleigh
	Montreal		Detroit		Sacramento
	Ottawa		El Paso		Saint Louis
	Quebec City		Fort Worth		Saint Paul
	Toronto		Fresno		Saint Petersburg
	Vancouver		Green Bay		Salt Lake City
	Mexico		Aguascalientes		United States
Cuernavaca		Houston	San Diego		
Cuidad Victoria		Indianapolis	San Francisco		
Guanajuato		Jacksonville	San Jose		
Matamoros		Kansas City	Scottsdale		
Mexico City		Las Vegas	Seattle		
Monterrey		Lincoln	Tampa		
Nuevo Laredo		Long Beach	Tucson		
Puebla		Los Angeles	Tulsa		
Reynosa		Madison	Virginia Beach		
United States	Tampico	United States	Memphis	United States	Washington DC
	Albany		Miami		
	Albuquerque		Milwaukee		
	Anaheim		Minneapolis		
	Atlanta		Nashville		
	Atlantic City		New Orleans		
	Austin		New York City		
	Baltimore		Newark		
	Boston		Oakland		
	Buffalo		Oklahoma City		
	Charlotte		Omaha		
	Chicago		Orlando		
	Cincinnati		Philadelphia		
Cleveland	Phoenix				
Columbus	Pittsburgh				