Urban Feasibility Model (UFM)

Presentation to
PIA NSW State Conference 2011
Presentation Outline

• UFM Background
  – What is the UFM?
  – Why was the UFM developed?
  – How does the UFM work?
  – UFM Project

• Live Demonstration
What is the UFM?

- GIS software application for interactive LEP plan making and assessment.
- Calculates housing and employment capacity and economic feasibility of development at the site level.
- Forecasts the location, type, density and timing of development under different LEP planning and property market scenarios.
…or put more simply

- What can be developed under a LEP?
- Is it economically feasible to develop?
- If not, will it be feasible in the future?
- What will be the impacts of the development?
Why was the UFM developed?

To assist in the delivery of the *Metropolitan Plan for Sydney 2036* through providing tools for evidence-based LEP plan making and assessment.

**ACTION I 4.3**

Develop and implement a LEP Feasibility Assessment Tool to evaluate the housing and employment capacity yield of LEPs.
LEPs crucial in delivering the Metropolitan Plan

- LEPs the primary land use planning instrument for delivering the Metropolitan Plan.

- LEPs must reflect the Metropolitan Plan’s spatial structure, strategic directions and targets.
LEPs integral to redevelopment of existing urban areas

- The Metropolitan Plan accommodates 70% of population growth (1.7 million by 2036) in existing urban areas.

- Achieved primarily through upzoning and redevelopment of low density residential and commercial areas in and around centres.

- Redevelopment of these areas difficult due to:
  - community concerns over loss of environmental amenity and neighbourhood character.
  - Higher development costs associated with site acquisition (fragmentation and high improved land values).
Limited tools available to planners for LEP plan making and assessment

- Many LEPs prepared based on limited evidence and the assumption that “if you zone it, they will build it”.

- The planning and development task is much more complex.
Planning & Development Task

- Planning Controls & Approvals
- The Market (Economic Feasibility)
- Transport & Infrastructure
- Development (Housing & Employment)
- Government Taxes & Levies
UFM: Next Gen Technology in Planning

• Assess different LEP planning scenarios against the Metropolitan Plan ‘on the fly’

• Interactively prepare evidence-based LEPs which meet the strategic directions of the Metropolitan Plan.

• Integrate local land use, transport and infrastructure planning.
How does the UFM work?

**STEP 1 - Development Potential**
- LEP
- Residential DCP
- Business Zones DCP

**STEP 2 - Physical Feasibility**
- Development Constraints
- Site Amalgamation

**STEP 3 - Economic Feasibility**
- Development Costs
- Government Taxes & Levies
- Property Market

**STEP 4 - Forecast Feasibility**
- Price Indexation
  - Property market
  - Construction
  - Section 94

**Housing & Employment Capacity**

**Forecast Development**
STEP 1 – Development Potential

- **LEP** – zones, FSR, height
- **DCP** –
  - Minimum lot size
  - Frontage / lot width
  - Onsite car parking
  - Landscaping
  - Maximum building footprint
  - Communal open space
  - Private open space
STEP 2 – Physical Feasibility

- **Development Constraints** –
  - Strata plan
  - Heritage
  - Schools
  - Other community uses

- **Site Amalgamation** –
  identify sites which need to be amalgamated to achieve development potential.
Development potential under the LEP and DCP
STEP 3 – Economic Feasibility

• Standard developers economic feasibility analysis applied to each site.
Sites which are economically feasible to develop
STEP 4 – Forecast Feasibility

- Price indexation of:
  - property market,
  - construction costs,
  - Govt. taxation

used to calculate economic feasibility of development over the life of the LEP.
LEP Assessment

Council LEP 2009

Metropolitan Plan Targets

- **Housing Target**
  - Housing Potential: 2700
  - Housing Affordability (Multi Unit): 7.44 Years

- **Employment Targets**
  - Employment Capacity (Net): 1529
  - Jobs Per Working Resident: 0.88

- **Centres & Urban Renewal**
  - Housing Capacity in Centres: 54%
  - Housing Capacity in Transit Nodes: 60%
  - Redevelopment of Strata Developments: 6 Sites (2%)
UFM Project Status

• UFM software currently in beta testing.

• Peer reviewed by CityFutures (UNSW) and Property Council of Australia (PCA).

• First version of the UFM planned to be released for use within DP&I early 2012.

• Future versions of the UFM will be developed based on demand for functionality within DP&I.
UFM
Live Demonstration