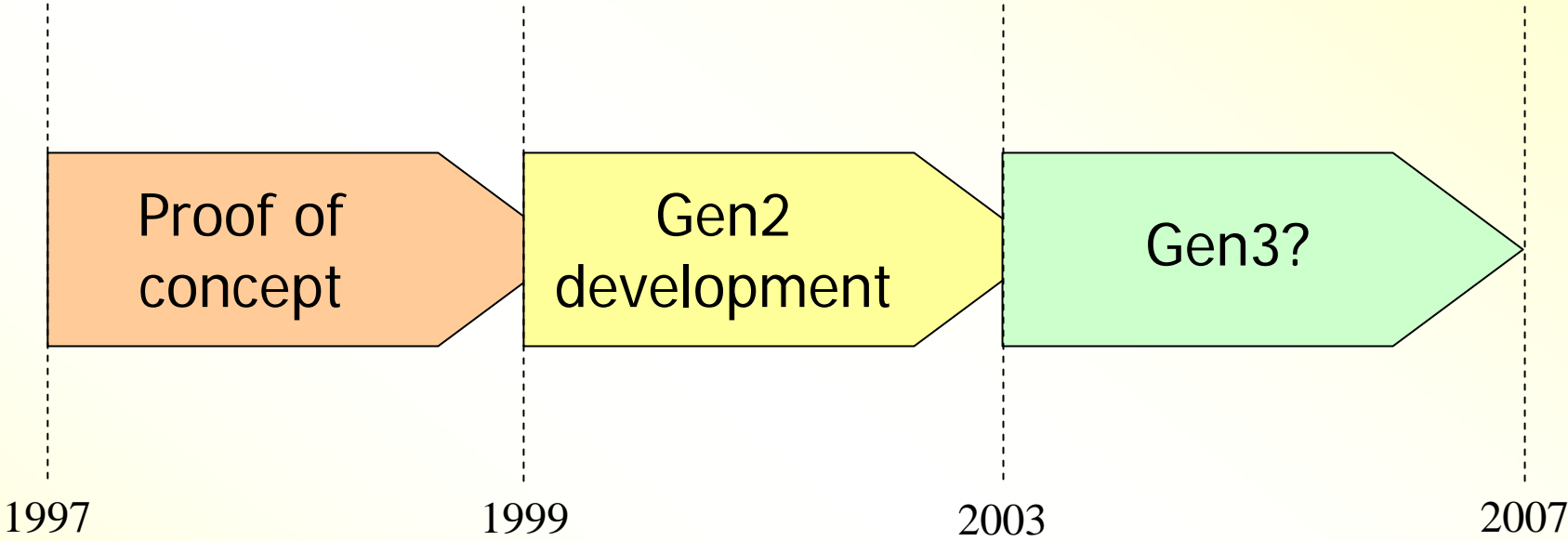


# Future Plans for TLUMIP

Third Oregon Symposium on Integrated Land Use-Transport Modeling  
23-25 July 2002

Rick Donnelly & Bill Upton

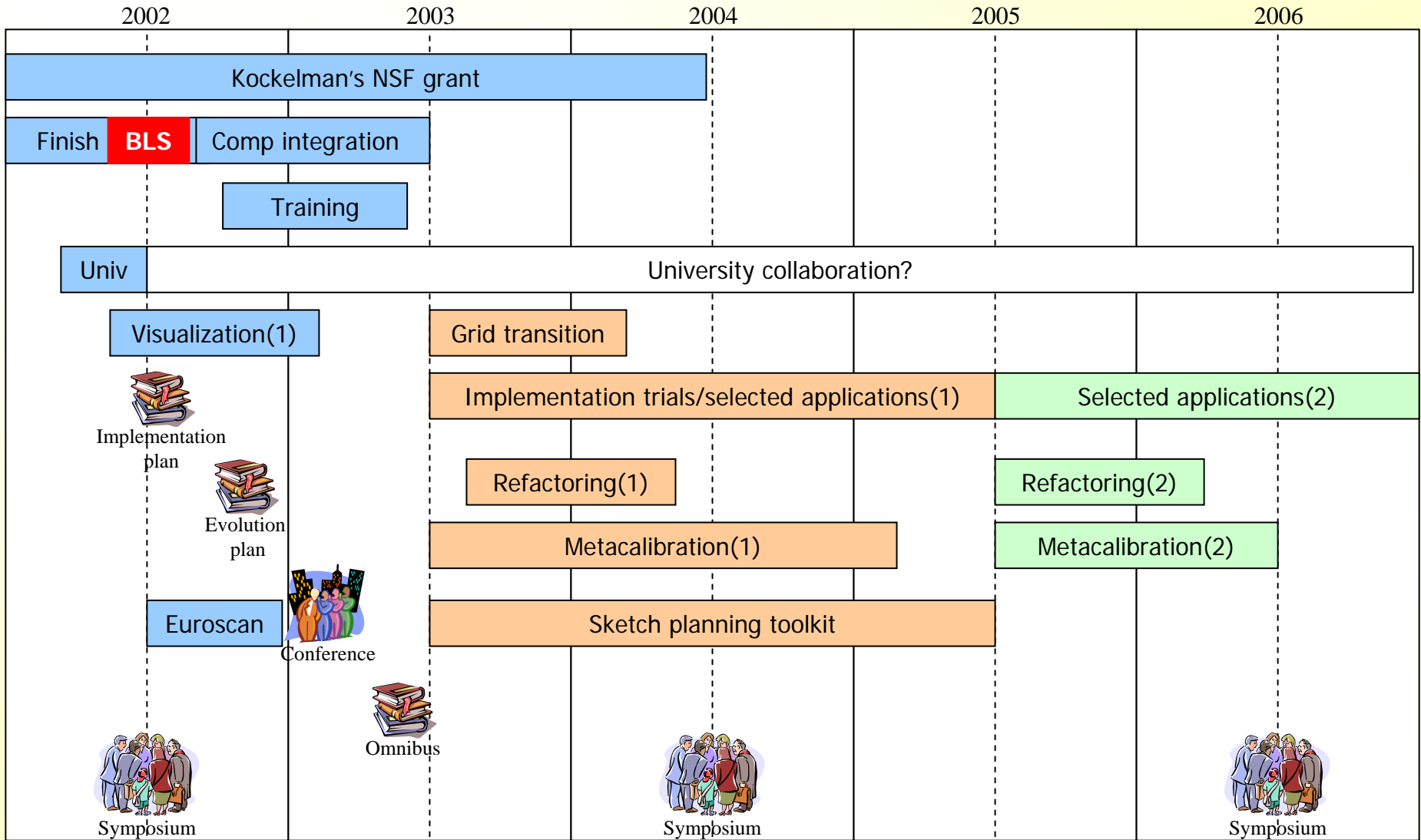
# Looking Back



# Meeting Outcome

1. Refactoring code to distributed architecture
2. Visualization
3. System calibration ("metacalibration")
4. Environmental analytics (AQ, sustainability, EJ, etc)
5. Selected applications and implementation trials
6. Sketch planning toolbox and conference
7. Omnibus
8. Symposia
9. Model integration and linkages
10. Grid-based representation
11. Coaching and training
12. Data acquisition
13. Model evolution
14. Implementation plan
15. Public policy simulator
16. University collaboration

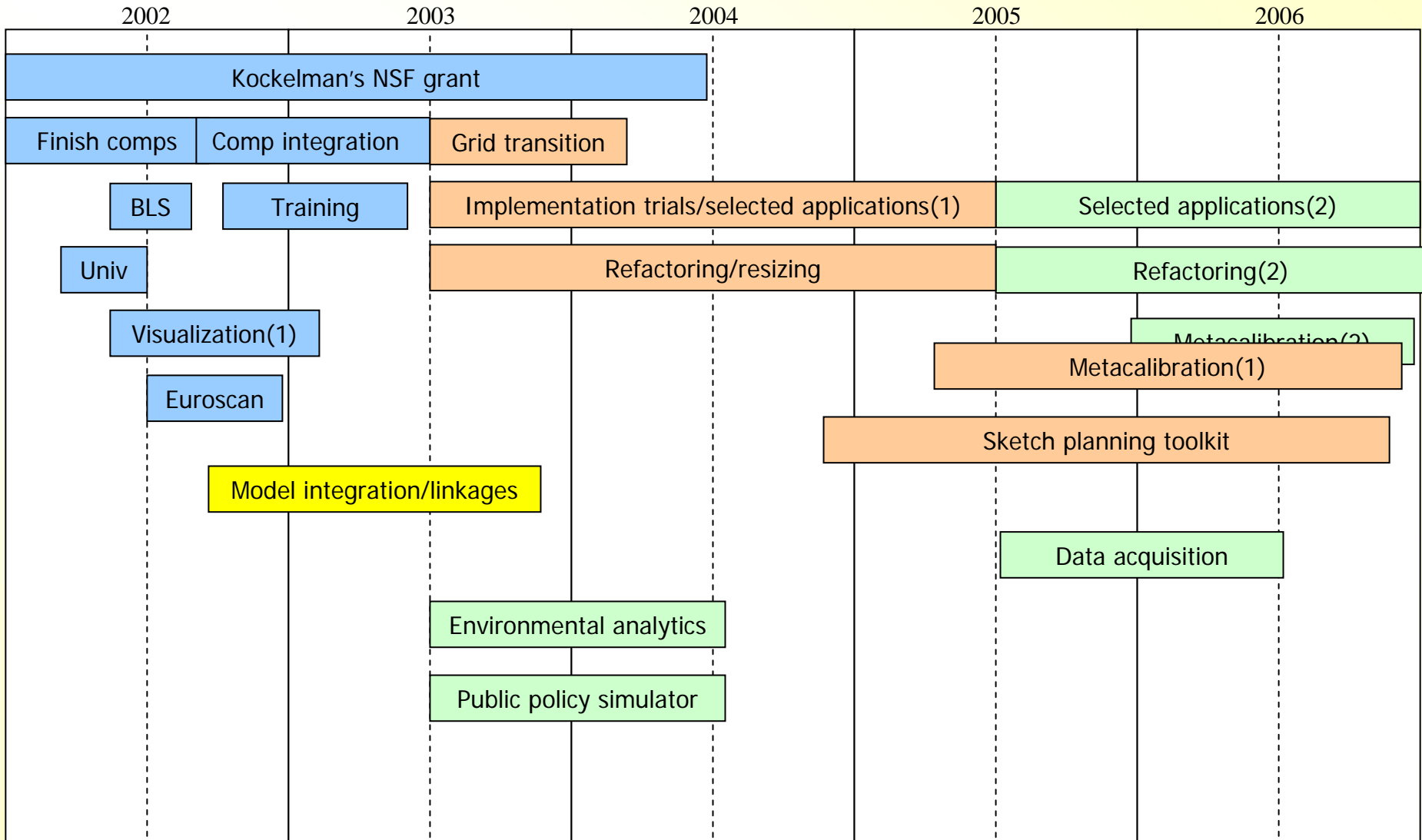
# TLUMIP Five Year Plan



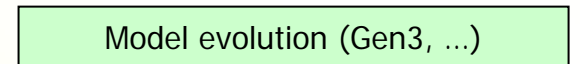
Program Phase



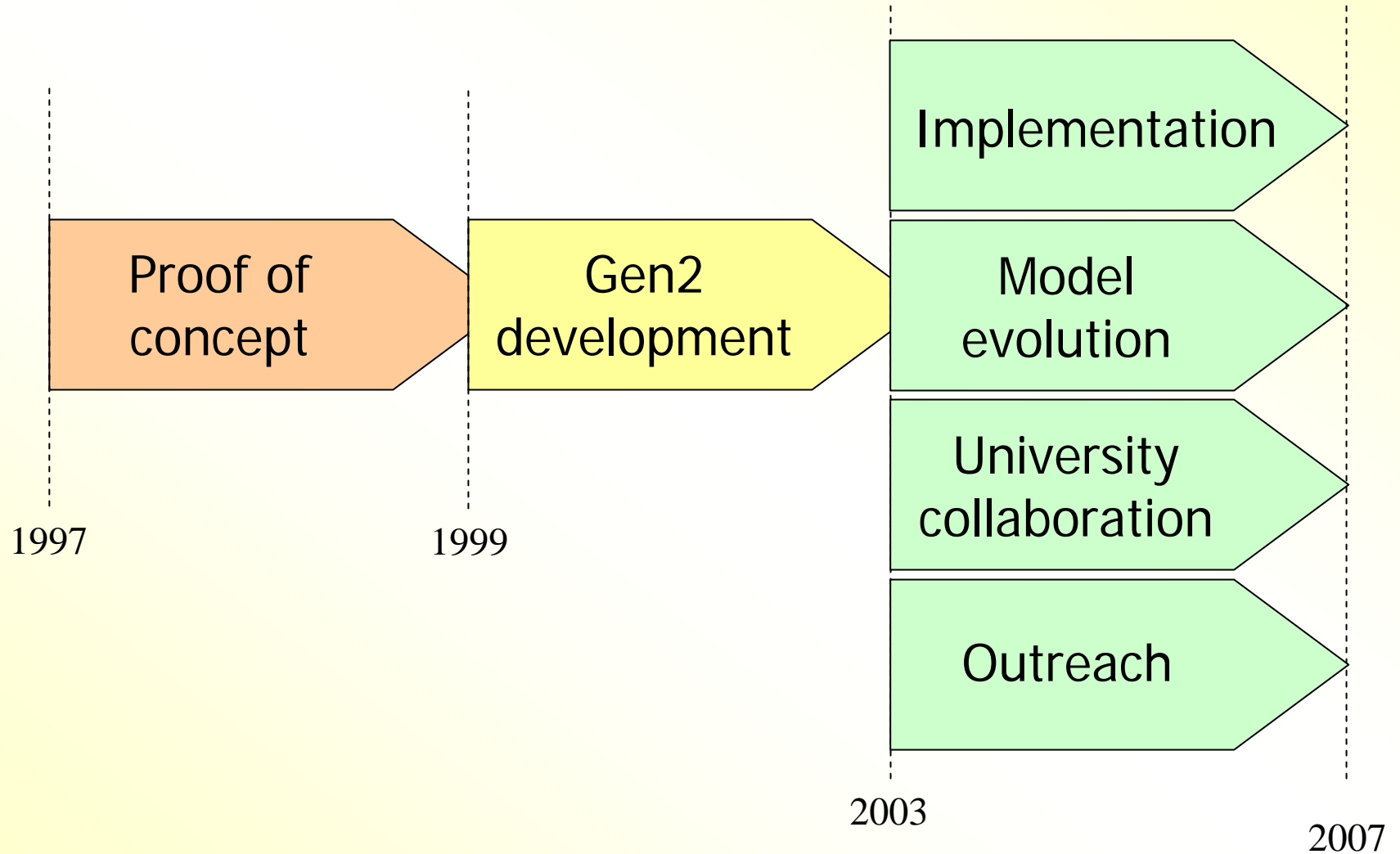
# TLUMIP Five Year Plan



Program Phase



# The Past to the Present



# Implementation

- Technical assistance
  - Coaching
  - Teaming
  - Transfer
- Visualization
- Software optimization
- Hardware strategy

# Software Optimization

## *Original plan*

- Pure and simple OOP code
- Optimize for speed
- Multi-thread the code
- Distributed code

## *Enlightened plan*

- Pure and simple OOP code
- Apparent optimization
- Distributed tasks (DAF)



# Distributed Application Framework (DAF)

- Tasks, queues, and messages
- Lightweight application
  - Trade flexibility for portability
  - Adaptive design
- Pure Java
  - OS independence
  - Native multithreading
- Second build in use

# University Collaboration

- Opportunity for Oregon university participation
- Work from their strengths
- Work on their timelines
- Autonomous track
- Meaningful contribution

# Topics

- Integrated land use-transport modeling
- Travel choice behavior
- Activity-based travel analysis
- Traffic science, control systems, and intelligent transportation systems
- Network dynamics and disequilibrium
- Simulation analysis and modeling
- Object-oriented programming
- Database systems
- Spatial analysis tools and techniques
- Non-parametric models

# Outreach

## *Profession*

- Symposiums and workshops
- Case studies and white papers
- Papers, publications and presentations
- Resuscitate TMIP land use track
- Global network
- Motivate NCHRP and pooled funds projects

## *Decision-makers*

- Case studies
- Brief ODOT executives, OTC members, and legislators
- Interagency support
- Bridge Limitation Study
- Visualization and decision support systems

Questions for Bill?