

UC Davis Budget Model

Allocating Patent Revenues: Transitions to align with the Incentive-Based Budget Model.

PURPOSE

To allocate patent funds in a manner more consistent with the new Budget Model.

BACKGROUND/DEFINITIONS

The UC Office of the President (UCOP) Office of Technology Transfer (OTT) administers patents on behalf of UC Davis, including securing and defending patents and disbursing net patent revenues to inventors and UC Davis.

Basic definitions to some commonly used terms are provided below and funds flows are also depicted on the attached charts.

Inventor Share: The inventor share goes directly from UCOP to the inventor(s) and is approximately 35% of Net Patent Revenue.

Net Patent Income: This is the revenue that UCOP has historically distributed to campus and which can be used for a variety of purposes. See Box 1 for how it is calculated.

Research Share: The Research Share goes directly from UCOP to the campus to be used for research activities only. It is approximately 15% of Net Patent Revenue. Research Share was established in 1997, in conjunction with a change in how UCOP calculated the inventor share. Inventions reported prior to 1997 are subject to the pre-1997 policy.

General Fund Share: Equals: 25% of (AGI - Direct Cases Expenses - Inventor Share). Prior to 2011-12, this went directly to UCOP for General Fund use. Under the Funding Streams Initiative, this revenue comes directly to UC Davis. This did not translate into additional funds for UC Davis as the UCOP General Fund distribution to UC Davis was reduced by approximately this same amount.

Strawberry Research Fund: This special set aside fund for the College of Agriculture and Environmental Sciences is calculated as 1/3 of the increase in UCD's strawberry royalty revenues resulting from increases in the strawberry royalty rates.

Note: Due to complexities with the way OP accounts for patent revenue and expenses, campus distribution of net patent revenues is delayed; in 2012-13, UC Davis will distribute patent revenue generated in 2010-11 and received by campus in 2011-12.

Box 1. OP Patent Revenue Distribution
Adjusted Gross Income
- Direct Expenses
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Net Patent Revenue
- Direct Expenses
- Inventor Share
- Research Share
- General Fund Share
- Strawberry Research Fund
- Indirect Expenses
+ STIP
<hr/>
Net Patent Income (Received by Campus)

HISTORICAL DISTRIBUTION

UC Davis has a long-standing practice of allocating 25% of the Net Patent Income to campus departments and keeping 75% centrally for various expenses, including Office of Research staff and capital projects. The actual calculation of the 25% distribution has varied over the years but has generally been tied to the amount of net patent income earned by each patent, using inventor share data as a proxy for net patent income. Dividing the Net Patent Income between departments has been an on-going area of contention due to the notion that revenue-generating patents are subsidizing other patents. The process of obtaining a patent can be an expensive and timely process. Often, patents result in upfront costs prior to the generation of revenue. These costs are covered by the Net Patent Revenue that UC Davis receives, thus reducing the amount of revenues allocated to the campus and available to disburse to departments with revenue-generating patents. From 2006-07 through 2009-10, patent revenues were split between plant and utility patents to address concerns that plant patents were subsidizing all other patents. This method, however, significantly and disproportionately reduced patent revenues associated with revenue generating utility patents. In 2011-12, there were changes to patent revenue allocations:

1. Research Share income, which had been relatively small up until recently (average of \$146,560 over the past five years vs. \$1,965,000 for net patent income), was separately distributed for the first time. In prior years, the standard 25% campus return exceeded the intent of the research share set-aside. But in 2011-12, 100% of the research share was allocated separate from other net patent allocations.
2. Net Patent Revenue continued to be distributed to the departments proportionately to Inventor Shares.
3. A greater proportion of patent income – 40% of Net Patent Revenue plus Research Share and Strawberry Research Fund, rather than 25% of Net Patent Revenue – was distributed to the schools, colleges and divisions. Starting in 2011-12, the allocations were split 70% to the departments and 30% to the deans. 2011-12 was the first year that included a dean's share.
4. 100% of the Strawberry Research Fund was distributed according to separate agreements.

The chart below summarizes the Net Patent Income and Research Share revenues and distributions from 2003-04 through 2011-12 (note: revenues are received in one fiscal year and distributed in the following):

Table 1: History of UC Davis Patent Allocations

Year of Distribution	Net Patent Income/Research Share	Department Distributions	Office of Research	Provost	Percent Distributed to Departments
2003/04	\$7,041,829	\$2,438,636	\$0	\$4,603,193	35%
2004/05	-\$959,416	\$0	\$0	-\$959,416	-
2005/06	\$1,315,662	\$315,000	\$0	\$1,000,662	24%
2006/07	\$1,732,434	\$407,600	\$456,165	\$868,669	24%
2007/08	\$784,163	\$175,000	\$362,106	\$247,057	22%
2008/09	\$1,444,056	\$335,091	\$407,012	\$701,953	23%
2009/10	\$1,735,008	\$394,700	\$407,012	\$933,296	23%
2010/11	\$3,785,735	\$841,880	\$407,012	\$2,536,843	22%
2011/12	\$2,904,708	\$1,074,260	\$407,012	\$1,423,436	37%

ADDITIONAL CONSIDERATIONS FOR 2012-13

Building upon the changes in 2011-12, allocations for 2012-13 are expected to address additional issues:

1. **General Fund Share:** The general fund share was returned to the campus as part of the OP funding streams initiative. UC Davis received \$1.3 million in patent funds for the General Fund Share, in conjunction with a commiserate General Fund (19900) reduction. Campus allocations in 2012-13 are calculated to keep the general fund share separate to align with the OP accounting treatment.
2. **Office of Research, Innovation Access:** Innovation Access, the unit responsible for patent filings, receives a base budget of approximately \$407,000 in patent funds and \$2 million in General Funds (\$1.6 million plus benefits). In on-going discussions with OR and in accordance with incentive-based budgeting, there is a desire to have more revenue flow directly to Innovation Access. We propose to allocate 15% of net patent revenues and research share to OR. In 2012-13, this would result in approximately \$485,000 to OR (an increase over the current allocation of \$407,000). In years where 15% would not generate enough revenues to cover \$407,000, we recommend redirecting funds from the net patent revenue and research share prior to distribution to the units to provide continued stability to OR at this historic level (i.e., \$407,000 becomes a floor).
3. **Volatility:** Patent revenues fluctuate significantly, as evidenced by the chart below:

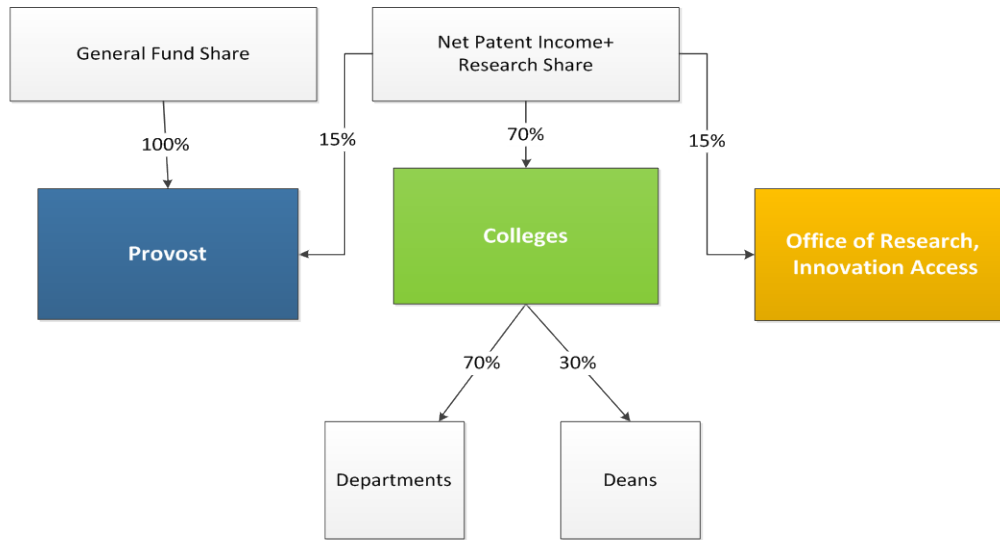
Table 2. History of Net Patent, Research Share and General Fund Shares

Year	Net Patent Revenue		Research Share		GF Share	
	Total	% Change	Total	% Change	Total	% Change
2002/03	\$7,017,443		\$24,386		\$2,812,847	
2003/04	-\$972,684	-114%	\$13,268	-46%	\$63,328	-98%
2004/05	\$1,280,763	-232%	\$34,899	163%	\$798,840	1161%
2005/06	\$1,648,181	29%	\$84,253	141%	\$912,366	14%
2006/07	\$696,679	-58%	\$87,484	4%	\$566,733	-38%
2007/08	\$1,286,598	85%	\$157,458	80%	\$719,519	27%
2008/09	\$1,578,801	23%	\$156,207	-1%	\$667,802	-7%
2009/10	\$3,537,610	124%	\$248,125	59%	\$1,315,945	97%
2010/11	\$2,564,962	-27%	\$339,746	37%	\$1,153,324	-12%
2011/12	\$2,834,282	10%	\$394,810	16%	\$1,299,666	13%

We do not propose any mechanism for smoothing out revenues other than maintaining OR's base budget at a minimum of \$407,000. However, the ability to produce preliminary estimates in the spring will allow units to better plan this resource and mitigate the volatility from year-to-year.

ALLOCATION MODEL

The general principles for the new budget model are proposed to apply to the patent revenue. Further, the proposed model would simplify the patent allocation process and allocate significantly more revenues to the entities that generated the revenue as follows:



Distribution by Type of Patent Fund. The Research Share would be distributed based on Research Share earnings and the Net Patent Income would be distributed based on Inventor Share earnings. The Strawberry Research Fund would not be included in this process and would continue to flow directly to the College of Agriculture and Environmental Sciences.

Timing. Historically, campus has distributed patent revenue in the spring. The new model proposes to instead allocate funds at the beginning of each fiscal year. This is possible because of the relatively simple mechanism, combined with the distribution lag inherent in the OP process. It is anticipated that campus will allocate funds by September of each fiscal year. Additionally, campus will be able to provide preliminary estimates to the Provost, OR and to the colleges as a whole (campus will not have the data necessary to provide estimates at the individual college-level) in the spring prior to the next fiscal year, which will allow for planning.

Net Impact. The net impact of this change would be to provide colleges and OR with more revenue starting immediately. Allocations for 2012-13 are provided in Appendix 1 along with information about allocations for the last two years. Note: The 2012-13 distribution to colleges in Appendix 1 does not tie to the amount listed in the chart above due to rounding and the inclusion of ANR related patent revenues.

Table 3. 2012-13 Allocations (also see Appendix 1)

	2012-13 Revenues, Old Methodology	2012-13 Revenues, New Methodology	Change
Revenue to Distribute:	\$4,529,921	\$4,529,921	\$0
To Colleges:	\$1,292,102	\$2,261,179	\$969,077
To Office of Research:	\$407,000	\$484,538	\$77,538
To Provost:	\$1,531,153	\$484,538	-\$1,046,615
General Fund Share:	\$1,299,666	\$1,299,666	\$0

Although department data is not yet available for 2013-14, the high level data is available and shows that there will again be additional funds in 2013-14 as shown in Table 4.

Table 4. High level overview of proposed 2013-14 allocations

	Allocations for 2012-13	Proposed Allocations 2013-14	Change
Revenue to Distribute:	\$4,529,921	\$6,386,063	\$1,856,142
To Colleges:	\$2,261,179	\$3,250,737	\$989,558
To Office of Research:	\$484,538	\$696,587	\$212,048
To Provost:	\$484,538	\$696,587	\$212,049
General Fund Share:	\$1,299,666	\$1,742,153	\$442,487

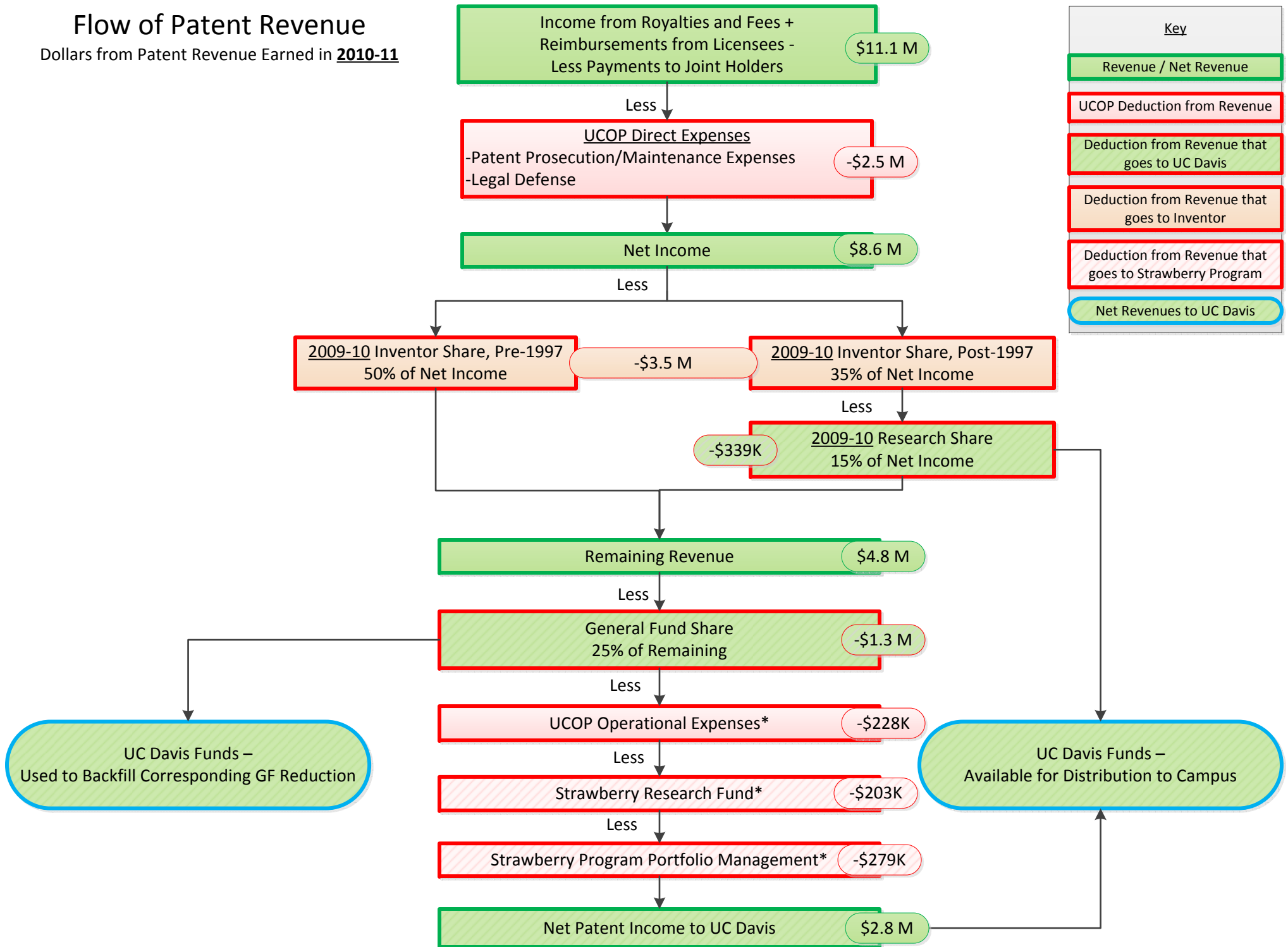
Patent Distribution

College	Department	2010-11 Distribution*	2011-12 Distribution*	Proposed 2012-13 Distribution
BIOS	Microbiology	\$3,000	\$13,150	\$19,700
BIOS	Molecular & Cellular Biology	\$3,000	\$1,450	\$2,800
BIOS	Neurobiology, Physiology & Behavior	\$0	\$1,570	\$3,600
BIOS	Plant Biology	\$1,000	\$1,260	\$11,100
BIOS	Dean	\$0	\$7,450	\$15,900
	SUBTOTAL BIOS	\$7,000	\$24,880	\$53,100
CAES	Animal Science	\$0	\$210	\$5,000
CAES	Entomology	\$5,000	\$6,790	\$0
CAES	Environmental Toxicology	\$0	\$0	\$1,600
CAES	Food Science & Tech	\$1,000	\$1,540	\$3,800
CAES	Nutrition	\$0	\$350	\$0
CAES	Plant Sciences	\$474,000	\$557,830	\$1,188,100
CAES	Textiles & Clothing	\$5,000	\$8,330	\$12,300
CAES	Dean	\$0	\$246,450	\$519,100
	SUBTOTAL CAES	\$485,000	\$821,500	\$1,729,900
CAES/COE	Bio and Ag Engineering	\$5,000	\$10,220	\$12,000
CAES/COE	Dean	\$0	\$4,980	\$5,100
	SUBTOTAL CAES/COE	\$5,000	\$16,600	\$17,100
COE	Chemical Engineering & Materials Science	\$0	\$0	\$1,400
COE	Computer Science	\$3,000	\$10,710	\$12,500
COE	Electrical & Computer Engineering	\$75,000	\$46,410	\$186,700
COE	Dean	\$0	\$24,480	\$86,000
	SUBTOTAL COE	\$78,000	\$81,600	\$286,600
MPS	Chemistry	\$1,000	\$1,890	\$6,800
MPS	Dean	\$0	\$810	\$2,900
	SUBTOTAL MPS	\$1,000	\$2,700	\$9,700
HArCS	California Lighting Center	\$0	\$2,240	\$3,900
HArCS	Dean	\$0	\$1,590	\$1,700
	SUBTOTAL HArCS	\$0	\$5,300	\$5,600
SOM	Internal Medicine	\$0	\$11,240	\$15,200
SOM	Neurology	\$0	\$5,820	\$2,900
SOM	Ophthalmology	\$0	\$1,960	\$5,800
SOM	Pharmacology	\$2,000	\$10,460	\$3,600
SOM	Psychiatry	\$0	\$1,400	\$0
SOM	SOM: Pathology	\$2,000	\$5,850	\$2,600
SOM	Dean	\$0	\$15,650	\$14,000
	SUBTOTAL SOM	\$4,000	\$52,380	\$44,100
SVM	Anatomy, Physiology & Cellular Bio	\$0	\$2,590	\$3,400
SVM	Medicine & Epidemiology	\$75,000	\$45,640	\$41,000
SVM	Population Health & Reproduction	\$0	\$1,050	\$900
SVM	Surgical and Radiology Sci	\$0	\$2,100	\$800
SVM	SVM: Pathology	\$0	\$0	\$4,800
SVM	Dean	\$0	\$22,020	\$21,800
	SUBTOTAL SVM	\$75,000	\$73,400	\$72,700
OR	McClellan Nuclear Radiation	\$0	\$0	\$1,600
OR	OVCR	\$0	\$0	\$700
	SUBTOTAL OR	\$0	\$0	\$2,300
	TOTAL	\$655,000	\$1,078,360	\$2,221,100

*Does not include 2008-09 Research Share dollars distributed in 2011-12.

Flow of Patent Revenue

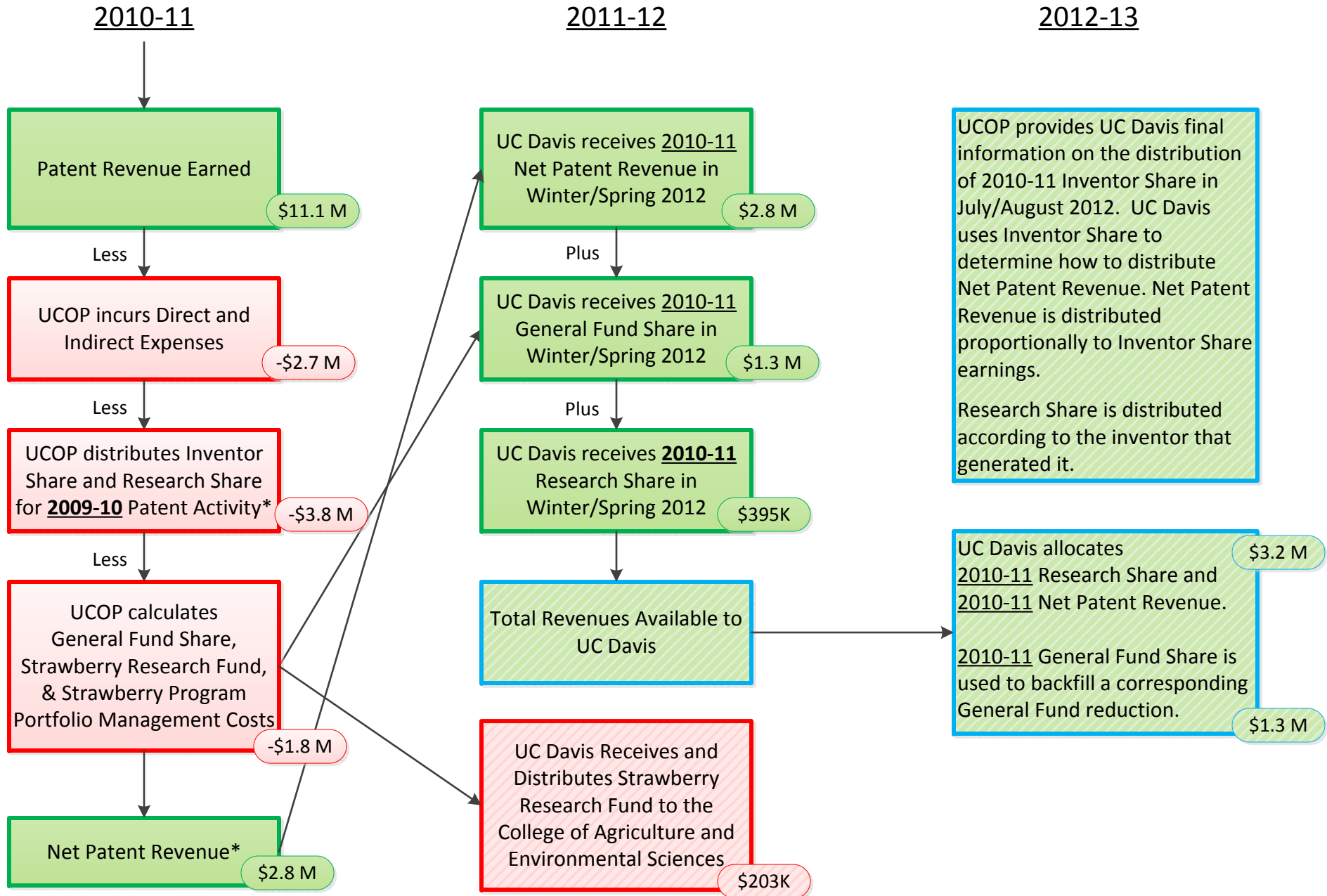
Dollars from Patent Revenue Earned in **2010-11**



*This cost is not included in UCOP's Annual Technology Transfer Report

Distribution of Patent Revenue

Dollars from Patent Revenue Earned in 2010-11



*Due to the way UCOP accounts for revenues and expenses, 2009-10 Inventor Share and Research Share are netted against 2010-11 Patent Revenue.